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New Insights into the Political Psychology of Intergroup Relations: How Personality and Emotions Shape "Our" Attitudes towards "Them"

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Nathalie Hofstetter

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Acknowledgments

"The scientist, by the very nature of his commitment, creates more and more questions, never fewer. Indeed the measure of our intellectual maturity … is our capacity to feel less and less satisfied with our answers to better and better problems."
- Gordon Allport (1955, 67), cited in Love and Hewstone (2021, 430)

As a scientist or political psychologist, respectively, I still have a long way to go to reach full intellectual maturity in Allport's sense. Nevertheless, I believe I can claim to have already undergone a certain process of scientific maturation in recent years, especially in those as a PhD student. This process was not only decisively initiated, but also constantly driven forward by my supervisor Prof. Dr. Markus Freitag. Ever since I became your (bachelor) student, you have been an inspiring, encouraging and supportive mentor to me, from whose expertise and experience I have greatly benefited – thank you! I very much appreciate the patience, understanding and support you have always shown me, especially during tough times. Be assured that my deepest gratitude, respect and sympathy for you go far beyond our shared social identity as fans of the SC Freiburg.

However, it was not only my later supervisor who sparked my interest in political psychological research many years ago, but also one of his doctoral students at the time who offered a seminar on "citizens and politics". Nearly five years later, this student had become a junior professor and attended my very first (online) presentation at an academic conference. Having always followed and admired her research and academic career, I feel very honoured and thankful to have Prof. Dr. Kathrin Ackermann as my second supervisor.

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Preface

Comprised of four empirical articles, this cumulative dissertation provides new and topical insights into the political psychology of intergroup relations. Concretely, the dissertation in its entity adds to the psychological illumination of conceptions of nationhood, attitudes towards immigrants and populist attitudes as individual-level political phenomena, which are all inextricably linked to social identities that set the ingroup ("us") against the outgroup(s) ("them"). Adopting a political psychology perspective, the main argument is that these intergroup attitudes are driven by inter-individual, psychological differences both in personality traits as deep-seated, stable characteristics and in emotions as situationally reactive, intrapsychic processes.

Each of the four articles contributes to the relevant literature by qualifying, refining and/or expanding existing theoretical and empirical insights, often in various ways. In this vein, a first key contribution lies in providing the very first systematic personality-based explanation of varying conceptions of nationhood (article 1). Second, the recently growing literature on the psychological underpinnings of populist attitudes is supplemented by new evidence on both dispositional and affective explanations, which take the concept's multi-dimensionality and non-compensatory nature seriously and challenge previous assumptions around the populist personality (article 2) or the role played by external crises (article 4). A third important contribution is offered by connecting different literatures to provide a more comprehensive account of the emotional mechanisms connecting pandemic threat with anti-immigrant attitudes in a real-world situation (article 3).

Articles 1, 3 and 4 have already been published in scientific journals relevant to their subject matter and ranked in the Social Science Citation Index (SCCI). Article 1 was published in *Nations and Nationalism* (Journal Impact Factor (JIF) 2022: 2.2), article 3 in the *Journal of Ethnic and Migration Studies* (JIF 2022: 3.3) and article 4 in the *European Political Science Review* (JIF 2022: 3.2). Thus, these three articles have already gone through a double-blind review process with two (articles 1 and 3) or three (article 4) reviewers. Former versions of article 2 have been presented in a research seminar and at a scientific conference. In its current version, the article is resubmitted after minor revisions to *Electoral Studies* (JIF 2022: 2.3).

Finally, on a technical note, all data analyses and visualisations were conducted using STATA and R. The English editing was done by Julie Armstrong.

1. Introduction

"Given the contemporary challenges facing the international community including the rise of populism, affective polarisation, political extremism, inequality, climate change, and the COVID-19 pandemic, political psychology is arguably needed now more than ever." (Osborne and Sibley 2022: 17)

Albeit presenting a comparatively young academic discipline (Haas 2016; Houghton 2015, 25; Jost and Sidanius 2004a; W. F. Stone and Schaffner 1988, v), dismissing political psychology as a marginal (sub-)field of scholarly inquiry is no longer warranted (cf. Merelman 1977; Rosenberg 2003, 428; Sears 1987, 229, but see F. Deutsch and Boehnke 2022). While at the height of the First World War, the historian Grundy (1917) spoke of political psychology as "a science which has yet to be created" (Rudmin 2005)[1], it has since undergone several developmental phases (see Cottam et al. 2016, 2022; F. Deutsch and Boehnke 2022; Dongare 2022; Eldad-Strenger and Mintz 2015; Hewer 2018; McGuire 2004; Nesbitt-Larking et al. 2014a; Sensales and Dal Secco 2014; Staerklé 2015; S. Stone et al. 2014; Ward 2002). Today, political psychology presents "a dominant force in the social sciences" (Osborne and Sibley 2022, 3; see also Quayle, Pautz, and Mhlongo 2020, 902).

Notwithstanding different views on the status of political psychology in (social) science (cf. Zúñiga and López-López 2021, 237f.), ranging from a distinct specialty within an academic discipline (e.g. Immelman 2005, 198), via a sub-discipline of psychology and/or political science (e.g. F. Deutsch and Boehnke 2022, 56; Dongare 2022, 1521; Erisen 2013; Nesbitt-Larking et al. 2014a), to an independent and adult academic discipline (e.g. McDermott 2004, 4; Wang 2022, 359), there is broad consensus that it is an inherently interdisciplinary research field (Cottam et al. 2022; Huddy, Sears, and Levy 2013a; Osborne and Sibley 2022; Quayle, Pautz, and Mhlongo 2020). While there is no single definition of political psychology (Zúñiga and López-López 2021, 237), at the most general level, the field aims to explain political phenomena from a psychological perspective (Krosnick, Stark, and Chiang 2017, 1). These phenomena are understood to be driven by internal,

[1] However, the explicit call for a merging of political science and psychological research is credited to the political scientist Merriam (1925) (M. Deutsch and Kinnvall 2002, 15; Eldad-Strenger and Mintz 2015, 2). Harold D. Lasswell, one of Merriam's students, is today acknowledged as the founding father of modern political psychology (F. Deutsch and Boehnke 2022; M. Deutsch and Kinnvall 2002). Still, the intellectual origins of political psychology can be dated back much further, to the 19th century (Osborne and Sibley 2022, 3) or even to ancient Greece (M. Deutsch and Kinnvall 2002, 15; Monroe et al. 2009, 859; Staerklé 2015, 427; Ward 2002, 61). For an "Outline of a Cultural History of Political Psychology", see Ginneken (1988).

psychological factors and their interaction with the broader social and political environment (Cottam et al. 2022, 9/12; Huddy, Sears, and Levy 2023, 3). The field draws upon theoretical and empirical insights not only from its parent, but many other related disciplines and areas such as sociology, public administration, neuroscience or communication research (Cottam et al. 2022; Huddy, Sears, and Levy 2013a; Osborne and Sibley 2022).[2] Political psychologists examine political phenomena on the individual-level as well as on the collective level, and the political thoughts and actions of both political elites and among the general public (Huddy, Sears, and Levy 2023, 1; Staerklé 2015, 427). Classical topics of political psychological research include personality and politics, political elites and leadership, mass political behaviour and public opinion (including voting behaviour, values, ideologies and attitudes), human cognition and information processing, affective processes, political conflict and change as well as international and intergroup relations (Cottam et al. 2010, 2016, 2022; Hermann 1986a; Houghton 2015; Huddy et al. 2023; Huddy, Sears, and Levy 2013b; Jost and Sidanius 2004b; Kuklinski 2002; Monroe et al. 2009; Nesbitt-Larking et al. 2014b; Schachinger 2014; Sears, Huddy, and Jervis 2003; Staerklé 2015; Zmerli and Feldman 2015, 2022).

Capitalising on established psychological concepts to understand why ordinary citizens, political leaders and groups behave as they do in politics has become a highly illuminating and popular scientific endeavour (cf. Cottam et al. 2022, 14; Krosnick, Stark, and Chiang 2017, 1). This is not only witnessed by the field's flourishing research community organised in the "International Society of Political Psychology (ISPP)", it's high-impact journal outlets "Political Psychology" and "Advances in Political Psychology" (Mintz and Mograbi 2015; Osborne and Sibley 2022, 3), but also by the rapid and continued growth of the field, which has virtually exploded in recent years (Cottam et al. 2022, vii; Huddy, Sears, and Levy 2023, 1). So what is original about adding a dissertation to this field, which has already become so heavily cultivated?

While one could allege that political psychology is just political science's "soup of the day" (Rahn, Sullivan, and Rudolph 2002, 158) and that its high attraction in recent decades is a phenomenon of our time or our socialisation in a "psychologised" (Western) environment, respectively (cf. Mulvale and Teo 2020; Sieben 2022; De Vos 2014), I claim that political psychology will never

[2] In this vein, Cottam et al. (2022, vii) note that calling the field "political psychology" is actually misleading, because it includes scholars from many other areas as well. What is more, while political psychology commonly claims to be bi-directional in its nature and assumptions (Eldad-Strenger and Mintz 2015, 3; Fuchsman 2012, 136; see also Hermann 1986a, ix), Krosnick, Stark, and Chiang (2017) critically remark that over the past decades, the field was dominated by political scientists (see also Monroe et al. 2009) and mainly contributed to (psychologically) understand politics, but less so to inform basic psychological theory.

grow old. First, this is because it helps to satisfy a basic need not only of its scholars, but of humans in general. This is understanding, i.e. making sense of, ourselves and one another (Braslow et al. 2012, 470f.; Nesbitt-Larking and Kinnvall 2012, 46f.). Second, and even more crucially, it is hard to imagine that a research field that is constantly tackling "urgent political problems of the day" (Sears 1987, 230) will one day become obsolete. Political psychology is, and has always been, a problem-centred field, close to its socio-historical environment and responsive to topical societal problems (Eldad-Strenger and Mintz 2015; Hermann 1986b, 2; Monroe et al. 2009, 895; Nesbitt-Larking et al. 2014a, 8; Nesbitt-Larking and Kinnvall 2012, 46f.). As such, political psychology is not only fuelled by age-old questions with continued importance, but also by recent world events that challenge today's societies (Huddy, Sears, and Levy 2013a, 1, 2023, 1; Rahn, Sullivan, and Rudolph 2002, 160). Getting back to the introductory quote, the rise of populism in and beyond Western democracies and the global Covid-19 pandemic constitute two such challenges that will feature as prominently in this dissertation, as do classics of this research field such as personality and ethnic prejudice. It is thus intended to be a vivid example of the dual engine drive of political psychological research and the field's relevance. I offer new insights relating to understudied aspects of intergroup relations, new psychological explanations of both more traditional and contemporary intergroup phenomena, and investigate the intergroup psychology of a major global crisis, demonstrating how useful political psychological research can be in an ever-changing environment.

Intergroup relations are one of the most central and perennial topics of political psychology (Huddy, Sears, and Levy 2023, 12; Monroe et al. 2009; Osborne and Sibley 2022, 7). Traditionally, interracial and interethnic relations have received – and probably still receive – greatest attention in intergroup research and have already produced a vast literature (Ryan, Hunger, and Major 2017, 479; Soliz and Rittenour 2012, 333). With attitudes towards immigrants and conceptions of nationhood, i.e. attitudes towards national membership, such rather classic intergroup phenomena are also studied in the present dissertation (articles 3 and 1, respectively). However, previous research is crucially expanded – primarily but not exclusively – by putting to test new or more encompassing psychological explanations. The first article aims to close a yawning research gap in national identity literature by presenting the first systematic analysis of the so far unstudied link between the Big Five personality traits and conceptions of nationhood. Article 3 capitalises on the fact that the emergence of the Covid-19 pandemic makes it possible for the first time to systematically analyse the impact of pandemic threat on attitudes towards immigrants in the context of a naturally occurring pandemic disease. It thereby provides a real-world test of an established psychological theory (the so-called BIS-theory, see section 1.3.4), but also crucially contributes to

theoretical development by providing insights into the psychological black box that relates pandemic threat and intergroup hostility.

Furthermore, with populism or populist attitudes, respectively, a comparatively young political phenomenon embedded in intergroup relations will be psychologically illuminated (articles 2 and 4). Here, I add to the currently growing empirical picture on the psychological underpinnings of populism by tackling yet unsolved questions and by addressing conceptual and methodological shortcomings in preceding research. In this vein, article 2 extends recent findings on the "dark" personality of populist leaders by empirically scrutinising whether such a personality profile can also be identified when looking at populist citizens. Article 4 offers novel insights into the emotional fabric of populism as it examines whether the populism-fuelling effect established in the context of previous crises also occurs in the Covid-19 case. Furthermore, both studies go beyond previous research in that they not only conceptually, but also methodologically, consider that populist attitudes have various dimensions which are related to each other in a non-compensatory manner. To make another central contribution evident, articles 3 and 4 help create a new body of empirical evidence on how internal psychological processes are affected by a major crisis of the 21st century, the Covid-19 crisis, and how these processes relate to both age-old and newer instants of societal boundaries drawing between "us" and "them". Finally, drawing on Cottam and colleagues' (2022) concept of the political being, this dissertation presents a theoretical contribution by embedding two different approaches to the political psychological study of relevant outcomes in an overarching theoretical framework. In this vein, I argue that the intergroup phenomena studied are driven by inter-individual, psychological differences both in personality traits as deep-seated, stable characteristics and in emotions as situationally reactive, intrapsychic processes.

Next to these scholarly contributions, gaining a greater and more comprehensive understanding of the psychology behind these phenomena is also of pronounced social and political relevance. Transferring the insights of this dissertation beyond research can help political practitioners and decision-makers as well as citizens to understand the influence of individuals' perceptions, feelings and attitudes in the context of intergroup relations. This not only promotes and facilitates critical (self-)reflection and mutual tolerance, but also gives important indications for all kind of interventions aimed at preventing or mitigating intergroup tensions and conflict. Knowing what or when citizens are psychologically prone to hold exclusionary notions of nationhood, anti-immigrant or populist attitudes is critical to foster liberal, democratic, diverse and tolerant societies. It is only then that we can, for example, prevent unintended and potentially harmful consequences of political communication and policy design, identify relevant target groups and reach them with sensitively and vigilantly framed information, proposals and campaigns.

The remainder of this introductory chapter is structured as follows: First, I define and discuss intergroup relations from a social identity perspective (1.1) as to lay the theoretical foundation to contextualise the political phenomena studied in this dissertation in the literature on intergroup relations (1.2). In section 1.3, using Cottam et al.'s (2022) "political being", I introduce my explanatory framework and give a detailed theoretical account of personality traits (1.3.1) and a primer on emotions (1.3.2), which present the primary explanatory variables in this dissertation. Then, a short look at the political being in its context is interposed (1.3.3), paving the way for a thorough discussion of relevant emotion theories (1.3.4). Section 1.3.5 is then aimed at wrapping up the main theoretical argumentation of this dissertation and present its overarching theoretical framework. This is followed by some first notes on the articles' research design in section 1.4 and a brief overview over the four articles that make up this cumulative dissertation in the closing section 1.5.

1.1. Intergroup Relations: A Social Identity Perspective

At the very latest since the fourth era of political psychology research beginning in the 1990s (McGuire 2004, 31), intergroup relations occupy a prominent place in the research field (Eldad-Strenger and Mintz 2015, 4; Huddy 2004, 947; Osborne and Sibley 2022, 17).[3] According to Hogg (2013, 533f.), "[i]ntergroup relations refer to the way in which people who belong to social groups or categories perceive, think about, feel about, and act towards and interact with people in other groups". As "social animals" (Dovidio and Gaertner 2010, 1088; Montag and Panksepp 2017, 3), we are all organised into different types of such social groups, which exist whenever at least two people "define and evaluate themselves in terms of the defining properties of a common self-inclusive category" (Hogg 2013, 534, 2018, 116). These range from small and intimate groupings (e.g. family, friends) to larger and abstract social categories such as religious, gender, ethnic or national groups (Brewer 2010, 536; Schachinger 2014, 133f.). While humans also self-define and distinguish themselves from others by focusing on their personal identity, including, for example, individual traits or skills, intergroup relations refer to those situations where we consider ourselves and others in terms of shared features or in relation to social categories, respectively (Böhm, Rusch, and Baron 2020, 949; Ellemers and de Gilder 2021, 452). This is consistent with Sherif's (1962, 5, 1966, 12) classic and widely accepted definition of intergroup relations as any instance in which "individuals belonging to one group interact, collectively or individually, with another group or its members in terms of their group identification". In those instances, individuals' group-based or

[3] For a history of intergroup relations research, see Dovidio, Newheiser and Leyens (2012) and Huddy (2004).

so-called "social identity"[4] is (made) relevant and salient and can exert far-reaching consequences for interpersonal perceptions, attitudes and behaviours (Brewer and Kramer 1985, 2020; Dovidio and Gaertner 2010; Hogg 2013).

The probably most comprehensive and prominent theoretical integration of processes of self-conception, social categorisation, intra- and intergroup processes is the "Social Identity Approach (SIA)" (Brewer 2010, 538; Brown 2020; Ellemers and de Gilder 2021, 453; Hogg 2013, 541; Scholz et al. 2021, 60). The SIA refers to the "Social Identity Theory of Intergroup Relations (SIT)" (Tajfel 1981, 1982; Tajfel and Turner 1979, 2004) and the closely related "Self-Categorisation Theory (SCT)" (Turner et al. 1987).[5] Since the SIA presents one of the most influential theoretical accounts in social psychology (Abrams and Hogg 2010, 179; Brown 2000; Dovidio and Gaertner 2010, 1090; Ellemers and Haslam 2012, 379; Tropp and Molina 2018, 624) and is widely regarded as crucial to a psychological understanding of intergroup relations (Hodson and Earle 2017; Hogg 2018, 115; Hornsey 2008, 217), it will be briefly introduced hereafter.

The SIA's theoretical perspective is based on the basic premise that individuals, as a way of making sense of their social environment, categorise themselves and others into social groups, a natural and basic psychological process which is referred to as social categorisation (Dovidio and Gaertner 2010; Ellemers and de Gilder 2021; Hogg 2013). What this process inevitably carries with it is an "apparently universal propensity to differentiate the social world into 'us' and 'them'", i.e. into ingroups to which we belong and outgroups we are not members of. This categorisation often (automatically) elicits biased perceptions and the application of group-based stereotypes[6], whereby perceived differences within groups are minimised and differences between groups are accentuated and exaggerated (Brewer 2010, 537; Brewer and Kramer 1985, 223; Hogg 2013, 461, 2018, 120).

[4] This is, according to Tajfel's (1972, 292) classical definition, "individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of this group membership" (cited in Hogg 2016, 6). A social identity can also be understood as a common form of group identification, which, contrary to mere group categorisation or objective group membership, is a subjective and internalised sense of attachment to a group (Huddy 2013, 738f.).

[5] The two theories have slightly different foci and emphases, but emerged from the same ideological and theoretical perspective and share most of their basis assumptions and methods (see Hogg 2013, 541; Hornsey 2008, 207f.). The main difference between SCT and SIT is that the former is mainly cognitive in nature, while SIT places additional weight on motivational factors (Huddy 2023, 776; Mason 2023, 889).

[6] Note that stereotypes are considered a set of shared beliefs about any kind of attributes of people belonging to a particular social group or category and thereby function as mental short-cuts to simplify the complex social environment (Cottam et al. 2022, 57; Dovidio and Gaertner 2010). Stereotypes can be, but are not necessarily, inaccurate and/or negative (cf. Timmer 2015).

Next to this cognitive process, the motivation to achieve, protect or advance the ingroup's relative status is central to the SIA (Tajfel 1982, 24; Vala and Costa-Lopes 2015, 409). Thus, to the extent that individuals attach an emotional significance to their group membership, they are motivated to satisfy a basic need for positive group distinctiveness or for a positive social identity, respectively (Brown 2020, 6; Ellemers and Haslam 2012, 382; Hodson and Earle 2017, 2; Hornsey 2008, 207).[7] Therefore, group members engage in social comparison to "differentiate their own groups positively from others" (Turner et al. 1987, 42, cited in Huddy and Bankert 2017, 4, see also Tajfel and Turner 2004, 377).[8] This strive for positive distinctiveness commonly results in a pronounced ingroup bias (Brewer 2007, 729; Brown 2000, 747), describing "the tendency to favour the in-group over the out-group in evaluations and behaviour" (Tajfel and Turner 2004, 373; Tropp and Molina 2018, 624).[9]

It must be noted that this ingroup bias, also discussed as ingroup favouritism, ingroup positivity or ingroup love, is not to be equalled with outgroup hostility (Brewer 1999, 2007, 2010; Mason 2023, 890). While the latter refers to "blatant" outgroup animosity, derogation and harmful intentions (cf. Pettigrew and Meertens 1995), ingroup bias means "simply a *relative* positivity toward in-groups via-à-vis out-groups" (Brewer 2007, 730, italics in original). However, ingroup love can be understood as a necessary (albeit not sufficient) condition for outgroup hate and intergroup conflict (Brewer 2007, 733; but see e.g. Al Ramiah, Hewstone, and Schmid 2011, 46). Both ingroup bias and outgroup hostility have a common foundation, which is social categorisation or social identification, respectively (Dovidio and Gaertner 2010, 1088).[10] Coming back to the intergroup comparison process, if this results in an unfavourable outcome, i.e. a negative or threatened social identity, the SIA specifies several strategies that group members adopt under different socio-

[7] Whether this is to achieve a positive self-esteem through group membership as suggested by the classical SIA, to reduce contextually generated subjective uncertainty about matters relevant to one's self-concept as proposed by Hogg (2000) or rather a matter of "optimal distinctiveness" (Brewer 1991) is of less relevance in the context of this dissertation (see, for example, Hogg 2018).

[8] Preconditions for this intergroup differentiation are the internalisation of group membership into the self-concept, a social situation that allows for intergroup comparisons and that an outgroup is perceived as a relevant comparison group (Tajfel and Turner 2004, 377). As noted by Böhm, Rusch, and Baron (2020, 952), "relative deprivation theory" (see Stouffer et al. 1949) is similar in stressing the importance of intergroup comparisons in intergroup relations.

[9] The existence of an ingroup bias was experimentally tested and supported in its "most gratuitous form" (Brown 2000, 747) by Tajfel and colleagues (1971) in so-called "minimal group settings" (see also Brewer 1979). In such settings, group membership is assigned by arbitrary social categories (Brewer 2010, 538; Cottam et al. 2022, 61; Al Ramiah, Hewstone, and Schmid 2011, 46).

[10] I follow Huddy (2013, 738) to generally understand social categorisation as a precursor to social identification (see again footnote 4).

structural circumstances to improve their (relative) group status (Ellemers and Haslam 2012, 382f.; Hornsey 2008, 207). Next to individual mobility and social creativity (see Tajfel and Turner 2004) that do not promote conflict (Finley 2010, 428), these include social competition, usually related to intergroup conflict (Ellemers and Haslam 2012, 383; Al Ramiah, Hewstone, and Schmid 2011; Tajfel and Turner 2004). While the SIA discusses this strategy more prominently with regard to low-status or minority groups that aim to change the social hierarchy (Brown 2020, 13), high-status or majority groups can also engage in social competition when they feel that their values, distinctiveness or position in the social hierarchy is threatened by a relevant outgroup (Finley 2010). The discrimination, derogation, exclusion and repression of (members of) the threatening outgroup can then present a way to restore or enhance their own social identity (Böhm, Rusch, and Baron 2020, 952; Finley 2010). Whether or not this is sufficient to give the SIA itself the status of a theory of prejudice and discrimination is a matter of debate and will not be further explored here (see, for example, Brown 2020; Finley 2010; Al Ramiah, Hewstone, and Schmid 2011). As outlined in the next section, the present dissertation follows other relevant intergroup research to draw on the SIA as a broad framework or a theoretical lens through which it conceptually views the concrete manifestations of intergroup relations under study (Brown 2020; Hornsey 2008; Huddy, Sears, and Levy 2013a, 2023, 12f.). These are attitudes towards immigrants, conceptions of nationhood and populist attitudes.

1.2. "Us" vs. "Them": Attitudes towards Immigrants, Conceptions of Nationhood and Populist Attitudes

Following Hogg's (2013, 533) definition of intergroup relations above, the political phenomena this dissertation aims to psychologically illuminate – attitudes towards immigrants, conceptions of nationhood and populist attitudes – are all instants or manifestations of intergroup relations. Conceptions of nationhood are primarily about how people perceive others, and, in particular, whether they perceive them as (not) belonging to their own national group. Based on the subjective understanding of what characterises one's own nation and its members, different criteria are applied in this categorisation process. Attitudes towards immigrants and populist attitudes, on the other hand, are very much about how people think and feel about outsiders, i.e. members of either ethnic or socio-structural outgroups. Characterised by a "collective self-construal" (Hogg 2018, 116) in terms of an "us" versus "them" distinction, they all present prime examples of individual perceptions and attitudes closely associated with group memberships or social identities, respectively.

In this vein, attitudes towards immigrants and conceptions of nationhood are the more classic scientifically studied concepts. I follow others to understand anti-immigrant attitudes as ethnic

prejudice, referring to explicit negative attitudes towards socially constructed ethnic, national and ethno-religious outgroups (Fetz and Kroh 2021, 187).[11] Conceptions of nationhood, ideal-typically either ethnic or civic in nature, capture attitudes towards national belonging and are commonly understood to represent an important dimension of a major social identity: national identity (Davidov 2009, 64; Lenard and Miller 2018, 58; Obradović, Power, and Sheehy-Skeffington 2020, 127; Yogeeswaran and Verkuyten 2022, 311). This so-called content dimension of national identity is about the criteria set for national belonging and thus draws the symbolic boundaries between the "nationals", i.e. the ingroup and the "others", i.e. the outgroup(s) (Helbling, Reeskens, and Wright 2016; Reeskens and Wright 2013; M. Wright, Citrin, and Wand 2012). In an ethnically conceived national community, relevant criteria for national belonging include national descent and ancestry as well as the assignment to the national culture with its shared history, myths and sociocultural values (Berg and Hjerm 2010; Filsinger et al. 2021; Ha and Jang 2016; Helbling, Reeskens, and Wright 2016; Ignatieff 1993; Lenard and Miller 2018). In contrast, a civic conception of nationhood stresses the aspect of choice in national belonging, for which an assignment to an explicitly political culture is required, in which equal citizens commit themselves to a set of political principles, values and duties (Erhardt, Wamsler, and Freitag 2021; Hadler and Flesken 2018; Reeskens and Hooghe 2010). As discussed in more detail in article 1 and empirically taken into consideration in the article's analyses, these two conceptions of nationhood represent ideal types and are not mutually exclusive (Ha and Jang 2016; Lindstam, Mader, and Schoen 2021; Reeskens and Hooghe 2010).

Both ethnic prejudice and national identity have attracted a great deal of scientific attention for decades now (Fiske 2000; Houghton 2015, 249ff.; Yogeeswaran and Verkuyten 2022, 317). Consequently, they can be said to belong to the standard repertoire of political psychology research (see Cottam et al. 2010, 2016, 2022; Hewer and Lyons 2018; Houghton 2015; Renshon and Duckitt 2000; Zúñiga and López-López 2021). At the same time, constantly increasing international migration and the strong politicisation of immigration issues underscore the topicality and on-going scientific, social and political relevance of studying attitudes towards immigrants (cf. Fetz and Kroh

[11] Traditionally, research on ethnic intergroup relations was mainly research on racism, i.e. on "Black-White relations" in the North-American context (Zick, Pettigrew, and Wagner 2008, 234). Analytical concepts of more modern and subtle forms of ethnic prejudice abound and include, for example, "aversive racism" (Dovidio 2001; Dovidio and Gaertner 2004), "symbolic racism" (Kinder and Sears 1981), "modern racism" (McConahay 1986) or "subtle prejudice" (Pettigrew and Meertens 1995) in the European context (Jost and Sidanius 2004b, 273). Not denying the value of these conceptual and terminological differentiations (cf. Kinder 2023; Rapp 2016), in the context of this dissertation, a somewhat more generic conceptual and empirical approach to anti-immigrant attitudes is chosen. As will be discussed in article 3, anti-immigrant attitudes are understood and measured as an expressed negativity towards the arrival of new immigrants and their influence on the host country and its inhabitants (see also Pellegrini et al. 2021).

2021; Grande, Schwarzbözl, and Fatke 2019; Havermans and Verkuyten 2021; McAuliffe and Triandafyllidou 2021). Moreover, despite the undamped globalisation and Europeanisation, the Russian attack on Ukraine and the renewed escalation of the Middle East conflict dramatically demonstrate the unchallenged (and sometimes devastating) power of national identities also in today's societies (Cottam et al. 2022, 350ff.).

A comparatively younger area of intense scholarly scrutiny is populism (e.g. Noury and Roland 2020, 422), "a powerful social force that has reshaped the political landscapes of many nations since the turn of the 21st century" (Maher et al. 2022, 819; see also Forgas and Crano 2021, 1; Gidengil and Stolle 2022, 442). Recent research in this area is increasingly applying an ideational approach to the concept, defining it as a thin ideology (see Hawkins and Rovira Kaltwasser 2017a, 2017b, 2018; Mudde 2017). This allows one to also look at the demand-side of the phenomenon, i.e. populist attitudes at the mass level (Elchardus and Spruyt 2016; Erisen et al. 2021; Fatke 2019; Marcos-Marne, Gil de Zúñiga, and Borah 2023; Rovira Kaltwasser and Van Hauwaert 2020). So do articles 2 and 4 of this dissertation, which conceptualises populist attitudes as a very contemporary, but no less exemplary form of societal boundary drawing between "us" and "them". As attitudes towards immigrants and conceptions of nationhood, "populism implies a strong intergroup element" (Fatke 2019, 138). However, populists do not primarily distinguish their ingroup from the outgroup(s) in national or ethnic terms. Instead, they assign themselves to the "pure" or "ordinary" people, a homogenously constructed ingroup which is contrasted to the "corrupt" or "malevolent" outgroup: the elites (Hameleers and de Vreese 2020, 256; Huguet Cabot et al. 2021; Martínez, van Prooijen, and Van Lange 2023, 699; Rhodes-Purdy, Navarre, and Utych 2021, 1559).[12] The virtuousness and homogeneity attributed to the people is then thought to allow them to formulate a common general will which should ultimately guide all political decisions. However, this "volonté générale" is perceived to be disregarded and constrained by the power-holding but "morally inferior" elites (Mudde 2004, 2017; Mudde and Rovira Kaltwasser 2017; Müller 2016, 20). This is the essence of the "Manichean struggle" between the people and the elite,

[12] As pointed out by Hameleers and De Vreese (2020), populist attitudes as social identity interpretation frames exclude different outgroups. Vertically, the boundary is drawn between the ordinary people and the elites. Horizontally, societal minorities which are perceived as threatening from within are demarcated. For example, these include immigrants, ethnic or religious minorities or, more generally, "groups within society who do not share the "people's" values" (Martínez, van Prooijen, and Van Lange 2023, 699). Both the elites and societal minorities are excluded from the ingroup of the "decent" people (see also Berman 2019, 667; Brubaker 2017; Obradović, Power, and Sheehy-Skeffington 2020, 125). If the main horizontal outgroup opposed is non-natives and immigrants, we typically speak of right-wing populism. However, immigrants might also present a relevant outgroup in left-wing populist accounts (Fatke 2019, 139).

between the good and the bad – a moral struggle that populism generalises to politics and society as a whole, i.e. to a Manichean worldview (Castanho Silva et al. 2018; Erisen et al. 2021; Mudde 2004).

As should have become clear by now, attitudes towards immigrants, conceptions of nationhood and populist attitudes can be all understood as intergroup phenomena, or, more precisely, as intergroup attitudes. Whether constituting classical perennials in intergroup research by surrounding ethnic and national groups or more recently emerged research foci, they (still) significantly shape today's politics. With all of them speaking directly to social identities, in the heyday of "identity politics"[13] in which the contemporary world finds itself, it comes as no surprise that ethnic prejudice, national identity and populism present highly topical and explosive issues (see Fukuyama 2018a, 2018b; Marchlewska et al. 2017; Müller 2016; Noury and Roland 2020). However, these phenomena not only crucially shape politics, but also social coexistence, integration and cohesion, especially in diverse and multicultural societies. By psychologically illuminating attitudes towards immigrants, conceptions of nationhood and populist attitudes, this dissertation is concerned with some of today's most prevalent and consequential societal boundaries, which repeatedly challenge the core values and the functioning of our liberal (Western) democracies (cf. Fukuyama 2018a). This psychological illumination and how it is implemented within the present dissertation is the topic of the next section.

1.3. The Political Being and Its Psychological Attributes

The aim of this dissertation is to add to the political-psychological explanation of attitudes towards immigrants, conceptions of nationhood and populist attitudes as topical and socio-political consequential expressions of intergroup perceptions and attitudes. In the previous section, these were all discussed as instants of drawing societal boundaries between in- and outgroups and thereby embedded in the SIA framework (section 1.1). While the SIA is considered a reasonable framework for conceptually approaching the phenomena under study and demonstrating their common denominator, for their psychological explanation, I move away from this approach. Quite different from genuine SI research, explanation is not sought in social identity salience, strength or socio-structural characteristics (Hogg 2018; Scheifele et al. 2021), but in individual-level psychological attributes and processes (cf. Cottam et al. 2022, 11).[14] In this vein, the approach chosen in this dissertation is more similar to earlier theories on intergroup relations and conflict that stressed the

[13] Following Fukuyama (2018a), by identity politics, I refer to politicised cravings for adequate recognition and dignity for a relevant and salient social ingroup.

[14] See Brown (2020) for a critical discussion of the SIT as a theory of prejudice and discrimination.

role of individual differences. The classic work to be mentioned here is "The Authoritarian Personality" by Adorno and colleagues (1950) that aimed to explain extreme prejudice by a set of personal characteristics constituting a pathological personality. Although especially the measurement instruments developed within the theory became subject of harsh criticism and were largely abandoned (cf. Duckitt 2015; Martin 2001), many of its core ideas remain influential and continue to stimulate research on, mostly non-pathological, personality patterns susceptible to prejudice (Dovidio, Newheiser, and Leyens 2012, 411f.).[15]

As discussed above, on the most general level, political psychology applies psychological insights to the study of politically relevant phenomena (Huddy, Sears, and Levy 2013a, 1). With attitudes towards immigrants, conceptions of nationhood and populist attitudes, this dissertation focuses on three such phenomena, located at the individual-level of ordinary citizens. As a political psychology study, it argues that these are driven by internal, psychological factors and their interaction with the broader social and political environment (Cottam et al. 2022; Huddy, Sears, and Levy 2023). The empirical studies constituting this dissertation will touch upon various such factors or attributes of what Cottam et al. (2022, 9/11) call "the political being", graphically illustrated with figure 1. Attitudes are placed towards the top of the political being's mind since they are accessible to us and comparatively easily changeable (Cottam et al. 2022, 10). Put simply, they are understood as positive or negative evaluations of (political) objects, persons, ideas or events and include cognitive and affective components as well as behavioural tendencies (Cottam et al. 2022, 76; Olufemi 2012, 61). The political objects relevant in this dissertation are immigrants, national membership or belonging, respectively, and populism. That individuals' attitudes towards these objects are crucially linked to social identities and can thus be considered intergroup attitudes has already been outlined. In figure 1, the groups that the political being is (not) attached to are placed at the intersection of the inner mind and the broader social and political environment of the political being. This is to

[15] Such a "bottom-up analysis" of intergroup conflict is also adopted by later theoretical accounts such as Altemeyer's (1998) "right wing authoritarianism", Sidanius and Pratto's (1999) "social dominance theory", (partly) in Jost and colleagues' (1994; 2004) "system justification theory", Rokeach's (1960) "dogmatism" or Kruglanski and colleagues' (2006) concept of "need for cognitive closure" (Böhm, Rusch, and Baron 2020; Hogg 2013, 537; Huddy 2004; Tropp and Molina 2018). Another line of intergroup research puts its focus on socio-structural factors of (competitive) group relationships and interdependence or on intergroup threat, respectively (see Dollard et al. 1939; Sherif 1958; but also Stouffer et al. 1949). Prominent examples are, for example, the "frustration aggression hypothesis" (Dollard et al. 1939), "realistic conflict theory" (Sherif 1958), "relative deprivation theory" (Stouffer et al. 1949), "symbolic racism theory" (Kinder and Sears 1981) or "integrated threat theory" (Stephan and Stephan 2000; cf. Hogg 2013; Yzerbyt and Demoulin 2010).

illustrate how the groups themselves form part of the environment, but group membership and identification (i.e. social identity) is an attribute of the individual.

These intergroup attitudes will be primarily explained through two other crucial aspects of the political being: personality and emotions, discussed in more detail in the following sections 1.3.1 and 1.3.2. That these concepts also meaningfully relate to other features of the political being such as values and cognitive processes will be considered theoretically in the articles and is further discussed below regarding the strong interdependence of emotion and cognition (sections 1.3.2 and 1.3.4).[16]

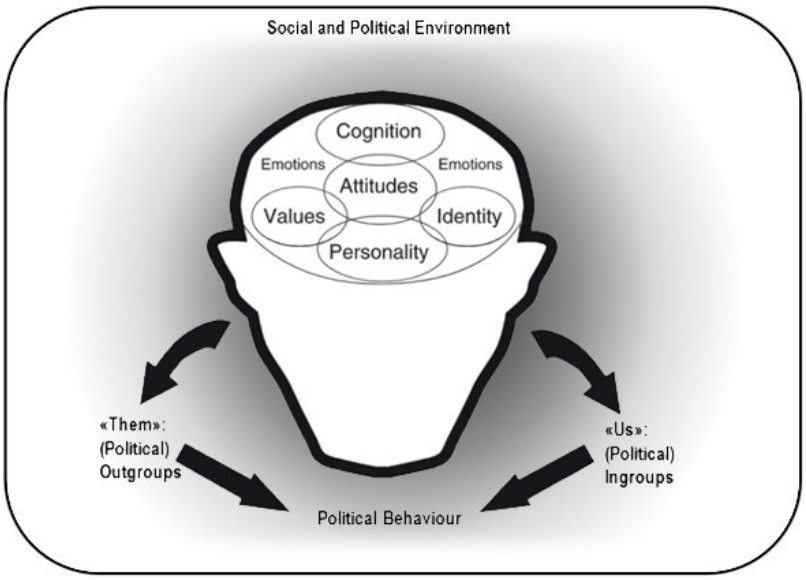

Figure 1: The Political Being
Source: Slightly adapted from Cottam et al. (2022, 11).

[16] *Values* are understood as deeply held general beliefs about what is right and wrong and thereby serve individuals as guiding principles across different situations (Cottam et al. 2022, 10; Leimgruber 2011, 108; Schwartz 2016, 64). *Cognitive processes* function as the mind's computer in that they involve the reception and interpretation of information from the environment (Cottam et al. 2022, 12). The fact that various psychological factors and processes in the political being's mind interrelate and affect each other (cf. Cottam et al. 2022) is taken into account for the theoretical argumentation in all studies of this dissertation. However, it must be noted that this holistic perspective is taken for, and confined to, the purpose of a theoretically driven and comprehensible generation of expectations and concrete hypotheses. This means that empirically, the focus is on one psychological factor and it's relation to the political phenomena in each study, whereas an empirical investigation of (x-way-)interactions, mediations and other complex patterns is beyond their the scope.

1.3.1. Personality Traits: The Big Five and the Dark Triad

Broadly speaking, personality refers to the entirety of psychological structures and processes that reflect "relatively stable patterns of feeling, thinking, striving, and behaving" and by which individuals differ from one another (Kandler, Riemann, and Hufer-Thamm 2022, 61f.; Caprara and Vecchione 2013). While there are different approaches to the study of personality (see Asendorpf and Neyer 2012; Cottam et al. 2022), I follow the so-called trait paradigm, which goes back to Gordon Allport (1937) and presents the currently dominant approach in personality and political psychology.[17] Therein, personality is described on the basis of a rather small set of partly inherited core characteristics, i.e. personality traits, which are relatively stable across time and transcend specific situations (Huddy, Sears, and Levy 2023, 7). As such, they "produce predispositions to think, feel, or act" (Cottam et al. 2022, 23) in all spheres of life, including the political one (Freitag 2017; Gerber et al. 2011; Kandler, Riemann, and Hufer-Thamm 2022; McCrae and Costa 2008). While different trait models exist, including partly different (numbers of) such core characteristics (cf. Feher and Vernon 2021; McCrae and Costa 2008, 173f.), the currently most consensual and popular way to comprehensively conceptualise and reliably measure personality traits is the so-called "Big Five Model" (Chen, Pruysers, and Blais 2021, 580). This model aims to capture the most important differences in general human personality with five broad and higher-order, empirically derived trait dimensions: openness to experience, conscientiousness, extraversion, agreeableness and neuroticism (Bakker 2023; Gosling, Rentfrow, and Swann 2003; Mondak and Halperin 2008).[18]

Openness to experience refers to a curiosity about new experiences, ideas and actions with individuals scoring high on this trait being open-minded, original and broadly interested (Freitag and Hofstetter 2023; John, Naumann, and Soto 2008; Mondak and Halperin 2008). Highly conscientious individuals have a pronounced need for control and structure, are typically described as very dutiful, organised, reliable and ambitious (Gallego and Pardos-Prado 2014; Kandler, Riemann, and Hufer-Thamm 2022). Extraversion refers to an energetic and excitement-seeking approach towards the social and material world and is associated with activity, sociability and assertiveness (Dinesen, Klemmensen, and Nørgaard 2016; Fatke 2017; Gerber et al. 2011). Agreeableness refers to cooperation, trust, sympathy and altruism (Mondak and Halperin 2008, 346). People scoring high on this trait long for harmony, are prosocially and communally oriented, compliant and tolerant (Dinesen, Nørgaard, and Klemmensen 2014; John, Naumann, and Soto 2008). Finally, neuroticism contrasts emotional stability and even-temperedness and refers to

[17] For a critical discussion of the trait approach to personality, see Deary (2009).

[18] To refer to the model, the trait dimensions' acronym «OCEAN» is also used in the literature.

negative emotionality, including feelings such as overwhelm, sadness, worry, disappointment and anxiety (Freitag and Hofstetter 2023; Gerber et al. 2011; Kandler, Riemann, and Hufer-Thamm 2022).

The Big Five personality traits are the central explanatory variables in article 1 of this dissertation, which is concerned with the personality correlates of national identity content. So far, those attitudes towards national membership have been explained by factors lying at the contextual level (e.g. economic or democratic development, globalisation, ethnic diversity) as well as at the individual-level (e.g. socio-economic and citizenship status, religiosity) (e.g., Ariely 2012; Canan and Simon 2019; Hadler and Flesken 2018; Jones and Smith 2001; Kunovich 2006, 2009; Shulman 2002). However, a deeper understanding of the psychological underpinnings of different conceptions of nationhood was largely lacking. Article 1 is thus a notable contribution to the literature, addressing a substantial research gap by presenting the first systematic analysis of the yet unstudied link between the Big Five and civic and ethnic national identities. The scholarly relevance of this investigation is further enhanced by testing these relationships across six Western European countries, addressing the lack of cross-national studies in research on personality effects in the political sphere. Next to cross-country differences, I find a consistent negative relationship between openness to experience and an ethnic national identity, while conscientiousness relates positively to the civic ideal type of national identity. The analyses thus provide empirical evidence that distinct conceptions of nationhood are indeed related to different dispositional foundations (i.e. personality traits) and thereby allow for valuable insights into the question of why and how individual notions of national belonging differ – also within specific country contexts. Not at least given that ethnic conceptions of nationhood have been shown to encourage outgroup hostility and conflict, these psychological insights are of pronounced social and political relevance. If liberal democracies aim to foster societal integration, cohesion and tolerance in the context of diversity, promoting inclusive, i.e. civic conceptions of nationhood can be an important measure.

The Big Five personality traits are also considered in the personality psychological illumination of populist attitudes in article 2 of this dissertation. However, the main interest of this study lies in the explanatory power of another set of personality traits, the so-called "Dark Triad" (Paulhus and Williams 2002). While the Big Five undoubtedly present a very useful and widely accepted trait taxonomy, they describe personality on a decidedly general level and have been questioned as a personality framework able to capture all relevant personality variation (Chen, Pruysers, and Blais 2021, 580). In particular, it has been argued that the model fails to discriminate between various antisocial tendencies and, as a consequence, to adequately assess socially malevolent or dark nuances of human personality (Galais and Rico 2021; Hong, Koh, and Paunonen 2012; Nai and

Maier 2018; Nai and Martínez i Coma 2019). As a remedy, a cluster of three empirically related yet conceptually distinct, subclinical personality traits has been proposed: the Dark Triad of Machiavellianism, narcissism and psychopathy (Furnham et al. 2014; Furnham, Richards, and Paulhus 2013). Machiavellianism refers to a dispositional tendency towards manipulation, calculating and exploitative behaviour driven by self-interest, ambition and power motives (Chen, Pruysers, and Blais 2021, 580; Feher and Vernon 2021, 3; Hart, Richardson, and Tortoriello 2018, 60). Narcissism is characterised by an inflated sense of self-worth and love, grandiosity, superiority, dominance and entitlement (Paulhus and Williams 2002, 557; Peterson and Palmer 2021, 2). Finally, psychopathy is associated with high impulsivity, thrill-seeking, fearlessness and a lack of empathy (Furnham et al. 2014, 115; Hart, Richardson, and Tortoriello 2018, 60). As revealed by previous research, the Dark Triad traits cannot be adequately represented by the Big Five and yield discrete explanatory power for a variety of political outcomes (Bakker 2023, 24; Chen, Pruysers, and Blais 2021, 580; Peterson and Palmer 2021, 1). What is more, although it is assumed that they are particularly relevant to the domain of politics (Hart, Richardson, and Tortoriello 2018, 59) and previous research finds that "populist leaders stand out for their 'dark personalities"'(Galais and Rico 2021, 1), they are comparatively rarely considered in psychological accounts of political attitudes and behaviours among the public. Moreover, the very few studies on the relationship between dark personality traits and populist attitudes (Galais and Rico 2021; Pruysers 2020) suffer from theoretical and empirical shortcomings and have produced highly inconclusive results. Against this background, article 2 specifies and expands previous research and provides first cross-country evidence on the dark personality profile characterising individuals who hold populist attitudes. In general, we find most relationships to be non-universal, underscoring the relevance of our comparative perspective. Yet, what seems to emerge is that psychopathy is a relatively consistent trait of populist individuals, albeit interestingly, it is negatively related to the people centrist subdimension of populism, supporting the idea that considering the concept's multidimensionality contributes to a more nuanced understanding of the populist personality. Our findings hold important political implications, for example relating to the role played by the supply side of populism (cf. Federico and Malka 2018).

1.3.2. Emotions

We now turn to the other attribute of the political being that features prominent in this dissertation, namely emotions. While long ignored in political science and political psychology, during the last few decades, we can observe an ever-growing scientific interest in and literature on emotions and politics (Brader and Marcus 2013, 165; Huddy, Sears, and Levy 2023, 11; Kushner Gadarian and

Brader 2023, 191; Redlawsk 2023, 146; Redlawsk and Mattes 2022, 139).[19] In general, emotions are multifaceted, "whole-body phenomena" that involve changes in physiology, subjective experience and behaviour (Gross 2014, 4; but see Izard 2010 for the many meanings of emotions). According to Albertson and Gadarian (2015, 5), emotions are made up of "(1) an appraisal or evaluation of the situation, (2) a physiological reaction, (3) a change in cognitive activity, (4) an action tendency and (5) a subjective feeling state" (see also Brader and Cikanek 2019, 203; Coppin and Sander 2021, 7). Today, emotions are largely acknowledged to be highly functional – rather than irrational – in that they assist humans in making sense of their complex environment, both consciously and unconsciously, and serve them as essential motivating forces to meet situational needs and goals (Albertson and Gadarian 2015; Bonansinga 2020; Brader and Cikanek 2019; Houghton 2015). Moreover, emotions and cognition are closely tied (Pessoa 2010) and "work in concert" (Bonansinga 2020, 83; Cottam et al. 2022, 10). The age-old debate about affect or cognition primacy set aside (cf. Coppin and Sander 2021; Houghton 2015; Lai, Hagoort, and Casasanto 2012), emotions are central not only to our social experience, but have been shown to "shape attention, decision-making, attitudes, and action in the realm of politics" (Brader and Marcus 2013, 166; see also Albertson and Gadarian 2015b, 5). There are different disciplinary perspectives on emotions, including psychoanalytic, social psychological, evolutionary psychology or neuroscience approaches, and, relatedly, different emotion models and theories, including valence, discrete or dimensional theories of emotions as well as individual- and group-level theories.[20] In the context of this dissertation, two theoretical approaches are in the foreground: First, this is the "behavioural immune system (BIS)" theory, which centres around disgust, an emotion of pronounced relevance in the study of intergroup relations and conflict (Brader and Cikanek 2019, 226; Wormley and Varnum 2023, 1). Second, this is the "affective intelligence theory (AIT)", presenting the most dominant theoretical lens through which emotions in politics are studied (Kushner Gadarian and

[19] In brief, this neglect mainly reflects the "reason-passion dichotomy" that was long prominent in political science and normatively contrasted cognition and emotions, with the latter dismissed as irrational, elusive and destructive (Bonansinga 2020; Brader and Marcus 2013; Vasilopoulos 2019). Against this backdrop, the "cognitive revolution" in psychology, starting in the mid of the 20th century, has of course also contributed to the privilege of cognitive explanations of political behaviour and attitudes (Albertson and Gadarian 2015; Marcus et al. 2006; Redlawsk and Mattes 2022). However, the idea that emotions matter in politics is anything but new and can already be found, for example, in ancient Greek thought (Marcus 2000, 221).

[20] It is beyond the scope of this dissertation to present these theoretical approaches in more detail and discuss them in relation to each other. (Selective) Overviews can be found, for example, in works around George E. Marcus (Brader and Marcus 2013; Marcus 2003; Marcus et al. 2019), Sirin and Villalobos (2019), Redlawsk and Mattes (2022) or Kushner Gadarian and Brader (2023).

Brader 2023, 195; Sirin and Villalobos 2019, 5). Before these theories are discussed in more detail, a short insertion on the political being's environment (see figure 1) is necessary.

1.3.3. A Necessary Interlude: The Political Being in Context

So far, we have discussed personality traits and emotions as internal attributes of the political being. However, as shown in figure 1, the political being is embedded in a broader social and political environment or context respectively.[21] As noted by Cottam et al. (2022, 12), "[p]olitical psychology involves not only the individual, but also the individual's interaction with their […] environment" (see also Huddy, Sears, and Levy 2023, 3). Today, as the so-called "person-situation debate" that erupted in the late 1970s has largely been overcome (cf. Fleeson and Noftle 2008; Funder 2009), there is a broad consensus around Lewin's (1936) classical claim that (political) behaviour and thoughts are a function of the person, i.e. individual-level factors, *and* the situation (Feldman and Zmerli 2022). Importantly, these two variables are not only acknowledged to have meaningful and systematic main effects, but also to interact with each other in shaping political behaviour and attitudes (Huddy, Sears, and Levy 2023; McGraw 2006, 143f.). In contemporary empirical research, different approaches to this person-situation interaction are pursued (see Furr and Funder 2021). So-called "dispositionally focused work" emphasises the role played by cross-situationally stable qualities of individuals such as personality traits. "Situationally oriented research", on the other hand, focuses on how (political) behaviours and attitudes are affected by characteristics of the situation in which they occur. These approaches have a venerable research tradition and – provided they avoid a competitive view on personal and situational forces and adequately discuss the (in-)comprehensiveness of their explanatory approach – continue to be fruitful and to provide meaningful insights (Furr and Funder 2021).

Studying the personality foundations of conceptions of nationhood and populist attitudes, articles 1 and 2 of this dissertation are clearly dispositionally focused. Still, scrutinising the respective relationships across different country-contexts is an important contribution of these studies, which thereby allow for (still relatively rare) insights into the generalisability of personality effects in the political sphere. While it is beyond the scope of these studies to explain the contextual effects of different personality traits, empirically proving that they do exist is an indispensable step, which will hopefully stimulate subsequent research on how intra-psychological and contextual factors

[21] As is often done in various fields of research, in this dissertation, I use the terms context, (external) circumstances, environment and situation interchangeably (cf. Gero and Smith 2009, 600; Nilsen and Bernhardsson 2019, 2; Pettegrew 1988, 333). At the same time, I am aware that, depending on the research goal pursued, it can elsewhere be important to differentiate these conceptual terms, which partly also have a discipline-specific meaning, scope and relevance.

jointly shape populist attitudes, conceptions of nationhood and other politically relevant phenomena. On a general level, this can not only be done with explanatory models including additive (person and situation) as well as multiplicative (person×situation) effects, but also by "contextualised person variables", "viewing 'the person in terms of contextually tuned dispositions" (Furr and Funder 2021, 672). This approach is pursued in articles 3 and 4 of this dissertation, which look at how emotional reactions to a specific situation, the Covid-19 pandemic, relate to attitudes towards immigrants and populist attitudes. Here, emotional reactions are understood as inherent components of the political being, which are, however, "by definition and function, inherently connected to situations" (Furr and Funder 2021, 673). This is why emotions float freely around in figure 1, while personality traits, thought to reveal relatively high stability across time and different situations, are placed in the depth of the political being's mind (Cottam et al. 2022, 9ff.).[22] As in the personality studies, the role of the context is further taken into account by applying a cross-country research design. In the next paragraph, the Covid-19 pandemic is shortly discussed as the relevant contextual trigger of emotions in this dissertation.

In December 2019 in Wuhan, China, «an epidemic outbreak of a new human coronavirus, termed the novel coronavirus COVID-19, has occurred» (Liu et al. 2020, 1), and shortly after, has developed into a global pandemic. Only recently (May 2023), the World Health Organization (WHO) declared the end of the global health emergency after a downward trend of more than a year, owed to the spread of effective vaccines and increased immunity through recovered infections.[23] As of mid-July 2023, the pandemic has claimed almost 7 million lives worldwide and more than two million in Europe alone.[24] It not only painfully affected public health but had severe consequences for almost all spheres of life, including the economic, social and political one, both at the individual level and at the (sub-)national level, culminating in a multi-faceted crisis. A crisis

[22] While there is also a broad literature on emotional traits (e.g., Elwood, Wolitzky-Taylor, and Olatunji 2012; Veenstra, Bushman, and Koole 2018), i.e. enduring tendencies to feel particular emotions (Toner and Gates 1985, 49), in this dissertation, emotions are mainly understood as reactive and transient psychological states. The implications of this two-fold conceptualisation and operationalisation of emotions will be shown and discussed by differentiating disgust as an emotional state from disgust sensitivity as an emotional trait in article 3 of this dissertation. Further, it should be noted that understanding personality traits as relatively stable across situations does not preclude contextual variation in their relationship with other variables such as political attitudes.

[23] United Nations (UN), UN News, " WHO chief declares end to COVID-19 as a global health emergency", published: May 5th 2023, last access: July 25th 2023, URL: https://news.un.org/en/story/2023/05/1136367.

[24] World Health Organization (WHO), WHO Coronavirus (COVID-19) Dashboard, "Overview", last access: July 25th 2023, URL: https://covid19.who.int/.

is defined as "a serious threat to the basic structures or the fundamental values and norms of a social system, which – under time pressure and highly uncertain circumstances – necessitates making critical decisions" (Rosenthal and Kouzmin 1997, 280). Based on the theoretical accounts of emotions presented in the subsequent section, the present dissertation argues that the various threats posed by the Covid-19 crisis evoked different emotional reactions among individuals, which in turn are consequential for intergroup relations, an assumption that is examined using the examples of attitudes towards immigrants (article 3) and populist attitudes (article 4).

1.3.4. Back to Emotions: The Behavioural Immune System Theory and Affective Intelligence Theory

Although social psychologists were leading in conceptualizing and researching the so-called "behavioural immune system (BIS)", the BIS-theory essentially relies on insights and arguments from evolutionary psychology and biology (Schaller, Murray, and Hofer 2021, 2; Shakhar 2019, 3). Throughout evolutionary history, infectious pathogens and the diseases they are causing posed a major deadly threat to humans and the reproductive fitness of their species (Aarøe, Osmundsen, and Petersen 2016; Bradshaw and Gassen 2021; Schaller, Murray, and Bangerter 2015; Schaller and Park 2011; Troisi 2020). The evolutionary adaptive, vital need to avoid and defend against pathogens led to the evolvement of sophisticated physiological defences or bio-immunological mechanisms, respectively, comprising the classic or physiological immune system (Ackerman, Hill, and Murray 2018; Miller and Maner 2012; Schaller, Murray, and Bangerter 2015). While the activation of this system is quite efficient in fighting pathogens, it is limited by its reactive nature, by not always being successful and metabolically costly (Ackerman, Hill, and Murray 2018, 1; Schaller, Murray, and Hofer 2021, 1; Shook et al. 2020). As scholars have demonstrated, this is why the evolutionary pressure of pathogens also shaped human psychology and led to the evolution of a complementary, psycho-motivational system, the BIS (Aarøe, Osmundsen, and Petersen 2016; Ackerman, Hill, and Murray 2018; Murray and Schaller 2016; Schaller 2016; Troisi 2020). The BIS functions as a "toolbox" for facilitating infection prophylaxis and contains affective, cognitive and behavioural tools to avoid infection in the first place (Filsinger and Freitag 2022, 420; Petersen 2023, 261f.; Schaller 2011, 3418; Schaller and Park 2011, 99; Wormley and Varnum 2023, 1). As a highly sensitive monitoring system, the BIS scans the immediate environment for perceptual cues indicating a potential infection risk and, in order to facilitate behavioural avoidance, activates aversive, psychological processes when such are detected (Schaller 2011; Schaller and Park 2011). Behavioural immune activity is functionally flexible, meaning that it calibrates (the strength of) its response to the costs and benefits of pathogen avoidance, thereby taking into consideration the perceived personal and contextual vulnerability to pathogen infection (Ackerman, Hill, and Murray

2018, 2). Moreover, "given the asymmetry in costs of false alarm versus misses" (Tybur and Lieberman 2016, 7), the BIS resembles a smoke detector (cf. Nesse 2005; Petersen 2023, 262) in being biased to overgeneralisation or false-positive inference errors, respectively (Miller and Maner 2012). It tends to sound the alarm at any hint of a potential infection risk, especially at perceptual cues that superficially resemble infection symptoms or have historically been associated with infectious diseases such as noxious odours, physical and mental anomalies or counter-normative behaviour (Ackerman, Hill, and Murray 2018, 2; Murray and Schaller 2016, 12; Schaller, Murray, and Hofer 2021, 3). This results in that many entities, including objects but also individuals and social groups, are implicitly assumed to pose a threat based on some broad categories of superficial cues that imperfectly, and often erroneously, indicate an infection risk (Schaller and Neuberg 2012, 14).

A social group that is particularly at risk of being mistakenly perceived as posing an infection risk is that of the "subjectively foreign", including foreigners, immigrants or ethnic minorities (Murray and Schaller 2016; Petersen 2023; Schaller 2016; Schaller, Murray, and Bangerter 2015; Valtorta et al. 2021).[25] Against this background, research has referred to outgroup hostility as one major social consequence of BIS activity (Aarøe, Petersen, and Arceneaux 2017; Ackerman, Hill, and Murray 2018; Kusche and Barker 2019; Navarrete and Fessler 2006; Schaller 2011; Schaller and Park 2011). Due to the BIS's functional flexibility, this relationship is said to be accentuated in times of increased pathogen threat or parasite stress, respectively (cf. Murray, Schaller, and Suedfeld 2013; Thornhill and Fincher 2020; Tybur et al. 2016). A major player in the BIS is the emotion of disgust, which is triggered "in the face of potential pathogenic contaminators" (Aarøe, Osmundsen, and Petersen 2016, 1). Disgust is so central to the function of the BIS that some even argue that these concepts are functionally identical and use them as synonyms (Bradshaw and Gassen 2021, 33; Murray and Schaller 2016, 9). According to Aarøe, Petersen, and Arceneau (2017, 279), disgust is the "consciously accessible output" once the BIS got activated. As a (disease-)avoidance or rejection emotion (cf. Davey 2011; Redlawsk and Mattes 2022), disgust motivates individuals to avoid, (physically) distance and withdraw from, as well as to expel the offending entities, i.e. the objects, people or situations that elicited the emotional reaction (Bradshaw and Gassen 2021, 249; Haidt 2003, 857). Crucially, disgust has powerful consequences for intergroup relations in

[25] As discussed in more detail article 3, there are several reasons why individuals perceived as foreign disproportionately trigger behavioural immune activity. These include that such individuals may have an unfamiliar physical appearance that is subjectively perceived as anomalous (e.g. darker skin colour), that they might carry exotic parasites to which the self and its ingroup are not yet adapted immunologically or that they are feared to be unaware of local rituals and norms relevant to prevent disease transmissions (Murray and Schaller 2016; Schaller 2011, 2016).

motivating changes in intergroup attitudes (Brader and Cikanek 2019, 226; Navarrete and Fessler 2006, 276). The general "tendency to experience disgust in response to potential elicitors" is captured with the concept of "disgust sensitivity", which will be discussed in more detail in article 3 (see also footnote 22).

Article 3 of this dissertation applies the BIS-framework to the study of intergroup relations in the context of the Covid-19 crisis. Using a multi-level design that combines individual-level survey data with regional-level Covid-19 data, it tests the notion that increased pandemic threat is associated with more hostile attitudes towards immigrants. Thereby, the study contributes to the literature by providing empirical evidence for the validity of the classical BIS-hypothesis in a real-world setting, i.e. in the context of a naturally occurring pathogen threat. What is more, by the means of multi-level path models, we not only scrutinise the role played by disgust. Drawing on the "affective intelligence theory (AIT)", we additionally shed light on other affective mechanisms connecting pathogen threat with attitudes towards immigrants. Our analyses show that Covid-19 pandemic threat exposure is indeed associated with stronger anti-immigrant sentiment. Regarding the psychological mechanisms underlying this relationship, we find anger to be crucial, while fear triggered by Covid-19 relates to more positive attitudes towards immigrants. Moreover, we present and discuss findings on the role played by disgust that appear surprising at first. All in all, our results indicate that the BIS appears as a compelling obstacle to inclusive orientations, but that not all affective processes related to it translate pandemic threat into outgroup negativity.

The AIT, that is the affective intelligence theory (Marcus 2000, 2002; Marcus and Mackuen 1993; Marcus, Mackuen, and Neuman 2011; Marcus, Neuman, and Mackuen 2000), is the product of a cross-disciplinary dialogue between political science and neuroscience starting in the in the 1980s and presents the first political theory on emotions that fully relies on neuroscientific principles (Marcus et al. 2019; Vasilopoulos 2019).[26] In its current version, the AIT identifies two dynamic neural systems that constantly sort the information we confront. The "disposition system" assesses the success of habituated goal seeking routines (i.e. habits) in response to familiar stimuli (Marcus et al. 2019, 117; Sirin and Villalobos 2019). This rapid, preconscious appraisal about the success or failure of ongoing action is reported to the brain by the affective dimension of enthusiasm, ranging from depression to elation (Kushner Gadarian and Brader 2023, 195; Marcus 2013, 26f., 2017). Another crucial capacity of the disposition system is the identification of recurring threats to cherished norms and practiced routines of thought and action (Marcus 2017; Vasilopoulos et al.

[26] Several of these axiomatic principles are touched upon in the following. For a more detailed account, see Marcus et al. (2019, 116).

2019, 681). In the context of such familiar but punishing circumstances, the affective appraisal of anger (aversion)[27] signals the severity of the normative offense and prompts the reliance on learned habits to manage them (Marcus 2012, 150f.; Marcus et al. 2019, 117). As an approach emotion, anger motivates individuals to externalise the responsibility for the threatening circumstances and to respond to them in a confrontative, aggressive and uncompromising way (Brader and Marcus 2013; Rico, Guinjoan, and Anduiza 2017). Enthusiasm and anger are thus both affective appraisals of a currently either rewarding or punishing but familiar environment, in which the (typically unconscious, automatic) reliance on proven courses of thinking and acting is promising and strategically effective (Johnston, Lavine, and Woodson 2015, 475; Marcus 2013, 27). If this is not the case, i.e. if individuals are confronted with novel, unusual and uncertain circumstances, another system called the "surveillance system" takes over and uses the affective dimension of fear to signal that a departure from routines is necessary to successfully manage the situation (Marcus 2012). Conscious awareness is brought into action; attentiveness, deliberation and learning are increased (Johnston, Lavine, and Woodson 2015, 475; Sirin and Villalobos 2019). In terms of the widely popular dual process models of decision-making (cf. Meffert and Zmerli 2022), "system 2 thinking" – a controlled, systematic and cognitively demanding mode of information processing (Grayot 2020, 106) – is activated (Brader and Cikanek 2019; Marcus 2017). Fearful individuals typically engage in cautious, risk-aversive and information-seeking modes of behaviour that promise safety (Brader and Marcus 2013; Erisen, Vasilopoulou, and Kentmen-Cin 2020).

Anger and fear thus crucially differ in their consequences for information processing, decision-making, tendencies to act and thus, as evidenced by recent research, for (political) attitudes and behaviours (e.g. Erhardt et al. 2021; Erisen, Vasilopoulou, and Kentmen-Cin 2020; Filsinger and Freitag 2022; Marcus et al. 2019; Rico, Guinjoan, and Anduiza 2017; Vasilopoulos et al. 2019, 2023; Vasilopoulou and Wagner 2017; Wamsler et al. 2023). What they have in common is that both emotions are triggered in conditions of threat, making them most relevant to my studies of the political consequences of Covid-19-induced emotions.[28] When a given situation is appraised as

[27] The terms anger and aversion are sometimes used interchangeably, whereby Brader and Marcus (2013, 179) locate anger within the emotional cluster of aversion that, for example, also includes disgust (Redlawsk and Mattes 2022, 140). In recent empirical research that is based on the AIT, it is common to refer to fear and anger as the two main affective reactions to threatening circumstances (e.g. Erisen, Vasilopoulou, and Kentmen-Cin 2020; Marcus et al. 2019; Vasilopoulos et al. 2019; Vasilopoulou and Wagner 2017; Wagner 2014). The present dissertation follows this approach.

[28] Strictly speaking, it is somewhat imprecise to speak of fear and anger as "emotions" in the context of AIT since this could imply that we are talking about discrete emotional states. However, in contrast to cognitive appraisal theories, AIT subscribes to a dimensional account of emotions. Preconscious appraisals of the environment are affectively

threatening by being novel, uncertain and beyond one's control, this is affectively expressed in terms of fear (Albertson and Gadarian 2015). In contrast, anger is associated with the affective signalling of a threat to cherished norms and the achievement of goals against the background of perceived personal efficacy and external perpetrators (Birch, Allen, and Sarmiento-Mirwaldt 2017, 895; Erisen, Vasilopoulou, and Kentmen-Cin 2020, 797). As argued above, the Covid-19 crisis presented a substantial and multi-faceted threat and can thus be expected to trigger both fear and anger. Importantly, this in line with the core tenet of AIT that all relevant appraisals are executed simultaneously and largely independently, which is why facing a threat, individuals commonly react with both heightened fear and anger (Vasilopoulos et al. 2019).

As alluded to above, in article 3 of this dissertation, AIT is used to expand the BIS-framework in the study of intergroup attitudes. While most BIS-research centres on disgust, AIT allows us to study the emotional part of the BIS more broadly, uncovering new psychological mechanisms connecting pathogen threat with attitudes towards immigrants. Thereby, we follow a central demand in threat literature to identify the emotions which do the work (e.g. Murray and Schaller 2016).

The AIT also appears in article 4 of this dissertation, where it forms the central theoretical background for the study of pandemic threat-induced emotions and populist attitudes. Previous research showed that populism tends to flourish in the wake of external threats (e.g. economic crises, terror attacks or immigration). In the political debate as well as by pundits, this is commonly attributed to the emotional experience of fear, whereas recent scholarly literature indicates that anger is the dominant emotion that drives populism. The findings of our cross-country analyses provide empirical support for the latter assumption. Furthermore, we show that this holds in particular for anti-elitism and the Manichean outlook inherent in populist attitudes. No less important, the study expands the literature on the psychological underpinnings of populism by examining the role played by emotions elicited by a threat barely connected to the classical political grievances underlying populism and by considering populism's distinct components. In this vein, it also offers a possible explanation why populist forces did not necessarily perform well during this crisis.

expressed along the dimensions of fear and anger, which both encompass a range of feelings. While this dimension ranges from calmness and relaxation to unease and anxiety in the case of fear, bitterness, contempt, anger and hatred are feelings within the affective range of anger or aversion, respectively (Marcus 2012, 2017). For the sake of readability and consistency with the relevant literature, variations along these dimensions are simply described referring to the dimensions' labels (i.e. fear and anger).

The next section rounds out the theoretical argumentation and presents the overarching theoretical framework of this dissertation.

1.3.5. Wrapping Up the Theoretical Argument

Drawing on Cottam and colleagues' (2022) concept of the political being embedded in a broader social and political context (figure 1), this dissertation combines two general theoretical approaches to the study of different intergroup phenomena. How these are embedded in an overarching theoretical framework is graphically depicted in figure 2.

Adopting a predominantly dispositional approach, my main theoretical argument in articles 1 and 2 is that (both general and dark) personality traits are deep-anchored, relatively stable intrapsychic factors that affect intergroup attitudes in the form of conceptions of nationhood and populist attitudes. Still, the empirical analyses account for the interaction of these internal attributes with the environment by studying the respective relationships separately in six different country contexts (see figure 2). They show both highly consistent and cross-contextually varying trait patterns. In contrast, the key argumentation line pursued in articles 3 and 4 is that intergroup phenomena are also affected by internal psychological factors that are less stable, but inherently related to the context in which the political being finds itself. This is tested looking at the role played by Covid-19 pandemic threat-elicited emotions on attitudes towards immigrants (article 3) and populist attitudes (article 4). As discussed in detail in article 4 on populist attitudes in particular, emotions as "contextualised personality variables" (Furr and Funder 2021) associate in a similar vein to intergroup attitudes across countries. However, as they are bound to specific contextual circumstances (here, the Covid-19 pandemic threat), some cross-country variation in relationships remains. Concluding, I argue that the intergroup phenomena studied in this dissertation are driven by inter-individual, psychological differences both in deep-seated, stable characteristics such as personality traits and situationally reactive, intrapsychic processes like emotions.

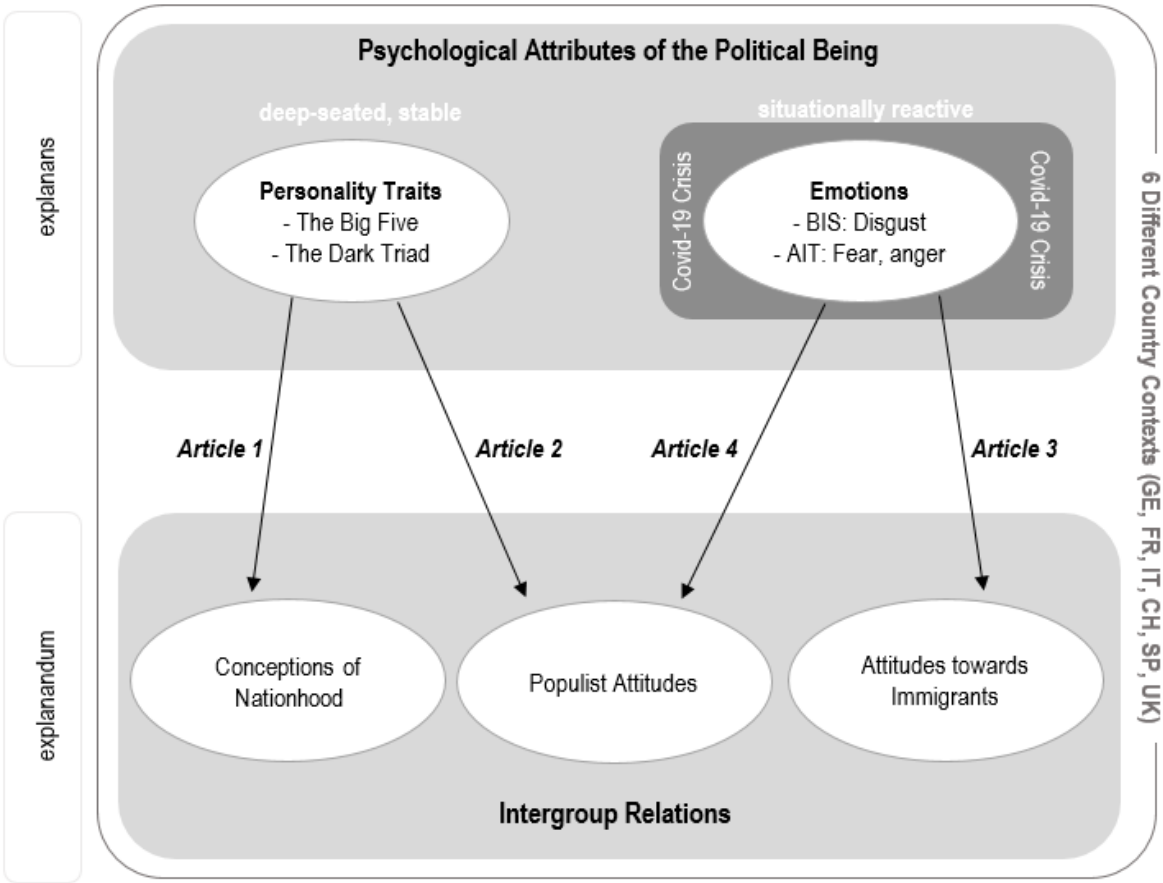

Figure 2: The Dissertation's Theoretical Framework

1.4. Research Design

This dissertation consists of four independent research articles that are, however, unified in their aim to add to a psychological explanation of political attitudes embedded in intergroup relations. In order to empirically scrutinise the role played by personality traits for conceptions of nationhood and populist attitudes, how the latter are shaped by Covid-19-induced emotions and how these emotions relate to attitudes towards immigrants, different research designs are employed. Here, I will briefly point to the common denominators of these designs, while the articles will give information about their peculiarities. Consequently, the general method, the data used for the analyses, the case selection and empirical measures used in more than one study are discussed.

On the most general level, all articles use quantitative statistical strategies, including individual- and multi-level linear regression models as well as hierarchical path models. What is more, all relationships studied within the four articles are done so across different country contexts. These country contexts are the same in all articles and encompass the following Western European countries: Germany, France, Italy, Switzerland, Spain and the United Kingdom (UK). This country

selection is inextricably linked to another common feature of the four articles, which is the data they use.

The empirical analyses are all based on a data set collected as part of a larger research project on "The Politics of Public Health Threat", with which a team around Prof. Dr. Markus Freitag (including the author) aimed to investigate the social, political and psychological consequences of the Covid-19 crisis. The Swiss National Science Foundation (SNSF) and the Berne University Research Foundation financially supported the project. We collected Covid-19-related data as well as data on many other relevant research topics. Whenever the Covid-19 context is not part of the empirical investigation anyway, additional analyses control for pandemic threat exposure to ensure that the particular situational context does not substantially drive the findings. The six countries were chosen because in the European context, they were among the most severely hit at the onset of the pandemic. What is more, with regard to contextualisation and generalisability of the empirical findings, these countries offer useful contextual variation. Regarding the pandemic itself, the countries experienced different infection and mortality rates (Villani et al. 2020) and widely varied in terms of governmental measures to combat the pandemic such as the severity and duration of lockdowns. Attitudes towards immigrants, conceptions of nationhood and populist attitudes are highly salient issues in all countries, which, however, also present markedly different contexts in this regard. Relevant contextual variation in the matter of immigration is, for example, of structural nature, as reflected by partly very different numbers of immigrants (in 2021, for example, per 1,000 inhabitants 16.6 in Switzerland vs. 5 in France).[29] Among other sources, also institutional and geopolitical variation contribute to the different contextual conditions. The country sample includes EU-states (Germany, France, Italy, Spain) and non-EU members (Switzerland, United Kingdom), different national migration regimes (cf. Finotelli and Ponzo 2023) and countries geographically more (e.g. Italy) or less prone (e.g. Switzerland) to be confronted with arriving refugees and asylum seekers. Relatedly, the country sample also provides useful variation with regards to national identity and the question of who belongs to the national ingroup, which is hotly debated in all countries. Certainly worth mentioning is the different history each country has in this regard, as well as current experiences with nationhood and its meaning, for example in the context of multilingualism (Switzerland), geographical division (United Kingdom) or regional independence movements (Spain, United Kingdom) (cf. Wamsler 2022; Wamsler et al. 2023). Finally, a recent rise in populism can be witnessed in all six countries studied in this dissertation. However, the development differs and useful variation is also offered when it comes to the strength and shape of populism in the six countries. For example, countries differ regarding the ideological

[29] Of course, the diverging figures in part also reflect different naturalisation and citizenship laws and processes.

content of populism, with Italy, Switzerland and the United Kingdom having no relevant left-wing populist forces compared to the other countries. Citizens' experiences with and attitudes towards populism are further likely to be shaped by its role in the political engine. In this vein, the country sample can capitalise on variation in current and experienced governmental participation of populist parties, whereby such participation has to date occurred in Spain, Switzerland and Italy but not in the other countries (Filsinger 2023). In sum, the country sample consists of national contexts that vary along features central to the analyses and furthermore constitute a diverse set of institutional, political, economic and social environments within Western Europe.

In each of the six countries, a total of four web-based surveys, each including around 1,000 respondents, was fielded at four different time points during the Covid-19 pandemic (see table 1). In order to obtain high representativeness of the samples, quota sampling in terms of age, gender, education, and for Switzerland also language, was used. The participants were compensated with a small monetary incentive. Table 1 provides an overview of the four survey waves and their use in the four articles of this dissertation.

The four surveys are not to be understood as longitudinal studies, but instead provide repeated cross-sectional and purely observational data. Against this background, it should be clarified that the empirical findings presented within this dissertation show correlational relationships. The four articles do their best to provide convincing theoretical arguments for the assumed direction of relationships and to minimise the risk of spurious relationships by including relevant control variables (see Chao and Yu 2023). Still, this prevents any causal inference from being drawn from the correlations uncovered.

To measure the Big Five personality traits, the central or secondary independent variables in articles 1 and 2, respectively, we made use of the Ten-Item Personality Inventory (TIPI) (Gosling, Rentfrow, and Swann 2003). The TIPI is one of the shortest validated instruments to measure the five personality dimensions and enjoys high popularity in and beyond psychological research. The arithmetic mean of the two related items captures the corresponding Big Five trait.

To capture respondents' emotional reactions to the Covid-19 pandemic threat in terms of fear and anger (articles 3 and 4), an adapted version of the so-called PANAS, i.e. the positive and negative affect schedule questionnaire (Watson, Clark, and Tellegen 1988), was used. More concretely, respondents were asked to think about the last few weeks and months and to indicate how often in this time (from 1 "never" to 5 "very often") they have felt different emotions in relation with a possible infection with Covid-19. Indicators for fear were "anxious" and "worried", for anger, they

were "angry" and "hostile". Both emotions are operationalised by combining these respective items in an additive score.

Table 1: Overview of the Surveys

	Survey 1	**Survey 2**	**Survey 3**	**Survey 4**
Date of interviews	17th April – 8th May 2020	24th November 2020 – 18th January 2021	22nd April – 21st May 2021	25th January – 8th March 2022
Target population	Residents aged 18 years or older in Germany (GE), France (FR), Italy (IT), Switzerland (CH), Spain (ES) and the United Kingdom (UK)			
Survey mode	Online			
Quota	Age, Sex, Education (+ language for CH)			
Sampling	Qualtrics panel	Survey Engine panel		
Interview language	GE: German, FR: French, IT: Italian, CH: German, French, Italian, ES: Spanish, UK: English			
Overall response rate*	8.71%	7.03%	17.83%	19.16%
Survey institute	Qualtrics	Survey Engine		
Data used in …				
article 1	X	X	X	
article 2	X			
article 3		X		
article 4		X	X	X

*RR5/6 Completion Rate (AAPOR 2016).[30]

Articles 2 and 4 both aim to add to a psychological explanation of populist attitudes. To measure those attitudes in a theoretically sound way, both the multidimensionality and the non-compensatory nature of the concept should be taken into account. This means that our instruments

[30] The American Association for Public Opinion Research (AAPOR) 2016, "Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys, 9th edition", last access : October 25th 2023, URL: https://aapor.org/wp-content/uploads/2022/11/Standard-Definitions20169theditionfinal.pdf.

must capture all three relevant subdimensions of populist attitudes (people centrism, anti-elitism and Manicheanism), and that our operationalisation needs to ensure that holding populist attitudes means that individuals "[…] exhibit anti-elitist orientations *and* a Manichean outlook *and* support popular sovereignty" (Wuttke, Schimpf, and Schoen 2020, 358, italics in original). As the length of the item battery varied over the surveys, in article 2, populist attitudes were measured by nine items anchored in the relevant literature (Akkerman, Mudde, and Zaslove 2014; Castanho Silva et al. 2018; Van Hauwaert, Schimpf, and Azevedo 2020), of which two were no longer available for the analyses in article 4. For each subdimension, the related items are summed up. The geometric mean of these scores then serves as the combined populist attitudes scale. This is to take into account the conceptual premise that populist attitudes do not only have various dimensions, but that these are related to each other in a non-compensatory manner. Put differently, using the geometric mean of the three subdimensions ensures that individuals scoring zero on either people centrism, anti-elitism or Manicheanism score zero on the combined scale, i.e. have no populist attitudes (Filsinger 2023; Mohrenberg, Huber, and Freyburg 2021).

1.5. Overview of the thesis

With this dissertation, I aim to add new and topical insights into the political psychology of intergroup relations. Driven by the urge to gain a deeper understanding of both long-standing issues in political psychology and new societal challenges, I equally build on an extant literature as I try to qualify, refine and expand the knowledge it generated. Put simply, I want to find out how both deep-seated, stable dispositions and situationally reactive, intrapsychic processes relate to some of the most politically consequential societal boundaries in Western European societies. To break this massive undertaking down to a scope that can be tackled with a dissertation, I scrutinise how personality traits relate to citizens' conceptions of nationhood (article 1) and populist attitudes (article 2) and how their emotional reactions to the Covid-19 crisis are linked to their attitudes towards immigrants (article 3) and populism (article 4). In the following, I give a brief and summarising preview to the four articles comprising this dissertation. A more detailed account of the studies' theoretical and empirical approaches, their findings and implications is given in the conclusion chapter in section 6.1.

Article 1 is published in *Nations and Nationalism* and is called "Personality and National Identity: How the Big Five Relate to Civic and Ethnic Conceptions of Nationhood" (Hofstetter 2023). It is motivated by a remarkable gap in the research around the content dimension of national identity, namely the lack of a systematic analysis of its link to basic personality traits. Given the prominence

the concept gained in recent years in not only describing national characters but also individual-level attitudes towards national membership (Simonsen and Bonikowski 2020, 117) and the existing evidence for the relevance of personality for other aspects of national identity (e.g. Curtis and Miller 2021; Duckitt and Sibley 2016; Sagiv, Roccas, and Hazan 2012; Zmigrod et al. 2021; Zmigrod, Rentfrow, and Robbins 2018), such an analysis was long overdue. Examining how the Big Five associate with two ideal-typical conceptions of nationhood – an ethnic one which is connected to narrowly drawn national boundaries and a civic one in which national membership is defined more inclusively – is thus a notable contribution to the literature. However, expanding our understanding of how people form national identities is, given their contested nature and their consequences for intergroup conflict and social cohesion, also of great social and political relevance (cf. Kunovich 2009). What is more, by scrutinising the dispositional correlates of civic and ethnic national identities across six European countries and three points in time (see table 1), my analyses contribute to the identification of robust and generalisable evidence, which has been urgently called for in psychology and beyond since the replication crisis at the latest (e.g. Zettler et al. 2022, 300). By revealing several consistent trait patterns, I show that looking at national identities from an individual psychological perspective has a valid point. In both the main and additional robustness analyses, openness to experience is found to conflict with exclusive attitudes towards national membership, i.e. an ethnic national identity, while conscientious individuals are more likely to perceive national belonging as a question of a shared political culture or to have a civic conception of nationhood, respectively.

Article 2, "A Justified Bad Reputation After All? Dark Personality Traits and Populist Attitudes in Comparative Perspective", is joint work with Maximilian Filsinger and, at the time of writing this dissertation, resubmitted to *Electoral Studies* after minor revisions. It departs from the inconclusive findings of the rare research on the link between personality traits and populist attitudes (see Fatke 2019; Galais and Rico 2021; Kenny and Bizumic 2020; Pruysers 2020; Vasilopoulos and Jost 2020). Since the role played by dark personality traits is particularly sparsely researched, the main focus is put on the Dark Triad of Machiavellianism, narcissism and psychopathy (see section 1.3.1). We specify and expand previous research by taking seriously the multi-dimensionality as well as the non-compensatory nature of populist attitudes and by providing first cross-country evidence on the socially aversive personality correlates of populist attitudes. Our findings indicate that most associations between personality traits and populist attitudes are context-dependent rather than universal, but still point to some relatively consistent trait patterns. In contrast to other research contexts and approaches (Galais and Rico 2021; Pruysers 2020), our analyses reveal psychopathy as the most significant predictor of populist attitudes and its subdimensions, while

Machiavellianism plays a less robust role and narcissism appears largely inconsequential. By further observing differentiated relationships between specific traits and the different subdimensions of populist attitudes, our study helps explain the scattered picture painted by previous research. Somewhat challenging earlier notions of an "unjustified bad reputation" of populists' personality (Galais and Rico 2021), we substantiate that certain personalities are generally more or less inclined to populist attitudes, but at the same time underscore the relevance of the context and the supply side of populism. This is not only a politically crucial finding, but also presents a stepping-stone for a more rigorous testing of the contingent effects of personality on populist attitudes.

Article 3, titled "Pandemic Threat and Intergroup Relations: How Negative Emotions Associated with the Threat of Covid-19 Shape Attitudes towards Immigrants", is co-authored with Markus Freitag and published in the *Journal of Ethnic and Migration Studies* (Freitag and Hofstetter 2022). Using a multi-level design that combines original survey data with regional-level indicators of Covid-19 pandemic threat across six European countries (see table 1), we put the BIS-hypothesis (see section 1.3.4) of increased outgroup hostility in times of heightened pathogenic threat to a real-world test. What is more, in order to illuminate the psychological mechanisms underlying this relationship, we combine the classical BIS-literature with a prominent political model of emotional processing, the AIT (see section 1.3.4). Thereby, we are able to provide valuable insights into the psychological black box relating pandemic threat to attitudes towards immigrants. Our analyses show that Covid-19 pandemic threat exposure in 105 European regions is indeed associated with more negative attitudes towards immigrants. However, our multi-level path models indicate that not every emotion triggered by the BIS is related to increased immigrant-hostility. Surprising at first glance, we find no evidence that disgust as a pivotal avoidance-oriented emotion is crucial in this relationship. And while Covid-19-induced anger fosters anti-immigrant stances, we show that individuals reacting with fear to the pandemic, in contrast to conventional wisdom, hold more immigrant-friendly orientations. Our findings not only contribute to research on the BIS, the political consequences of emotions and of the pandemic, they have also far-reaching implications for modern societies in terms of social integration, political communication and policy design in times of crises.

Article 4, which I co-authored with Maximilian Filsinger and Markus Freitag, is published in the *European Political Science Review* and bears the title "The Emotional Fabric of Populism during a Public Health Crisis: How Anger Shapes the Relationship between Pandemic Threat and Populist Attitudes" (Filsinger, Hofstetter, and Freitag 2023). The study finds its starting point in the Covid-19 pandemic and the widespread assumption that external threats and crises increase support for populism (cf. Maher et al. 2022; Verbalyte, Bonansinga, and Exadaktylos 2022), which has been

empirically backed in the context of previous hazards.[31] As this research has shown, threat-elicited emotions are a key mechanism through which threats and crises are linked to populism (e.g. Erisen and Vasilopoulou 2022; Marcus et al. 2019; Rhodes-Purdy, Navarre, and Utych 2021; Rico, Guinjoan, and Anduiza 2017; Vasilopoulos et al. 2019). Contributing to both the growing literatures on psychological underpinnings of populism and on the political consequences of the pandemic, our study addressed three so far unanswered questions. First, whether populism, and in particular populist attitudes, also flourish in the wake of the Covid-19 crisis, a threat which is unlike previous hazards studied not apparently connected to the classical political grievances underlying populism. Second, building again on the AIT (see section 1.3.4), what threat-elicited emotions drive populism? And finally, are threat-triggered emotions equally associated with different populist subdimensions? Using 18 samples from six European countries at three different time points (see table 1), our analyses support our expectations that anger induced by Covid-19 pandemic threat is positively related to populist attitudes while fear tends to be negatively linked to populist stances. While understanding populist attitudes as a combination of Manicheanism, anti-elitism and people centrism, we further show that the positive relationship between anger and populist attitudes is driven, in particular, by the two populist subdimensions of Manicheanism and people centrism. Since anger was the less dominant emotional reaction to the pandemic, our findings might offer a plausible explanation for the modest performance of populist forces during the pandemic (e.g. Bayerlein et al. 2021; Bayerlein and Metten 2022). However, while populism not necessarily flourishes in the context of every crisis, our study indicates that the type of threat does not matter significantly for this emotion to prompt populist support.

[31] Moffitt (2015) for example, discusses this notion critically and argues that crises not just trigger populism, but that populism also tries to trigger crises or that populist actors "perform" crises respectively.

1.6. Literature

Aarøe, Lene, Mathias Osmundsen, and Michael Bang Petersen. 2016. "Distrust as a Disease Avoidance Strategy: Individual Differences in Disgust Sensitivity Regulate Generalized Social Trust." *Frontiers in Psychology* 7(1038): 1–14.

Aarøe, Lene, Michael Bang Petersen, and Kevin Arceneaux. 2017. "The Behavioral Immune System Shapes Political Intuitions: Why and How Individual Differences in Disgust Sensitivity Underlie Opposition to Immigration." *American Political Science Review* 111(2): 277–94.

Abrams, Dominic, and Michael A. Hogg. 2010. "Social Identity and Self-Categorization." In *The SAGE Handbook of Prejudice, Stereotyping and Discrimination*, eds. John F. Dovidio, Miles Hewstone, Peter Glick, and Victoria M. Esses. London: SAGE, 179–93.

Ackerman, Joshua M., Sarah E. Hill, and Damian R. Murray. 2018. "The Behavioral Immune System: Current Concerns and Future Directions." *Social and Personality Psychology Compass* 12(2): 57–70.

Adorno, Theodor W., Else Frenkel-Brunswik, Daniel Levinson, and Nevitt Sanford. 1950. *The Authoritarian Personality*. New York: Harper.

Akkerman, Agnes, Cas Mudde, and Andrej Zaslove. 2014. "How Populist Are the People? Measuring Populist Attitudes in Voters." *Comparative Political Studies* 47(9): 1324–53.

Albertson, Bethany, and Shana Kushner Gadarian. 2015. *Anxious Politics: Democratic Citizenship in a Threatening World*. New York: Cambridge University Press.

Allport, Gordon W. 1937. *Personality: A Psychological Interpretation*. New York: Henry Holt.

———. 1955. *Becoming: Basic Considerations for a Psychology of Personality*. New Haven: Yale University Press.

Altemeyer, Bob. 1998. "The 'Other Authoritarian Personality.'" *Advances in Experimental Social Psychology* 30: 47–92.

Ariely, Gal. 2012. "Globalisation and the Decline of National Identity? An Exploration across Sixty-Three Countries." *Nations and Nationalism* 18(3): 461–82.

Asendorpf, Jens B, and Franz J Neyer. 2012. *Psychologie Der Persönlichkeit: Mit 144 Abbildungen Und 110 Tabellen*. 5th ed. Berlin/Heidelberg: Springer.

Bakker, Bert N. 2023. "Personality Approaches to Political Behavior." In *The Oxford Handbook of*

Political Psychology, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 21–64.

Bayerlein, Michael et al. 2021. "Populism and COVID-19: How Populist Governments (Mis)Handle the Pandemic." *Journal of Political Institutions and Political Economy* 2(3): 389–428.

Bayerlein, Michael, and Anne Metten. 2022. "The Impact of COVID-19 on the Support for the German AfD: Jumping the Populist Ship or Staying the Course?" *Politische Vierteljahresschrift* 63(3): 405–40.

Berg, Linda, and Mikael Hjerm. 2010. "National Identity and Political Trust." *Perspectives on European Politics and Society* 11(4): 390–407.

Berman, Sheri. 2019. "Populism Is a Symptom Rather than a Cause: Democratic Disconnect, the Decline of the Center-Left, and the Rise of Populism in Western Europe." *Polity* 51(4): 654–67.

Birch, Sarah, Nicholas J. Allen, and Katja Sarmiento-Mirwaldt. 2017. "Anger, Anxiety and Corruption Perceptions: Evidence from France." *Political Studies* 65(4): 893–911.

Böhm, Robert, Hannes Rusch, and Jonathan Baron. 2020. "The Psychology of Intergroup Conflict: A Review of Theories and Measures." *Journal of Economic Behavior and Organization* 178: 947–62.

Bonansinga, Donatella. 2020. "Who Thinks, Feels: The Relationship Between Emotions, Politics and Populism." *The Open Journal of Sociopolitical Studies* 13(1): 83–106.

Brader, Ted, and Erin Cikanek. 2019. "The Emotional Foundations of Democratic Citizenship." In *New Directions in Public Opinion*, ed. Adam J. Berinsky. New York: Routledge, 202–35.

Brader, Ted, and George E. Marcus. 2013. "Emotion and Political Psychology." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, and Jack S. Levy. New York: Oxford University Press, 165–204.

Bradshaw, Hannah K., and Jeffrey Gassen. 2021. "The Evolution of Disgust, Pathogens, and the Behavioural Immune System." In *The Handbook of Disgust Research: Modern Perspectives and Applications*, eds. Philiip A. Powell and Nathan S. Consedine. Cham: Springer, 31–51.

Braslow, Matthew D., Jean Guerrettaz, Robert M. Arkin, and Kathryn C. Oleson. 2012. "Self-Doubt." *Social and Personality Psychology Compass* 6(6): 470–82.

Brewer, Marilynn B. 1991. "The Social Self: On Being the Same and Different at the Same Time."

Personality and Social Psychology Bulletin 17(5): 475–82.

———. 1999. "The Psychology of Prejudice: Ingroup Love or Outgroup Hate?" *Journal of Social Issues* 55(3): 429–44.

———. 2007. "The Importance of Being We: Human Nature and Intergroup Relations." *American Psychologist* 62(8): 728–38.

———. 2010. "Intergroup Relations." In *Advanced Social Psychology: The State of the Science*, eds. Roy F. Baumeister and Eli J. Finkel. Oxford: Oxford University Press, 535–71.

Brewer, Marilynn B., and Roderick M. Kramer. 1985. "The Psychology of Intergroup Attitudes and Behavior." *Annual Review of Psychology* 36: 219–43.

Brown, Rupert. 2000. "Social Identity Theory: Past Achievements, Current Problems and Future Challenges." *European Journal of Social Psychology* 30(6): 745–78.

———. 2020. "The Social Identity Approach: Appraising the Tajfellian Legacy." *British Journal of Social Psychology* 59(1): 5–25.

Brubaker, Rogers. 2017. "Why Populism?" *Theory and Society* 46(5): 357–85.

Canan, Coskun, and Mara K Simon. 2019. "Immigration, Diversity and the Relevance of Ascriptive Characteristics in Defining National Identity across 21 Countries and 28 West-German Districts." *Migration Studies* 7(2): 201–19.

Caprara, Gian V., and Michele Vecchione. 2013. "Personality Approaches to Political Behavior." In *Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, and Jack S. Levy. Oxford: Oxford University Press, 23–35.

Castanho Silva, Bruno et al. 2018. "Public Opinion Surveys: A New Scale." In *The Ideational Approach to Populism: Concept, Theory, and Analysis*, eds. Kirk A. Hawkins, Ryan E. Carlin, Levente Littvay, and Cristóbal Rovira Kaltwasser. Abingdon: Routledge, 150–78.

Chao, Fan, and Guang Yu. 2023. "Causal Inference Using Regression-Based Statistical Control: Confusion in Econometrics." *Journal of Data and Information Science* 8(1): 21–28.

Chen, Philip, Scott Pruysers, and Julie Blais. 2021. "The Dark Side of Politics: Participation and the Dark Triad." *Political Studies* 69(3): 577–601.

Coppin, Géraldine, and David Sander. 2021. "Theoretical Approaches to Emotion and Its Measurement." In *Emotion Measurement*, ed. Herbert L. Meiselman. Sawston: Woodhead Publishing, 3–37.

Cottam, Martha L., Beth Dietz-Uhler, Elena Mastors, and Thomas Preston, eds. 2010. *Introduction to Political Psychology*. 2nd ed. New York & Hove: Psychology Press, Taylor & Francis Group.

Cottam, Martha L., Elena Mastors, Thomas Preston, and Beth Dietz, eds. 2016. *Introduction to Political Psychology*. 3rd ed. New York & Oxon: Routledge, Taylor & Francis Group.

———, eds. 2022. *Introduction to Political Psychology*. 4th ed. New York & Oxon: Routledge, Taylor & Francis Group.

Curtis, K. Amber, and Steven V. Miller. 2021. "A (Supra)Nationalist Personality? The Big Five's Effects on Political-Territorial Identification." *European Union Politics* 22(2): 202–26.

Davey, Graham C. L. 2011. "Disgust: The Disease-Avoidance Emotion and Its Dysfunctions." *Philosophical Transactions of the Royal Society B: Biological Sciences* 366(1583): 3453–65.

Davidov, Eldad. 2009. "Measurement Equivalence of Nationalism and Constructive Patriotism in the ISSP: 34 Countries in a Comparative Perspective." *Political Analysis* 17(1): 64–82.

Deary, Ian J. 2009. "The Trait Approach to Personality." In *The Cambridge Handbook of Personality Psychology*, eds. Philip J. Corr and Gerald Matthews. New York: Cambridge University Press, 89–109.

Deutsch, Franziska, and Klaus Boehnke. 2022. "Geschichte Und Institutionelle Entwicklung Der Politischen Psychologie in Deutschland." In *Politische Psychologie: Handbuch Für Wissenschaft Und Studium*, eds. Sonja Zmerli and Ofer Feldman. Baden-Baden: Nomos, 39–60.

Deutsch, Morton, and Catarina Kinnvall. 2002. "What Is Political Psychology?" In *Political Psychology*, ed. Kristen Renwick Monroe. Mahwah: Lawrence Erlbaum, 15–42.

Dinesen, Peter Thisted, Robert Klemmensen, and Asbjørn Sonne Nørgaard. 2016. "Attitudes Toward Immigration: The Role of Personal Predispositions." *Political Psychology* 37(1): 55–72.

Dinesen, Peter Thisted, Asbjørn Sonne Nørgaard, and Robert Klemmensen. 2014. "The Civic Personality: Personality and Democratic Citizenship." *Political Studies* 62(S1): 134–52.

Dollard, John S. et al. 1939. *Frustration and Aggression*. New Haven: Yale University Press.

Dongare, Nagorao S. 2022. "Political Psychology: Concepts, Meaning, Significance and History." *The International Journal of Indian Psychology* 10(3): 1519–25.

Dovidio, John F. 2001. "On the Nature of Contemporary Prejudice: The Third Wave." *Journal of Social Issues* 57(4): 829–49.

Dovidio, John F., and Samuel L. Gaertner. 2004. "Aversive Racism." In *Advances in Experimental Social Psychology. Advances in Experimental Social Psychology (Vol. 36)*, ed. Mark P. Zanna. Amsterdam: Elsevier Academic Press, 1–52.

———. 2010. "Intergroup Bias." In *Handbook of Social Psychology*, eds. Susan T. Fiske, Daniel T. Gilbert, and Gardner Lindzey. Hoboken: John Wiley & Sons, 1084–1121.

Dovidio, John F., Anna Kaisa Newheiser, and Jacques Philippe Leyens. 2012. "A History of Intergroup Relations Research." In *Handbook of the History of Social Psychology*, eds. Arie W. Kruglanski and Woldgang Stroebe. Clifton: Psychology Press, 407–29.

Duckitt, John. 2015. "Authoritarian Personality." In *International Encyclopedia of the Social & Behavioral Sciences*, ed. James D. Wright. Oxford: Elsevier, 255–61.

Duckitt, John, and Chris G. Sibley. 2016. "Personality, Ideological Attitudes, and Group Identity as Predictors of Political Behavior in Majority and Minority Ethnic Groups." *Political Psychology* 37(1): 109–24.

Elchardus, Mark, and Bram Spruyt. 2016. "Populism, Persistent Republicanism and Declinism: An Empirical Analysis of Populism as a Thin Ideology." *Government and Opposition* 51(1): 111–33.

Eldad-Strenger, Julia, and Alex Mintz. 2015. "Political Psychology." In *The International Encyclopedia of Political Communication*, ed. Gianpietro Mazzoleni. John Wiley & Sons, https://doi.org/10.1002/9781118541555.wbiepc1.

Ellemers, Naomi, and Dick de Gilder. 2021. "Categorization and Identity as Motivational Principles in Intergroup Relations." In *Social Psychology: Handbook of Basic Principles*, eds. Paul A. M. Van Lange, E. Tory Higgins, and Arie W. Kruglanski. New York: Guilford Press, 452–72.

Ellemers, Naomi, and S. Alexander Haslam. 2012. "Social Identity Theory." In *Handbook of Theories of Social Psychology (Volume 2)*, eds. Paul A. M. Van Lange, Arie W. Kruglanski, and E. Tory Higgins. London: SAGE, 379–98.

Elwood, Lisa S., Kate Wolitzky-Taylor, and Bunmi O. Olatunji. 2012. "Measurement of Anxious Traits: A Contemporary Review and Synthesis." *Anxiety, Stress and Coping* 25(6): 647–66.

Erhardt, Julian, Markus Freitag, Maximilian Filsinger, and Steffen Wamsler. 2021. "The Emotional Foundations of Political Support: How Fear and Anger Affect Trust in the Government in Times of the Covid-19 Pandemic." *Swiss Political Science Review* 27(2): 339–52.

Erhardt, Julian, Steffen Wamsler, and Markus Freitag. 2021. "National Identity between Democracy and Autocracy: A Comparative Analysis of 24 Countries." *European Political Science Review* 13(1): 59–76.

Erisen, Cengiz. 2013. "The Political Psychology of Turkish Political Behavior: Introduction by the Special Issue Editor." *Turkish Studies* 14(1): 1–12.

———. 2021. "Psychological Correlates of Populist Attitudes." *Advances in Political Psychology* 42(S1): 149–71.

Erisen, Cengiz, and Sofia Vasilopoulou. 2022. "The Affective Model of Far-Right Vote in Europe: Anger, Political Trust, and Immigration." *Social Science Quarterly* 0(00): 1–14.

Erisen, Cengiz, Sofia Vasilopoulou, and Cigdem Kentmen-Cin. 2020. "Emotional Reactions to Immigration and Support for EU Cooperation on Immigration and Terrorism." *Journal of European Public Policy* 27(6): 795–813.

Fatke, Matthias. 2017. "Personality Traits and Political Ideology: A First Global Assessment." *Political Psychology* 38(5): 881–99.

———. 2019. "The Personality of Populists: How the Big Five Traits Relate to Populist Attitudes." *Personality and Individual Differences* 139: 138–51.

Federico, Christopher M., and Ariel Malka. 2018. "The Contingent, Contextual Nature of the Relationship Between Needs for Security and Certainty and Political Preferences: Evidence and Implications." *Political Psychology* 39(Suppl. 1): 3–48.

Feher, Anita, and Philip A. Vernon. 2021. "Looking beyond the Big Five: A Selective Review of Alternatives to the Big Five Model of Personality." *Personality and Individual Differences* 169(110002): 1–8.

Feldman, Ofer, and Sonja Zmerli. 2022. "Politische Psychologie: Eine Einführung." In *Politische Psychologie: Handbuch Für Wissenschaft Und Studium*, eds. Sonja Zmerli and Ofer Feldman. Baden-Baden: Nomos, 13–22.

Fetz, Karolina, and Martin Kroh. 2021. "Prejudice in Disguise: Which Features Determine the Subtlety of Ethnically Prejudicial Statements?" *Journal of Social and Political Psychology* 9(1): 187–206.

Filsinger, Maximilian. 2023. "Perceived Exclusionary Disadvantages and Populist Attitudes: Evidence from Comparative and Longitudinal Survey Data in Six European Countries."

Political Research Quarterly 76(3): 1043–57.

Filsinger, Maximilian, and Markus Freitag. 2022. "Pandemic Threat and Authoritarian Attitudes in Europe: An Empirical Analysis of the Exposure to COVID-19." *European Union Politics* 23(3): 417–36.

Filsinger, Maximilian, Nathalie Hofstetter, and Markus Freitag. 2023. "The Emotional Fabric of Populism during a Public Health Crisis: How Anger Shapes the Relationship between Pandemic Threat and Populist Attitudes." *European Political Science Review* 0(00): 1–19. https://doi.org/10.1017/S1755773923000036.

Filsinger, Maximilian, Steffen Wamsler, Julian Erhardt, and Markus Freitag. 2021. "National Identity and Populism: The Relationship between Conceptions of Nationhood and Populist Attitudes." *Nations and Nationalism* 27(3): 656–72.

Finley, Simon Alexis. 2010. "An Identity-Based Understanding of Intergroup Conflict." *Contemporary Justice Review: Issues in Criminal, Social, and Restorative Justice* 13(4): 425–41.

Finotelli, Claudia, and Irene Ponzo, eds. 2023. *Migration Control Logics and Strategies in Europe: A North-South Comparison*. Cham: Springer.

Fiske, Susan T. 2000. "Stereotyping, Prejudice, and Discrimination at the Seam between the Centuries: Evolution, Culture, Mind, and Brain." *European Journal of Social Psychology* 30(3): 299–322.

Fleeson, William, and Erik Noftle. 2008. "The End of the Person-Situation Debate: An Emerging Synthesis in the Answer to the Consistency Question." *Social and Personality Psychology Compass* 2(4): 1667–84.

Forgas, Joseph P., and William D. Crano. 2021. "The Psychology of Populism: The Tribal Challenge to Liberal Democracy." In *The Psychology of Populism: The Tribal Challenge to Liberal Democracy*, eds. Joseph P. Forgas, William D. Crano, and Klaus Fiedler. New York & London: Routledge, Taylor & Francis Group, 1–19.

Freitag, Markus. 2017. *Die Psyche Des Politischen: Was Der Charakter Über Unser Politisches Denken Und Handeln Verrät*. Zürich: NZZ Libro.

Freitag, Markus, and Nathalie Hofstetter. 2022. "Pandemic Threat and Intergroup Relations: How Negative Emotions Associated with the Threat of Covid-19 Shape Attitudes towards Immigrants." *Journal of Ethnic and Migration Studies* 48(13): 2985–3004.

———. 2023. "Pandemic Personality: Emotional Reactions, Political and Social Preferences across Personality Traits in Times of Corona." *Current Psychology* 42: 17359–73.

Fuchsman, Ken. 2012. "Interdisciplines and Interdisciplinarity: Political Psychology and Psychohistory Compared." *Issues in Integrative Studies* 30: 128–54.

Fukuyama, Francis. 2018a. "Against Identity Politics: The New Tribalism and the Crisis of Democracy." *Foreign Affairs* 97(5): 90–114.

———. 2018b. "Why National Identity Matters." *Journal of Democracy* 29(4): 5–15.

Funder, David C. 2009. "Persons, Behaviors and Situations: An Agenda for Personality Psychology in the Postwar Era." *Journal of Research in Personality* 43(2): 120–26.

Furnham, Adrian, Steven C Richards, and Delroy L Paulhus. 2013. "The Dark Traid of Personality: A 10 Year Review." *Social and Personality Psychology Compass* 7(3): 199–216.

Furnham, Adrian, Steven Richards, Luis Rangel, and Daniel N. Jones. 2014. "Measuring Malevolence: Quantitative Issues Surrounding the Dark Triad of Personality." *Personality and Individual Differences* 67: 114–21.

Furr, R Michael, and David C. Funder. 2021. "Persons , Situations , and Person – Situation Interactions." In *Handbook of Personality: Theory and Research*, eds. Oliver P. John and Richard W. Robins. New York: Guilford Publications, 667–85.

Galais, Carol, and Guillem Rico. 2021. "An Unjustified Bad Reputation? The Dark Triad and Support for Populism." *Electoral Studies* 72(102357): 1–6.

Gallego, Aina, and Sergi Pardos-Prado. 2014. "The Big Five Personality Traits and Attitudes towards Immigrants." *Journal of Ethnic and Migration Studies* 40(1): 79–99.

Gerber, Alan S., Gregory A. Huber, David Doherty, and Conor M. Dowling. 2011. "The Big Five Personality Traits in the Political Arena." *Annual Review of Political Science* 14: 265–87.

Gero, John S., and Gregory J. Smith. 2009. "Context, Situations, and Design Agents." *Knowledge-Based Systems* 22(8): 600–609.

Gidengil, Elisabeth, and Dietlind Stolle. 2022. "Populism." In *The Cambridge Handbook of Political Psychology*, eds. Danny Osborne and Chris G. Sibley. New York: Cambridge University Press, 442–57.

van Ginneken, Jaap. 1988. "Outline of a Cultural History of Political Psychology." In *The Psychology of Politics*, eds. William F. Stone and Paul E. Schaffner. New York: Springer, 3–22.

Gosling, Samuel D., Peter J. Rentfrow, and William B. Swann. 2003. "A Very Brief Measure of the Big-Five Personality Domains." *Journal of Research in Personality* 37(6): 504–28.

Grande, Edgar, Tobias Schwarzbözl, and Matthias Fatke. 2019. "Politicizing Immigration in Western Europe." *Journal of European Public Policy* 26(10): 1444–63.

Grayot, James D. 2020. "Dual Process Theories in Behavioral Economics and Neuroeconomics: A Critical Review." *Review of Philosophy and Psychology* 11(1): 105–36.

Gross, James J. 2014. "Emotion Regulation: Conceptual and Empirical Foundations." In *Handbook of Emotion Regulation*, ed. James J. Gross. New York: The Guiford Press, 3–20.

Ha, Shang E., and Seung Jin Jang. 2016. "National Identity in a Divided Nation: South Koreans' Attitudes toward North Korean Defectors and the Reunification of Two Koreas." *International Journal of Intercultural Relations* 55: 109–19.

Haas, Ingrid J. 2016. "Political Psychology (Annotated Bibliography)." In *Oxford Bibliographies in Psychology*, ed. Dana S. Dunn. New York: Oxford University Press, 10.1093/obo/9780199828340-0178.

Hadler, Markus, and Anaïd Flesken. 2018. "Political Rhetoric and Attitudes toward Nationhood: A Time-Comparative and Cross-National Analysis of 39 Countries." *International Journal of Comparative Sociology* 59(5–6): 362–82.

Haidt, Jonathan. 2003. "The Moral Emotions." In *Handbook of Affective Sciences*, eds. Richard J. Davidson, Klaus R. Scherer, and H. Hill Goldsmith. Oxford: Oxford University Press, 852–70.

Hameleers, Michael, and Claes H. de Vreese. 2020. "To Whom Are 'the People' Opposed? Conceptualizing and Measuring Citizens' Populist Attitudes as a Multidimensional Construct." *Journal of Elections, Public Opinion and Parties* 30(2): 255–74.

Hart, William, Kyle Richardson, and Gregory K. Tortoriello. 2018. "Dark Personality Voters Find Dark Politicians More Relatable and Fit for Office." *Journal of Research in Personality* 75: 59–68.

Van Hauwaert, Steven M., Christian H. Schimpf, and Flavio Azevedo. 2020. "The Measurement of Populist Attitudes: Testing Cross-National Scales Using Item Response Theory." *Politics* 40(1): 3–21.

Havermans, Willemijn, and Maykel Verkuyten. 2021. "Positive and Negative Behavioural Intentions towards Immigrants: A Question of Ethnic Categorisation or Worldview

Conflict?" *International Journal of Psychology* 56(5): 633–41.

Hawkins, Kirk A., and Cristóbal Rovira Kaltwasser. 2017a. "The Ideational Approach to Populism." *Latin American Research Review* 52(4): 513–28.

———. 2017b. "What the (Ideational) Study of Populism Can Teach Us, and What It Can't." *Swiss Political Science Review* 23(4): 526–42.

———. 2018. "Introduction: The Ideational Approach." In *The Ideational Approach to Populism: Concept, Theory, and Analysis*, eds. Kirk A. Hawkins, Ryan E. Carlin, Levente Littvay, and Cristóbal Rovira Kaltwasser. Abingdon: Routledge, 1–24.

Helbling, Marc, Tim Reeskens, and Matthew Wright. 2016. "The Mobilisation of Identities: A Study on the Relationship between Elite Rhetoric and Public Opinion on National Identity in Developed Democracies." *Nations and Nationalism* 22(4): 744–67.

Hermann, Margaret G., ed. 1986a. *Political Psychology: Contemporary Problems and Issues*. San Fransisco & London: Jossey-Bass.

———. 1986b. "What Is Political Psychology?" In *Political Psychology: Contemporary Problems and Issues*, ed. Margaret G. Hermann. San Fransisco & London: Jossey-Bass, 1–10.

Hewer, Christopher J. 2018. "Some Historical and Philosophical Considerations." In *Political Psychology: A Social Psychological Approach*, eds. Christopher J. Hewer and Evanthia Lyons. Hoboken: John Wiley & Sons, 1–27.

Hewer, Christopher J., and Evanthia Lyons, eds. 2018. *Political Psychology: A Social Psychological Approach*. John Wiley & Sons.

Hodson, Gordon, and Megan Earle. 2017. "Social Identity Theory (SIT)." In *Encyclopedia of Personality and Individual Differences*, eds. Virgil Zeigler-Hill and Todd K. Shackelford. Cham: Springer, https://doi.org/10.1007/978-3-319-28099-8_1185-1. 10.1007/978-3-319-28099-8_1185-1.

Hofstetter, Nathalie. 2023. "Personality and National Identity: How the Big Five Relate to Civic and Ethnic Conceptions of Nationhood." *Nations and Nationalism* 29(2): 562–78.

Hogg, Michael A. 2000. "Subjective Uncertainty Reduction through Self-Categorization: A Motivational Theory of Social Identity Processes." *European Review of Social Psychology* 11(1): 223–55.

———. 2013. "Intergroup Relations." In *Handbook of Social Psychology*, eds. John DeLamater and

Amanda Ward. Dordrecht: Springer, 533–61.

———. 2016. "Social Identity Theory." In *Understanding Peace and Conflict Through Social Identity Theory: Contemporary Global Perspectives*, eds. Shelley McKeown, Reeshma Haji, and Neil Ferguson. Cham: Springer, 3–17.

———. 2018. "Social Identity Theory." In *Contemporary Social Psychological Theories*, ed. Peter J. Burke. Stanford: Standford University Press, 112–38.

Hong, Ryan Y., Shiyun Koh, and Sampo V. Paunonen. 2012. "Supernumerary Personality Traits beyond the Big Five: Predicting Materialism and Unethical Behavior." *Personality and Individual Differences* 53(5): 710–15.

Hornsey, Matthew J. 2008. "Social Identity Theory and Self-Categorization Theory: A Historical Review." *Social and Personality Psychology Compass* 2(1): 204–22.

Houghton, David P. 2015. *Political Psychology: Situations, Individuals, and Cases*. 2nd ed. New York & Oxon: Routledge, Taylor & Francis Group.

Huddy, Leonie. 2004. "Contrasting Theoretical Approaches to Intergroup Relations." *Political Psychology* 25(6): 947–67.

———. 2013. "From Group Identity to Political Cohesion and Commitment." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, and Jack S. Levy. New York: Oxford University Press, 737–773.

———. 2023. "National Identity, Patriotism, and Nationalism." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 769–803.

Huddy, Leonie, David O. Sears, and Jack S. Levy. 2013a. "Introduction: Theoretical Foundations of Political Psychology." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, and Jack S. Levy. New York: Oxford University Press, 1–21.

———. 2013b. *The Oxford Handbook of Political Psychology*. 2nd ed. eds. Leonie Huddy, David O. Sears, and Jack S. Levy. New York: Oxford University Press.

———. 2023. "Introduction: Theoretical Foundations of Political Psychology." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 1–18.

Huddy, Leonie, David O. Sears, Jack S. Levy, and Jennifer Jerit, eds. 2023. *The Oxford Handbook of*

Political Psychology. 3rd ed. New York: Oxford University Press.

Huguet Cabot, Pere Lluís, David Abadi, Agneta Fischer, and Ekaterina Shutova. 2021. "Us vs. Them: A Dataset of Populist Attitudes, News Bias and Emotions." In *Proceedings of the 16th Conference of the European Chapter of the Association for Computational Linguistics: Main Volume*, Association for Computational Linguistics, 1921–45. arxiv: 2101.11956v3.

Ignatieff, Michael. 1993. *Blood and Belonging: Journeys into the New Nationalism*. Toronto: Viking.

Immelman, Aubrey. 2005. "Political Psychology and Personality." In *Handbook of Personology and Psychopathology*, ed. Stephen Strack. Hoboken: John Wiley & Sons, 198–225.

Izard, Carroll E. 2010. "The Many Meanings/Aspects of Emotion: Definitions, Functions, Activation, and Regulation." *Emotion Review* 2(4): 363–70.

John, Oliver P., Laura P. Naumann, and Cristopher J. Soto. 2008. "Paradigm Shift to the Integrative Big Five Trait Taxonomy: History, Measurement, and Conceptual Issues." In *Handbook of Personality: Theory and Research*, eds. Oliver P. John, Richard W. Robins, and Lawrence A. Pervin. New York: Guilford, 114–58.

Johnston, Christopher D., Howard Lavine, and Benjamin Woodson. 2015. "Emotion and Political Judgment: Expectancy Violation and Affective Intelligence." *Political Research Quarterly* 68(3): 474–92.

Jones, F. L., and Philip Smith. 2001. "Individual and Societal Bases of National Identity: A Comparative Multi-Level Analysis." *European Sociological Review* 17(2): 103–18.

Jost, John T., and Mahzarin R. Banaji. 1994. "The Role of Stereotyping in System-Justification and the Production of False Consciousness." *British Journal of Social Psychology* 33(1): 1–27.

Jost, John T., Mahzarin R. Banaji, and Brian A. Nosek. 2004. "A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo." *Political Psychology* 25(6): 881–919.

Jost, John T., and Jim Sidanius. 2004a. "Political Psychology: An Introduction." In *Political Psychology: Key Readings*, eds. John T. Jost and Jim Sidanius. New York: Psychology Press, 1–17.

———. 2004b. *Political Psychology: Key Readings*. eds. John T. Jost and Jim Sidanius. New York: Psychology Press.

Kandler, Christian, Rainer Riemann, and Anke Hufer-Thamm. 2022. "Persönlichkeit Und Politik."

In *Politische Psychologie: Handbuch Für Wissenschaft Und Studium*, eds. Sonja Zmerli and Ofer Feldman. Baden-Baden: Nomos, 61–81.

Kenny, Paul D., and Boris Bizumic. 2020. "Is There a Populist Personality? Populist Attitudes, Personality, and Voter Preference in Australian Public Opinion." *The Australian Conference on Personality and Individual Differences (ACPID)*, Virtual conference, December 4-5, 2020.

Kinder, Donald R. 2023. "Prejudice and Politics." In *Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 987–1015.

Kinder, Donald R., and David O. Sears. 1981. "Prejudice and Politics: Symbolic Racism Versus Racial Threats to the Good Life." *Journal of Personality and Social Psychology* 40(3): 414–31.

Krosnick, Jon A., Tobias H. Stark, and I-Chant A. Chiang. 2017. "The Two Core Goals of Political Psychology." In *Political Psychology: New Explorations*, eds. Jon A. Krosnick, I-Chant A. Chiang, and Tobias H. Stark. New York: Routledge, Taylor & Francis Group, 1–11.

Kruglanski, Arie W., Antonio Pierro, Lucia Mannetti, and Eraldo De Grada. 2006. "Groups as Epistemic Providers: Need for Closure and the Unfolding of Group-Centrism." *Psychological Review* 113(1): 84–100.

Kuklinski, James H. 2002. "The Study of Politics." In *Thinking about Political Psychology*, ed. James H. Kuklinski. Cambridge: Cambridge University Press, 1–20.

Kunovich, Robert M. 2006. "An Exploration of the Salience of Christianity for National Identity in Europe." *Sociological Perspectives* 49(4): 435–60.

Kunovich, Robert M. 2009. "The Sources and Consequences of National Identification." *American Sociological Review* 74(4): 573–93.

Kusche, Isabel, and Jessica L. Barker. 2019. "Pathogens and Immigrants: A Critical Appraisal of the Behavioral Immune System as an Explanation of Prejudice against Ethnic Outgroups." *Frontiers in Psychology* 10(2412): 1–9.

Kushner Gadarian, Shana, and Ted Brader. 2023. "Emotion and Political Psychology." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 191–247.

Lai, Vicky Tzuyin, Peter Hagoort, and Daniel Casasanto. 2012. "Affective Primacy vs. Cognitive Primacy: Dissolving the Debate." *Frontiers in Psychology* 3(243): 1–8.

Lenard, Patti Tamara, and David Miller. 2018. "Trust and National Identity." In *The Oxford Handbook of Social and Political Trust*, ed. Eric M. Uslaner. Oxford: Oxford University Press, 57–74.

Lewin, Kurt. 1936. *Principles of Topological Psychology*. New York: McGraw-Hill.

Lindstam, Emmy, Matthias Mader, and Harald Schoen. 2021. "Conceptions of National Identity and Ambivalence towards Immigration." *British Journal of Political Science* 51(1): 93–114.

Liu, Zhihua, Pierre Magal, Ousmane Seydi, and Glenn Webb. 2020. "Understanding Unreported Cases in the COVID-19 Epidemic Outbreak in Wuhan, China, and the Importance of Major Public Health Interventions." *Biology* 9(50): 1–12.

Love, Angelika, and Miles Hewstone. 2021. "Intergroup Contact and Prejudice Reduction: Three Guiding Principles." In *Social Psychology: Handbook of Basic Principles*, eds. Paul A. M. Van Lange, E. Tory Higgins, and Arie W. Kuglanski. New York: The Guiford Press, 430–51.

Maher, Paul J. et al. 2022. "The Many Guises of Populism and Crisis: Introduction to the Special Issue on Populism and Global Crises." *Political Psychology* 43(5): 819–26.

Marchlewska, Marta et al. 2017. "Populism as Identity Politics: Perceived Ingroup Disadvantage, Collective Narcissism and Support for Populism." *Social Psychological and Personality Science* 9(2): 151–62.

Marcos-Marne, Hugo, Homero Gil de Zúñiga, and Porismita Borah. 2023. "What Do We (Not) Know about Demand-Side Populism? A Systematic Literature Review on Populist Attitudes." *European Political Science* 22(3): 293–307.

Marcus, George E. 2000. "Emotions in Politics." *Annual Review of Political Science* 3(1): 221–50.

———. 2002. *The Sentimental Citizen: Emotion in Democratic Politics*. University Park: Pennsylvania State University Press.

———. 2003. "The Psychology of Emotions and Politics." In *Oxford Handbook of Political Psychology*, eds. David O. Sears, Leonie Huddy, and Robert Jervis. New York: Oxford University Press, 182–221.

———. 2012. "Reason, Passion, and Democratic Politics: Old Conceptions - New Understandings - New Possibilities." In *Passions and Emotions*, ed. James E. Fleming. New York & London: New York University Press, 127–88.

———. 2017. "How Affective Intelligence Theory Can Help Us Understand Politics." In *Emotion*

Researcher: ISRE's Sourcebook for Research on Emotion and Affect. https://emotionresearcher.com/how-affective-intelligence-theory-can-help-us-understand-politics/ (July 31, 2023).

Marcus, George E., and Michael B. Mackuen. 1993. "Anxiety, Enthusiasm, and the Vote: The Emotional Underpinnings of Learning and Involvement During Presidential Campaigns." *The American Political Science Review* 87(3): 672–85.

Marcus, George E., Michael Mackuen, and W. Russell Neuman. 2011. "Parsimony and Complexity: Developing and Testing Theories of Affective Intelligence." *Political Psychology* 32(2): 323–36.

Marcus, George E., Michael MacKuen, Jennifer Wolak, and Luke Keele. 2006. "The Measure and Mismeasure of Emotion." In *Feeling Politics: Emotion in Political Information Processing*, ed. David P. Redlawsk. New York: Palgrave Macmillan, 31–45.

Marcus, George E., W. Russell Neuman, and Michael Mackuen. 2000. *Affective Intelligence and Political Judgment*. Chicago: University of Chicago Press.

Marcus, George E., Nicholas A. Valentino, Pavlos Vasilopoulos, and Martial Foucault. 2019. "Applying the Theory of Affective Intelligence to Support for Authoritarian Policies and Parties." *Political Psychology* 40(S1): 109–39.

Marcus, George E. 2013. "The Theory of Affective Intelligence and Liberal Politics." In *Emotions in Politics: The Affect Dimension in Political Tension*, ed. Nicolas Demertzis. London: Palgrave Macmillan, 17–38.

Martin, John Levi. 2001. "The Authoritarian Personality, 50 Years Later: What Lessons Are There for Political Psychology?" *Political Psychology* 22(1): 1–26.

Martínez, Cristhian A., Jan Willem van Prooijen, and Paul A. M. Van Lange. 2023. "The Hateful People: Populist Attitudes Predict Interpersonal and Intergroup Hate." *Social Psychological and Personality Science* 14(6): 698–707.

Mason, Lilliana. 2023. "Political Identities." In *Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 886–917.

McAuliffe, Marie, and Anna Triandafyllidou, eds. 2021. International Organization of Migration (IOM) *World Migration Report 2022*. Geneva: International Organization for Migration.

McConahay, John B. 1986. "Modern Racism, Ambivalence, and the Modern Racism Scale." In

Prejudice, Discrimination, and Racism, eds. John F. Dovidio and Samuel L. Gaertner. San Diego: Academic Press, 91–126.

McCrae, Robert R, and Paul T Costa. 2008. "The Five-Factor Theory of Personality." In *Handbook of Personality: Theory and Research*, eds. Oliver P. John, Richard W. Robins, and Lawrence A. Pervin. New York: Guilford, 159–81.

McDermott, Rose. 2004. *Political Psychology in International Relations*. Ann Arbor: The University of Michigan Press.

McGraw, Kathleen M. 2006. "Why and How Psychology Matters." In *The Oxford Handbook of Contextual Political Analysis*, eds. Robert E. Goodin and Charles Tilly. New York: Oxford University Press, 131–56.

McGuire, William J. 2004. "The Poly-Psy Relationship: Three Phases of a Long Affair." In *Political Psychology: Key Readings*, eds. John T. Jost and Jim Sidanius. New York: Psychology Press, 22–31.

Meffert, Michael F., and Sonja Zmerli. 2022. "Informationsverarbeitung Und Entscheidungsfindung." In *Politische Psychologie: Handbuch Für Wissenschaft Und Studium*, eds. Sonja Zmerli and Ofer Feldman. Baden-Baden: Nomos, 103–25.

Miller, Saul L., and Jon K. Maner. 2012. "Overperceiving Disease Cues: The Basic Cognition of the Behavioral Immune System." *Journal of Personality and Social Psychology* 102(6): 1198–1213.

Mintz, Alex, and Eli Mograbi. 2015. "Political Psychology: Submissions, Acceptances, Downloads, and Citations." *Political Psychology* 36(3): 267–75.

Moffitt, Benjamin. 2015. "How to Perform Crisis: A Model for Understanding the Key Role of Crisis in Contemporary Populism." *Government and Opposition* 50(2): 189–217.

Mohrenberg, Steffen, Robert A Huber, and Tina Freyburg. 2021. "Love at First Sight? Populist Attitudes and Support for Direct Democracy." *Party Politics* 27(3): 528–39.

Mondak, Jeffery J., and Karen D. Halperin. 2008. "A Framework for the Study of Personality and Political Behaviour." *British Journal of Political Science* 38(2): 335–62.

Monroe, Kristen Renwick, William Chiu, Adam Martin, and Bridgette Portman. 2009. "What Is Political Psychology?" *Perspectives on Politics* 7(4): 859–82.

Montag, Christian, and Jaak Panksepp. 2017. "Primary Emotional Systems and Personality: An Evolutionary Perspective." *Frontiers in Psychology* 8(464): 1–15.

Mudde, Cas. 2004. "The Populist Zeitgeist." *Government and Opposition* 39(4): 542–63.

———. 2017. "Populism: An Ideational Approach." In *The Oxford Handbook of Populism*, eds. Cristóbal Rovira Kaltwasser, Paul Taggart, Paulina Ochoa Espejo, and Pierre Ostiguy. New York: Oxford University Press, 27–47.

Mudde, Cas, and Cristóbal Rovira Kaltwasser. 2017. *Populism: A Very Short Introduction*. New York: Oxford University Press.

Müller, Jan-Werner. 2016. *What Is Populism?* Philadelphia: University of Pennsylvania Press.

Mulvale, Susannah, and Thomas Teo. 2020. "Psychologization and Its Vicissitudes." In *Psychologie Und Kritik: Formen Der Psychologisierung Nach 1945*, eds. Viola Balz and Lisa Malich. Wiesbaden: Springer, 43–58.

Murray, Damian R., and Mark Schaller. 2016. "The Behavioral Immune System: Implications for Social Cognition, Social Interaction, and Social Influence." In *Advances in Experimental Social Psychology*, eds. James M. Olson and Mark P. Zanna. Cambridge, MA: Acdemic Press, 75–129.

Murray, Damian R., Mark Schaller, and Peter Suedfeld. 2013. "Pathogens and Politics: Further Evidence That Parasite Prevalence Predicts Authoritarianism." *PLoS ONE* 8(5): e62275.

Nai, Alessandro, and Jürgen Maier. 2018. "Perceived Personality and Campaign Style of Hillary Clinton and Donald Trump." *Personality and Individual Differences* 121: 80–83.

Nai, Alessandro, and Ferran Martínez i Coma. 2019. "The Personality of Populists: Provocateurs, Charismatic Leaders, or Drunken Dinner Guests?" *West European Politics* 42(7): 1337–67.

Navarrete, Carlos David, and Daniel M.T. Fessler. 2006. "Disease Avoidance and Ethnocentrism: The Effects of Disease Vulnerability and Disgust Sensitivity on Intergroup Attitudes." *Evolution and Human Behavior* 27(4): 270–82.

Nesbitt-Larking, Paul, and Catarina Kinnvall. 2012. "The Discursive Frames of Political Psychology." *Political Psychology* 33(1): 45–59.

Nesbitt-Larking, Paul, Catarina Kinnvall, Tereza Capelos, and Henk Dekker. 2014a. "Introduction: Origins, Developments and Current Trends." In *The Palgrave Handbook of Global Political Psychology*, eds. Paul Nesbitt-Larking, Catarina Kinnvall, Tereza Capelos, and Henk Dekker. Basingstoke: Palgrave Macmillan, 3–16.

———, eds. 2014b. *The Palgrave Handbook of Global Political Psychology*. Basingstoke: Palgrave Macmillan.

Nesse, Randolph M. 2005. "Natural Selection and the Regulation of Defenses. A Signal Detection Analysis of the Smoke Detector Principle." *Evolution and Human Behavior* 26(1): 88–105.

Nilsen, Per, and Susanne Bernhardsson. 2019. "Context Matters in Implementation Science: A Scoping Review of Determinant Frameworks That Describe Contextual Determinants for Implementation Outcomes." *BMC Health Services Research* 19(189): 1–21.

Noury, Abdul, and Gerard Roland. 2020. "Identity Politics and Populism in Europe." *Annual Review of Political Science* 23(1): 421–39.

Obradović, Sandra, Séamus A. Power, and Jennifer Sheehy-Skeffington. 2020. "Understanding the Psychological Appeal of Populism." *Current Opinion in Psychology* 35: 125–31.

Osborne, Danny, and Chris G. Sibley. 2022. "Political Psychology: Advancing an International Perspective on the Psychology of Political Behaviour." In *The Cambridge Handbook of Political Psychology*, eds. Danny Osborne and Chris G. Sibley. New York: Cambridge University Press, 3–21.

Paulhus, Delroy L., and Kevin M. Williams. 2002. "The Dark Triad of Personality: Narcissism, Machiavellianism, and Psychopathy." *Journal of Research in Personality* 36(6): 556–63.

Pellegrini, Valerio et al. 2021. "Social Exclusion and Anti-Immigration Attitudes in Europe: The Mediating Role of Interpersonal Trust." *Social Indicators Research* 155: 697–724.

Pessoa, Luiz. 2010. "Emergent Processes in Cognitive-Emotional Interactions." *Dialogues in Clinical Neuroscience* 12(4): 433–48.

Petersen, Michael Bang. 2023. "The Evolutionary Approach to Political Psychology." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 248–79.

Peterson, Rolfe Daus, and Carl L. Palmer. 2021. "The Dark Is Rising: Contrasting the Dark Triad and Light Triad on Measures of Political Ambition and Participation." *Frontiers in Political Science* 3(657750): 1–9.

Pettegrew, Loyd S. 1988. "The Importance of Context in Applied Communication Research." *The Southern Speech Communication Journal* 53(4): 331–38.

Pettigrew, T. F., and R. W. Meertens. 1995. "Subtle and Blatant Prejudice in Western Europe." *European Journal of Social Psychology* 25(1): 57–75.

Pruysers, Scott. 2020. "A Psychological Predisposition towards Populism? Evidence from Canada."

Contemporary Politics. https://doi.org/10.1080/13569775.2020.1851930.

Quayle, Michael, Nikolas Pautz, and Brian Mhlongo. 2020. "A Coauthorship Analysis of Internationalization in Political Psychology Through the Lens of ISPP Dissemination Activities." *Political Psychology* 41(5): 901–21.

Rahn, Wendy M., John L. Sullivan, and Thomas J. Rudolph. 2002. "Political Psychology and Political Science." In *Thinking about Political Psychology*, ed. James H. Kuklinski. Cambridge: Cambridge University Press, 155–86.

Al Ramiah, Ananthi, Miles Hewstone, and Katharina Schmid. 2011. "Social Identity and Intergroup Conflict." *Psychological Studies* 56(1): 44–52.

Rapp, Carolin. 2016. Is It All the Same? Forms of Racial Prejudice, Their Origins and Consequences Reconsidered. *Paper Prepared for the European Social Survey Conference, Workshop "Attitudes towards Immigrants: Concepts and Measurements"*. July 13-15, 2016. Lausanne, Switzerland.

Redlawsk, David P. 2023. "Expanding Our Thinking about Discrete Emotions and Politics." *Politics and the Life Sciences* 42(1): 146–57.

Redlawsk, David P., and Kyle Mattes. 2022. "Emotions and Politics." In *The Cambridge Handbook of Political Psychology*, eds. Danny Osborne and Chris G. Sibley. New York: Cambridge University Press, 139–58.

Reeskens, Tim, and Marc Hooghe. 2010. "Beyond the Civic-Ethnic Dichotomy: Investigating the Structure of Citizenship Concepts across Thirty-Three Countries." *Nations and Nationalism* 16(4): 579–97.

Reeskens, Tim, and Matthew Wright. 2013. "Nationalism and the Cohesive Society: A Multilevel Analysis of the Interplay Among Diversity, National Identity, and Social Capital Across 27 European Societies." *Comparative Political Studies* 46(2): 153–81.

Renshon, Stanley A., and John Duckitt, eds. 2000. *Political Psychology: Cultural and Crosscultural Foundations*. London: Macmillan Press.

Rhodes-Purdy, Matthew, Rachel Navarre, and Stephen M. Utych. 2021. "Populist Psychology: Economics, Culture, and Emotions." *The Journal of Politic* 83(4): 1559–72.

Rico, Guillem, Marc Guinjoan, and Eva Anduiza. 2017. "The Emotional Underpinnings of Populism: How Anger and Fear Affect Populist Attitudes." *Swiss Political Science Review* 23(4):

444–61.

Rokeach, Milton. 1960. *The Open and Closed Mind*. New York: Basic Books.

Rosenthal, Uriel, and Alexander Kouzmin. 1997. "Crises and Crisis Management: Toward Comprehensive Government Decision Making." *Journal of Public Administration Research and Theory* 7(2): 277–304.

Rovira Kaltwasser, Cristóbal, and Steven M. Van Hauwaert. 2020. "The Populist Citizen: Empirical Evidence from Europe and Latin America." *European Political Science Review* 12(1): 1–18.

Rudmin, Floyd W. 2005. "G. B. Grundy's 1917 Proposal for Political Psychology: 'A Science Which Has Yet to Be Created.'" *ISPP News* 16(2): 6–7.

Ryan, William S., Jeffrey M. Hunger, and Brenda Major. 2017. "Applying Intergroup Relations Research to Understanding LGB Health Disparities." *Journal of Social Issues* 73(3): 477–92.

Sagiv, Lilach, Sonia Roccas, and Osnat Hazan. 2012. "Identification With Groups: The Role of Personality and Context." *Journal of Personality* 80(2): 345–74.

Schachinger, Helga E. 2014. *Psychologie Der Politik: Eine Einführung*. Bern: Hans Huber, Hogrefe.

Schaller, Mark. 2011. "The Behavioural Immune System and the Psychology of Human Sociality." *Philosophical Transactions of the Royal Society B: Biological Sciences* 366(1583): 3418–26.

———. 2016. "The Behavioral Immune System." In *The Handbook of Evolutionary Psychology (Volume 1 Foundations)*, ed. D.M. Buss. Hoboken: Wiley, 206–24.

Schaller, Mark, Damian R. Murray, and Adrian Bangerter. 2015. "Implications of the Behavioural Immune System for Social Behaviour and Human Health in the Modern World." *Philosophical Transactions of the Royal Society B: Biological Sciences* 370(20140105): 1–10.

Schaller, Mark, Damian R. Murray, and Marlise K. Hofer. 2021. "The Behavioural Immune System and Pandemic Psychology: The Evolved Psychology of Disease-Avoidance and Its Implications for Attitudes, Behaviour, and Public Health during Epidemic Outbreaks." *European Review of Social Psychology (Pre-publication Manuscript)*: 1–30. https://doi.org/10.1080/10463283.2021.1988404.

Schaller, Mark, and Steven L. Neuberg. 2012. "Danger, Disease, and the Nature of Prejudice(S)." In *Advances in Experimental Social Psychology*, eds. James M. Olson and Mark P. Zanna. Burlington: Academic Press, 1–54.

Schaller, Mark, and Justin H. Park. 2011. "The Behavioral Immune System (and Why It Matters)."

Current Directions in Psychological Science 20(2): 99–103.

Scheifele, Carolin et al. 2021. "Testing the Basic Socio-structural Assumptions of Social Identity Theory in the Gender Context: Evidence from Correlational Studies on Women's Leadership." *European Journal of Social Psychology* 51(7): 1038–60.

Scholz, Geeske, Tobias Eberhard, Robin Ostrowski, and Nanda Wijermans. 2021. "Social Identity in Agent-Based Models—Exploring the State of the Art." In *Advances in Social Simulation: Proceedings of the 15th Social Simulation Conference: 23–27 September 2019*, eds. Petra Ahrweiler and Martin Neumann. Cham: Springer, 59–64.

Sears, David O. 1987. "Political Psychology: Contemporary Problems and Issues." *Annual Review of Political Science* 38(1): 229–55.

Sears, David O., Leonie Huddy, and Robert Jervis, eds. 2003. *Oxford Handbook of Political Psychology*. New York: Oxford University Press.

Sensales, Gilda, and Alessandra Dal Secco. 2014. "Political Psychology." In *Encyclopedia of Critical Psychology*, ed. Thomas Teo. New York: Springer, 1419–25.

Shakhar, Keren. 2019. "The Inclusive Behavioral Immune System." *Frontiers in Psychology* 10(1004): 1–8.

Sherif, Muzafer. 1958. "Superordinate Goals in the Reduction of Intergroup Conflict." *The American Journal of Sociology* 63(4): 349–56.

———, ed. 1962. *Intergroup Relations and Leadership: Approaches and Research in Industrial, Ethnic, Cultural and Political Areas*. New York: John Wiley.

———. 1966. *In Common Predicament: Social Psychology of Intergroup Conflict and Cooperation*. Boston: Houghton Mifflin.

Shook, Natalie J. et al. 2020. "Disease Avoidance in the Time of COVID-19: The Behavioral Immune System Is Associated with Concern and Preventative Health Behaviors." *PLoS ONE* 15(8): e0238015.

Shulman, Stephen. 2002. "Sources of Civic and Ethnic Nationalism in Ukraine." *Journal of Communist Studies and Transition Politics* 18(4): 1–30.

Sidanius, Jim, and Felicia Pratto. 1999. *Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression*. New York: Cambridge University Press.

Sieben, Anna. 2022. "Psychologisierung." In *Kulturpsychologie: Eine Einführung*, eds. Wolfradt. Uwe,

Lars Allolio-Näcke, and Paul Sebastian Ruppel. Wiesbaden: Springer, 387–98.

Simonsen, Kristina Bakkær, and Bart Bonikowski. 2020. "Is Civic Nationalism Necessarily Inclusive? Conceptions of Nationhood and Anti-Muslim Attitudes in Europe." *European Journal of Political Research* 59(1): 114–36.

Sirin, Cigdem V., and José D. Villalobos. 2019. "The Study of Discrete Emotions in Politics." In *Oxford Research Encyclopedia of Politics*, ed. William R. Thomson. https://doi.org/10.1093/acrefore/9780190228637.013.918.

Soliz, Jordan, and Christine E. Rittenour. 2012. "Family as an Intergroup Arena." In *The Handbook of Intergroup Communication*, ed. Howard Giles. New York: Routledge, 331–43.

Staerklé, Christian. 2015. "Political Psychology." In *International Encyclopedia of the Social & Behavioral Sciences*, ed. James D. Wright. Oxford: Elsevier, 427–433.

Stephan, Walter G., and Cookie White Stephan. 2000. "An Integrated Threat Theory of Prejudice." In *Reducing Prejudice and Discrimination: The Claremont Symposium on Applied Psychology*, ed. S. Oskamp. Mahwah: Erlbaum, 23–45.

Stone, Susanna et al. 2014. "Overview: Political Psychology." *Wiley Interdisciplinary Reviews: Cognitive Science* 5(4): 373–85.

Stone, William F., and Paul E. Schaffner, eds. 1988. *The Psychology of Politics*. 2nd ed. New York: Springer.

Stouffer, Samuel A. et al. 1949. *The American Soldier: Combat and Its Aftermath*. Princeton: Princeton University Press.

Tajfel, Henri. 1972. "Social Categorization. English Manuscript of 'La Catégorisation Sociale'." In *Introduction à La Psychologie Sociale*, ed. Serge Moscovici. Paris: Larousse, 272–302.

———. 1981. *Humans Groups and Social Categories: Studies in Social Psychology*. Cambridge: Cambridge University Press.

———. 1982. "Social Psychology of Intergroup Relations." *Annual Review of Psychology* 33(1): 1–39.

Tajfel, Henri, and John C. Turner. 1979. "The Social Identity Theory of Intergroup Behavior." In *Psychology of Intergroup Relations*, eds. S. Worchel and W. Austin. Chicago: Nelson-Hall, 33–47.

———. 2004. "The Social Identity Theory of Intergroup Behavior." In *Political Psychology: Key Readings*, eds. John T. Jost and Jim Sidanius. New York & Hove: Psychology Press, 367–90.

Thornhill, Randy, and Corey L. Fincher. 2020. "The Parasite-Stress Theory of Cultural Values and Sociality." In *The Cambridge Handbook of Evolutionary Perspectives on Human Behavior*, eds. L. Workman, W. Reader, and J. Barkow. Cambridge: Cambridge University Press, 167–78.

Timmer, Alexandra. 2015. "Judging Stereotypes: What the European Court of Human Rights Can Borrow from American and Canadian Equal Protection Law." *The American Journal of Comparative Law* 63(1): 239–84.

Toner, H. L., and G. R. Gates. 1985. "Emotional Traits and Recognition of Facial Expression of Emotion." *Journal of Nonverbal Behavior* 9(1): 48–66.

Troisi, Alfonso. 2020. "Fear of COVID-19: Insights from Evolutionary Behavioral Science." *Clinical Neuropsychiatry* 17(2): 72–75.

Tropp, Linda R., and Ludwin E. Molina. 2018. "Intergroup Processes: From Prejudice to Positive Relations Between Groups." In *The Oxford Handbook of Personality and Social Psychology*, eds. Kay Deaux and Mark Snyder. New York: Oxford University Press, 621–44.

Turner, John C. et al. 1987. *Rediscovering the Social Group: A Self-Categorization Theory*. Oxford: Basil Blackwell.

Tybur, Joshua M. et al. 2016. "Parasite Stress and Pathogen Avoidance Relate to Distinct Dimensions of Political Ideology across 30 Nations." *Proceedings of the National Academy of Sciences of the United States of America* 113(44): 12408–13.

Tybur, Joshua M., and Debra Lieberman. 2016. "Human Pathogen Avoidance Adaptations." *Current Opinion in Psychology* 7: 6–11.

Vala, Jorge, and Rui Costa-Lopes. 2015. "Intergroup Relations." In *International Encyclopedia of the Social & Behavioral Sciences*, ed. James D. Wright. Waltham: Elsevier, 409–15.

Valtorta, Roberta Rosa, Cristina Baldissarri, Luca Andrighetto, and Chiara Volpato. 2021. "Seeing Others as a Disease: The Impact of Physical (but Not Moral) Disgust on Biologization." *International Review of Social Psychology* 34(1): 1–17.

Vasilopoulos, Pavlos. 2019. "Affective Intelligence and Emotional Dynamics in Voters' Decision-Making Processes." In *Oxford Research Encyclopedia of Politics*, ed. William R. Thomson. New York: Oxford University Press, https://doi.org/10.1093/acrefore/9780190228637.013.

Vasilopoulos, Pavlos, and John T. Jost. 2020. "Psychological Similarities and Dissimilarities between Left-Wing and Right-Wing Populists: Evidence from a Nationally Representative

Survey in France." *Journal of Research in Personality* 88(104004): 1–11.

Vasilopoulos, Pavlos, George E. Marcus, Nicholas A. Valentino, and Martial Foucault. 2019. "Fear, Anger, and Voting for the Far Right: Evidence From the November 13, 2015 Paris Terror Attacks." *Political Psychology* 40(4): 679–704.

Vasilopoulos, Pavlos, Haley Mcavay, Sylvain Brouard, and Martial Foucault. 2023. "Emotions, Governmental Trust and Support for the Restriction of Civil Liberties during the Covid-19 Pandemic." *European Journal of Political Research* 62(2): 422–42.

Vasilopoulou, Sofia, and Markus Wagner. 2017. "Fear, Anger and Enthusiasm about the European Union: Effects of Emotional Reactions on Public Preferences towards European Integration." *European Union Politics* 18(3): 382–405.

Veenstra, Lotte, Brad J. Bushman, and Sander L. Koole. 2018. "The Facts on the Furious: A Brief Review of the Psychology of Trait Anger." *Current Opinion in Psychology* 19: 98–103.

Verbalyte, Monika, Donatella Bonansinga, and Theofanis Exadaktylos. 2022. "When Emotions Run High: Affective Responses to Crises in Europe." *Innovation: The European Journal of Social Science Research* 35(1): 1–13.

Villani, Leonardo et al. 2020. "Comparison of Deaths Rates for COVID-19 across Europe During the First Wave of the COVID-19 Pandemic." *Frontiers in Public Health* 8(620416): 1–5.

De Vos, Jan. 2014. "Psychologization." In *Encyclopedia of Critical Psychology*, ed. Thomas Teo. New York: Springer, 1547–51.

Wagner, Markus. 2014. "Fear and Anger in Great Britain: Blame Assignment and Emotional Reactions to the Financial Crisis." *Political Behavior* 36(3): 683–703.

Wamsler, Steffen. 2022. "Violated Entitlement and the Nation: How Feelings of Relative Deprivation Shape Nationalism and Constructive Patriotism." *International Journal of Comparative Sociology* 00(0): 1–19.

Wamsler, Steffen, Markus Freitag, Julian Erhardt, and Maximilian Filsinger. 2023. "The Pandemic and the Question of National Belonging: Exposure to Covid-19 Threat and Conceptions of Nationhood." *European Journal of Political Research* 62(2): 510–29.

Wang, Puqu. 2022. *Principle of Interest Politics: Logic of Political Life from China's Perspective*. Singapore: Springer.

Ward, Dana. 2002. "Political Psychology: Origins and Development." In *Political Psychology*, ed.

Kristen Renwick Monroe. Mahwah: Lawrence Erlbaum, 61–78.

Watson, David, Lee Anna Clark, and Auke Tellegen. 1988. "Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales." *Journal of Personality and Social Psychology* 54(6): 1063–70.

Wormley, Alexandra S., and Michael E.W. Varnum. 2023. "How Is the Behavioral Immune System Related to Hygiene Behaviors?" *Current Research in Ecological and Social Psychology* 4(100081): 1–9.

Wright, Matthew, Jack Citrin, and Jonathan Wand. 2012. "Alternative Measures of American National Identity: Implications for the Civic-Ethnic Distinction." *Political Psychology* 33(4): 469–82.

Wuttke, Alexander, Christian Schimpf, and Harald Schoen. 2020. "When the Whole Is Greater than the Sum of Its Parts: On the Conceptualization and Measurement of Populist Attitudes and Other Multidimensional Constructs." *American Political Science Review* 114(2): 356–74.

Yogeeswaran, Kumar, and Maykel Verkuyten. 2022. "The Political Psychology of National Identity." In *The Cambridge Handbook of Political Psychology*, eds. Danny Osborne and Chris G. Sibley. New York: Cambridge University Press, 311–28.

Yzerbyt, Vincent, and Stéphanie Demoulin. 2010. "Intergroup Relations." In *Handbook of Social Psychology*, eds. Susan T. Fiske, Daniel T. Gilbert, and Gardner Lindzey. Hoboken: John Wiley & Sons, 1024–83.

Zettler, Ingo et al. 2022. "The Role of Personality in COVID-19-Related Perceptions, Evaluations, and Behaviors: Findings Across Five Samples, Nine Traits, and 17 Criteria." *Social Psychological and Personality Science* 13(1): 299–310.

Zick, Andreas, Thomas F. Pettigrew, and Ulrich Wagner. 2008. "Ethnic Prejudice and Discrimination in Europe." *Journal of Social Issues* 64(2): 233–51.

Zmerli, Sonja, and Ofer Feldman, eds. 2015. *Politische Psychologie: Handbuch Für Studium Und Wissenschaft*. Baden-Baden: Nomos.

———, eds. 2022. *Politische Psychologie: Handbuch Für Wissenschaft Und Studium*. 2nd ed. Baden-Baden: Nomos.

Zmigrod, Leor et al. 2021. "The Cognitive and Perceptual Correlates of Ideological Attitudes: A Data-Driven Approach." *Philosophical Transactions of the Royal Society B: Biological Sciences*

376(20200424): 1–14.

Zmigrod, Leor, Peter J. Rentfrow, and Trevor W. Robbins. 2018. "Cognitive Underpinnings of Nationalistic Ideology in the Context of Brexit." *Proceedings of the National Academy of Sciences of the United States of America* 115(19): E4532–40.

Zúñiga, Claudia, and Wilson López-López. 2021. "Conclusion: Future Directions for Political Psychology in Latin America." In *Political Psychology in Latin America*, eds. Claudia Zúñiga and Wilson López-López. Washington DC: American Psychological Association, 237–45.

2. Article 1: Personality and National Identity: How the Big Five Relate to Civic and Ethnic Conceptions of Nationhood

Nathalie Hofstetter

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In recent years, the concept of national identity has recaptured the imagination of public opinion research and with it individuals' conceptions of what it takes to be a "true" member of their nation. This investigation aims to add to the explanation of varying conceptions of nationhood by scrutinising their personality-based foundations. It provides the first systematic analysis of a yet unstudied link between the Big Five personality traits and two ideal-typical conceptions of nationhood: civic and ethnic national identity. Using 18 samples from six European countries (Germany, France, Italy, Switzerland, Spain, and the United Kingdom), each containing around 1000 individuals, we uncover psychological underpinnings of attitudes towards national membership, revealing several consistent trait patterns. We find a negative relationship between openness to experience and an ethnic national identity, while conscientiousness associates positively with the civic ideal type of national identity content. The findings presented extend current understandings of how people conceptualise national belonging and provide evidence that distinct conceptions of nationhood are related to different dispositional foundations.

Keywords: Big Five personality traits, conceptions of nationhood, ethnic–civic dichotomy, national identity, regression analysis

2.1. Introduction

The Europe of recent decades is characterised by rapidly advancing globalisation and Europeanisation trends, manifested, among other things, in international economic trade and cooperation, political and legal integration, and mass migration. These developments transcend national borders while also highlighting them and are accompanied by political debates on the meaning of the nation-state and national identity. This is emphatically illustrated, for example, in the context of the so-called European refugee crisis, the Brexit referendum or, most recently, the Russian attack on Ukraine (e.g., Hobolt, 2016; Schmidt & Quandt, 2018).

Thus, it is unsurprising "that national identities have experienced a renaissance in public opinion research" (Lindstam et al., 2021, p. 93) or, as Filsinger et al. (2021, p. 657) put it, to see them "center stage in contemporary political science" (cf. Schmidt & Quandt, 2018). By focusing on the criteria set to define national membership along which symbolic boundaries are drawn, we study the content dimension of national identity and follow the relevant literature to distinguish civic and ethnic conceptions of nationhood (Berg & Hjerm, 2010; Helbling et al., 2016; Kunovich, 2009; Reeskens & Hooghe, 2010). A civic national identity emphasises the relevance of adhering to the national political culture, for example, by respecting its laws and institutions, when it comes to the question of national belonging. In contrast, an ethnic national identity conceives this belongingness as dependent on ethnocultural sameness and thus on more exclusive criteria such as ancestry and birthplace (Filsinger et al., 2021; Ha & Jang, 2016; Kunovich, 2009; Reeskens & Hooghe, 2010). While this distinction was originally made at the country level to classify whole societies, we follow a more recent approach in comparative survey research to study national identity content at the microlevel (Simonsen & Bonikowski, 2020, p. 117; Wright et al., 2012, p. 470). Measuring ethnic and civic national identities at the individual level, researchers usually bring back the societal-level perspective by aggregating these measures or relating them to societal properties, thus substantially dealing with differences across societies (e.g., Ariely, 2012; Pehrson et al., 2009; Sarrasin et al., 2020). Here, this paper departs from most previous research on ethnic and civic conceptions of nationhood in mass public opinion. Following on from research on other aspects of national identity such as nationalism, patriotism, or (political–territorial) group identification, we place greater emphasis on national identity as an individual-level phenomenon and shed light on the role played by psychological traits (c.f. Curtis & Miller, 2021; Duckitt & Sibley, 2016; Sagiv et al., 2012; Zmigrod et al., 2018, 2021). Regarding these traits, this study focuses on the so-called Big Five of personality (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism), which constitute a widely accepted taxonomy to describe and measure personality (Gerber et al., 2010, 2011a; Mondak, 2010).

Against this background, this study aims to shed light on the psychological correlates of national identity as a multidimensional belief system by examining how the Big Five relate to civic and ethnic conceptions of nationhood, widely discussed as the two ideal types of national identity content (cf. Lindstam et al., 2021; Reeskens & Hooghe, 2010; Wright et al., 2012). Drawing on 18 samples from six European countries, empirical findings point to some cross-national variation but also reveal several consistent albeit differentiated relationships between personality and the two ideal types of national identity content: While a negative relationship is found between openness to experience (and low extraversion) and an ethnic conception of nationhood, conscientiousness relates positively to a civic conception of nationhood.

This article contributes to the literature in several respects. First, despite the recent prominence of both concepts, this study is, to the best of our knowledge, the first to systematically relate conceptions of nationhood to the Big Five personality traits.[1] It thereby extends the current understanding of how people form national identities. Considering the variable and contested nature of national identities as well as their consequences for intergroup relations, this is not only of epistemic interest but also of social and political relevance (Kunovich, 2009). Moreover, research on the role of personality in the political sphere is enriched by following Mondak's (2010, p. 19) call to examine hypotheses about the Big Five in independent analyses conducted with new data sets. With regard to the empirical analyses, we operate with data gathered through a cross-sectional survey repeated three times in six European countries (Germany, France, Italy, Switzerland, Spain, and the United Kingdom). This provides a total of 18 samples to broadly test the relationships of interest, each containing details of around 1000 individuals. In this vein, this study also contributes to the important question of how generalisable associations between personality and (political) attitudes are and acknowledges the insistent call brought up in the context of the "replicability crisis" in psychology and beyond to identify robust, replicable, and generalisable evidence (cf. Weinschenk, 2017; Zettler et al., 2022).

[1] Again, the above-mentioned studies by Curtis and Miller (2021), Duckitt and Sibley (2016), Sagiv et al. (2012), and around Zmigrod et al. (2018, 2021) have already linked (the Big Five) personality traits to other aspects of national identity such as (political–territorial) group identification, nationalism, or patriotism. Although these are terminologically, theoretically, and empirically related concepts, they must be distinguished from the two ideal types of national identity content, that is, civic and ethnic conceptions of nationhood, on which the present investigation focuses. Thus, findings from these studies cannot be directly applied to the research endeavour pursued here.

2.2. Conceptual Background: Personality and National Identity

Following the so-called trait paradigm dominant in personality psychology, the present study defines personality as the entirety of all characteristics reflecting "relatively stable patterns of feeling, thinking, striving, and behaving and by which a person is more or less distinguished from others […]" (Kandler & Riemann, 2015, p. 51). Although these characteristics constitute a comprehensive and multifaceted personality system, personality traits are understood as the core components of one's personality, shaping how individuals respond to the vast array of stimuli they encounter in the world (Gerber et al., 2011a; Mondak, 2010). In order to comprehensively conceptualise and reliably measure personality traits, the Big Five Model has established itself in recent years as the "general taxonomy of personality traits" (John et al., 2008, p. 116). The model suggests five higher-order, empirically derived dimensions of personality traits into which most individual differences in human personality can be classified: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Gosling et al., 2003, p. 506). These abstract and broad traits are found to be considerably stable over the course of life and situations, to be (partly) determined by genetic dispositions, and to emerge across different cultural and linguistic contexts (Gallego & Pardos-Prado, 2014; Mondak, 2010; Weinschenk, 2017). Openness to experience refers to a valuing of opportunities for new experiences, actions, and ideas and is usually conveyed by adjectives such as open-minded, original, intellectual, and tolerant (Caprara & Vecchione, 2013; Mondak & Halperin, 2008). Conscientiousness is linked to being organised, responsible, and dutiful and implies high impulse control that facilitates task- and goal-directed behaviour (Gallego & Pardos-Prado, 2014; John et al., 2008). Extraversion describes an energetic and excitement-seeking approach towards life and includes sociability, activity, and assertiveness (Dinesen et al., 2016; Gerber et al., 2011a; Mondak & Halperin, 2008). Agreeableness contrasts antagonism and refers to a prosocial and communal orientation towards others, trust, and modesty. Scoring high on this trait is related to being kind, caring, cooperative, compliant, and tolerant (Gallego & Pardos-Prado, 2014; Gerber et al., 2011a; John et al., 2008). Finally, neuroticism implies low emotional stability and even temper and is associated with negative emotionality such as feeling sad, worried, tense, and vulnerable (Caprara & Vecchione, 2013; Mondak & Halperin, 2008).

Generally, the concept of national identity is complex and controversial, lacking a distinct definition (Davidov, 2009). From the view of Social Identity Theory (Tajfel, 1981), national identity captures the cognitive and affective belonging to a nation or national group (Huddy & Del Ponte, 2020). Although national identity was initially conceived as a unidimensional construct within empirical research, there is now broad scholarly consensus that it is a multidimensional belief system (Ariely, 2020; Citrin et al., 2001; Davidov, 2009; Helbling et al., 2016; Schmidt & Quandt, 2018). Most previous research can be classified as either adapting an affective or a normative understanding of

national identity (Wright et al., 2012). An affective understanding surrounds the attachment and feelings to the nation, most often in the distinct forms of patriotism and nationalism. A normative approach is about the content of national identity, that is, the criteria set for defining national membership and drawing the boundaries between national insiders and outsiders (Helbling et al., 2016, p. 746; Wright et al., 2012, p. 469).[2] In cross-national studies, the content dimension has emerged as the main aspect of analysing national identity, as the importance of distinguishing the national ingroup from national outgroups—or "us" from "them"—cannot be overstated (Helbling et al., 2016, p. 746; Reeskens & Wright, 2013, p. 156). Already rooted in Meinecke's (1908) distinction of a *Staatsnation* and a *Kulturnation* and becoming widely accepted with the seminal work of Kohn (1939), research tends to distinguish between a civic and an ethnic conception of nationhood as the two ideal types of national identity's content dimension (Ariely, 2020; Citrin et al., 2001; Hadler & Flesken, 2018; Kunovich, 2009; Lindstam et al., 2021; Reeskens & Hooghe, 2010).[3] A civic conception of national belonging is characterised by the notion of a nation as a community of equal citizens sharing a set of political principles, values, and duties. In contrast, in an ethnically conceived national community, a strong emphasis is placed on national descent and ancestry, history and commonly shared myths, and other sociocultural values (Ha & Jang, 2016; Ignatieff, 1993; Lenard & Miller, 2018). Accordingly, in the case of a civic or "thin" national identity (Berg & Hjerm, 2010), national belonging is based on an explicitly political culture and thus on inclusive and voluntarist factors such as a common national language and loyalty to political institutions and laws (Filsinger et al., 2021; Lenard & Miller, 2018). Because these characteristics are accessible or adoptable by virtually everyone and therefore "boundaries drawn using these criteria are permeable for outsiders" (Lindstam et al., 2021, p. 95), the civic notion of nationhood stresses the aspect of choice in national belonging (Erhardt et al., 2021; Hadler & Flesken, 2018). Conversely, a "thick" ethnic conception of nationhood is based on criteria such as national ancestry, being born in the country, and assigning to the native culture, for example, in the form of the country's dominant religion (Berg & Hjerm, 2010; Filsinger et al., 2021; Helbling et al., 2016).

[2] However, the boundaries between these two approaches are often blurred, so that (conceptual) accounts of patriotism and nationalism frequently also refer to different membership criteria, and different conceptions of nationhood are also discussed in affective terms (Ariely, 2020; Mussotter, 2021). Moreover, other related concepts and terms such as national pride, belonging, or identification are discussed in the literature. Finally, further differentiations can be found within the concept of national identity and within its two main understandings (e.g., Ariely, 2011; Bonikowski & DiMaggio, 2016).

[3] Originally, this distinction was made at the country level to classify nations, for example, based on their laws, literature, and official statements (e.g., Brubaker, 1992). Over the past several years, empirical research has proved that these distinct conceptions of nationhood also emerge at the individual level, that is, in mass public opinion (Simonsen & Bonikowski, 2020). An overview of these studies can be found in Wright et al. (2012, p. 470), for example.

Accordingly, ethnic national boundaries are more objectivist and exclusive in the sense that they are impossible or very difficult to transcend (Ha & Jang, 2016; Lenard & Miller, 2018; Lindstam et al., 2021, p. 95). Although the two conceptions of nationhood are not mutually exclusive and most citizens subscribe to a mix of civic and ethnic criteria for national belonging, survey research identifies the conceptual distinction between these two ideal types in most publics (Ha & Jang, 2016, p. 110; Lindstam et al., 2021, p. 95; Reeskens & Hooghe, 2010).

2.3. Personality and National Identity Content: The Relationship between Personality Traits and Conceptions of Nationhood

When it comes to the correlates of national identity content, we find evidence on the individual and contextual level. (Economic) development, globalisation, ethnic diversity, national policies, or elite rhetoric have all been discussed as macrovariables affecting conceptions of nationhood (Ariely, 2012; Canan & Simon, 2019; Hadler & Flesken, 2018; Helbling et al., 2016; Jones & Smith, 2001; Kunovich, 2009; Shulman, 2002a). Regarding individual-level forces, studies mainly point to the relevance of socioeconomic status (income and education), religious identity, and citizenship or minority (migrant) status (Jones & Smith, 2001; Kunovich, 2006, 2009). However, to the best of our knowledge, no systematic analysis of the personality correlates of civic and ethnic conceptions of nationhood exist. Against this background, we deduce expectations from theoretical-conceptual arguments and the cumulative body of knowledge linking personality to attitudes and behaviours conceptually and empirically proximate to national identity (e.g., intergroup attitudes or national feelings and attachment; cf. Curtis & Miller, 2021). However, the lack of previous studies on the relationship between personality and conceptions of nationhood means that some of our expectations are ambiguous or rather exploratory in nature.

Openness to experience is associated with the tendency to question existing norms and values as well as one's own cultural assumptions (Ang et al., 2006). Open individuals are characterised by cognitive flexibility, whereby Zmigrod et al. (2018, p. E4538) note that "more cognitively flexible individuals have a reduced tendency to selectively fuse with their national ingroup". Further, they appreciate cultural diversity, are shown to identify less strongly with their country of origin, and instead, are characterised by cosmopolitan values (Freitag, 2017, p. 101). Against this background, it could be expected that openness to experience relates negatively to both ethnic and civic conceptions of nationhood, as both draw boundaries between national insiders and outsiders. This argument is particularly convincing when the criteria to define these boundaries are exclusionary, as in the case of an ethnic conception of nationhood. However, the choice element of a civic national identity and its comparatively broad accessibility might also appeal to open individuals. The positive association between openness and a supranationalist European identification reported

by Curtis and Miller (2021) could be interpreted as supporting this idea, given the strong argument by Aichholzer et al. (2021, p. 299) that the endorsement of civic aspects of national identity should resonate well with support for a supranationalist political institution such as the European Union (EU). Regarding an ethnic national identity, our assumption is consolidated by the abundant empirical evidence that such notions of national belonging encourage outgroup hostility (more so than civic conceptions) (Reeskens & Wright, 2013, p. 157), while openness is related to interethnic and intercultural tolerance and more positive sentiments towards members of national outgroups (Dinesen et al., 2016; Freitag & Rapp, 2015; Gallego & Pardos-Prado, 2014). In sum, while there are conflicting expectations regarding the relationship between openness to experience and a civic conception of nationhood, we assume this trait to relate negatively to an ethnic conception of nationhood.

Conscientiousness typically coincides with a clear need for structure, law and order, and a pronounced demand for dutifulness and social conformity (Mondak et al., 2011; Mondak & Halperin, 2008). Strongly committed to social norms and rules, the expectation is that conscientious individuals insist on a general commitment to the political culture, its values and institutions when defining the national ingroup. Thus, conscientiousness should relate positively to a national identity with civic content. As highly conscientious individuals lean towards traditionalism and political conservatism and tend to prefer the existing social order and hierarchies (Freitag & Rapp, 2015; Shulman, 2002a), one could also expect them to put a strong emphasis on objectivist and exclusionary criteria when it comes to drawing national boundaries. Some studies find conscientiousness coincides with outgroup negativity, for example, in the form of anti-immigrant attitudes or racial prejudice (Ackermann & Ackermann, 2015; Dinesen et al., 2016; Gallego & Pardos-Prado, 2014). Against this background, we expect conscientiousness to relate positively both to civic and ethnic national identities.

While *extraversion* is decisive for the more social aspects of politics such as political activism and participation, its implications for intergroup attitudes and feelings in general and national identities in particular are less obvious (Ackermann & Ackermann, 2015, p. 400; Dinesen et al., 2016, p. 58; Gallego & Pardos-Prado, 2014, p. 84). However, in addition to being sociable and outgoing, extroverts are also characterised by their assertiveness which is accompanied by a drive for power and dominance, the endorsement of social hierarchies, and feelings of social superiority (Caprara & Vecchione, 2013; Freitag & Rapp, 2015). While this seems rather at odds with civic ideals of national belonging such as equality of citizens, a general inclusiveness, and wide accessibility of the national ingroup, it resonates well with the demand to adapt to the prevailing sociocultural system with its historically grown values, customs, and hierarchical order. We would therefore expect

highly extraverted individuals to set more strict criteria for national membership. As previous research shows, extraversion also relates positively to right-wing authoritarianism which is closely tied to ethnocentrism, national chauvinism, and aggression towards outgroups and thus conceptually close to a national identity with ethnic content (Ekehammar et al., 2004; Huddy & Del Ponte, 2020). Further supporting this assumption, Gallego and Pardos-Prado (2014) and Freitag and Rapp (2015) report lower levels of pro-immigrant attitudes and tolerance among extraverts. In sum, it is expected that extraversion relates positively to an ethnic construction of national identity, while the direction of the relationship between this trait and a civic conception of nationhood is less clear-cut. This is because highly extraverted individuals might consider it essential to adapt not only to the sociocultural but also to the political-institutional fabric of the national community.

Regarding *agreeableness*, existing research above all suggests a negative relationship with an ethnic conception of nationhood. Agreeable individuals are generally kind, cooperative, tolerant, and inclined to solidarity; they avoid interpersonal and intergroup conflict and stick to "the principles of social cohesion, equal rights and general altruism" (Freitag & Rapp, 2015, p. 356; Gallego & Pardos-Prado, 2014, p. 82). These characteristics clearly contrast with an ethnic conception of nationhood in which national belonging is defined along exclusionary criteria and which is typically related to intergroup conflict. Agreeableness, in contrast, is negatively related to prejudice and anti-immigrant attitudes (e.g., Crawford & Brandt, 2019; Dinesen et al., 2016; Sibley & Duckitt, 2008). With regard to a civic conception of nationhood, expectations are not as straightforward. For one thing, the notion of a national community of equal citizens committed to a voluntarily shared political culture could appeal to agreeable individuals who appreciate a harmonious and communal coexistence. People scoring high on agreeableness adhere to sociopolitical norms and value conformity and compliance with legally regulated rules and regulations (Curtis & Miller, 2021; Dinesen et al., 2014; Roccas et al., 2002). Against this background, defining national belonging along civic criteria seems to fit these individuals. However, due to their benevolent orientation towards other people in general, their conflict avoidance, and pronounced tendency towards restraint, it is also possible that agreeable individuals refrain entirely from drawing (national) boundaries between "themselves" and "others" (cf. Reeskens & Wright, 2013, p. 1447). Thus, while these conflicting arguments do not allow us to derive a clear expectation regarding the relationship between agreeableness and a civic conception of nationhood, we assume that this trait will relate negatively to an ethnic conception of nationhood.

As for *neuroticism* or emotional instability, there are no clear expectations. From a theoretical point of view, one could argue that people scoring high on neuroticism, driven by anxiety and a fear of

losing their established social position, are reluctant to provide broad access to their ingroup and are thus in favour of strict and exclusionary access criteria to the national community (Freitag & Rapp, 2015; Gallego & Pardos-Prado, 2014). Granting national belonging to virtually anyone who aspires to it and is willing to subscribe to the respective political culture could be perceived as an unpleasant challenge to the security-promising status quo (Gerber et al., 2010). However, neurotic individuals are generally rather reserved and disinterested when it comes to politics and its inherent competition for ideas and content (Freitag, 2017; Shulman, 2002a). Accordingly, political debates about the content of national identity or the necessary criteria for national belonging are also likely to be viewed with detachment, arguing against a clear conception of national identity in either civic or ethnic terms. Further, although it has been widely argued that neurotic individuals perceive (national) outgroups as a threat and are therefore more likely to harbour negative attitudes towards their members, the respective empirical evidence is anything but unambiguous (Crawford & Brandt, 2019; Dinesen et al., 2016; Sibley & Duckitt, 2008). Thus, neuroticism is considered to be of secondary relevance to conceptions of nationhood, and no formative role of this personality dimension is expected.

2.4. Data and Method

We test the expectations outlined above across 18 samples, relying on original cross-sectional survey data of around 18,000 European respondents in total, collected at three time points (spring 2020; winter 2020/2021; spring 2021) in Germany, France, Italy, Switzerland, Spain, and the United Kingdom.[4] The first large online survey was conducted by Qualtrics, the latter two by SurveyEngine. Quotas on age, gender, and education for each country (including language for Switzerland) were used for all surveys to mirror the distribution of these variables representative for the entire population (for a detailed description of the surveys, see Supporting Information S1).

The primary independent variables of interest are measures of the Big Five personality traits. To this end, a widely used brief measure of the five factors developed by Gosling et al. (2003), the Ten-Item Personality Inventory (TIPI), was used to create arithmetic means from the related

[4] The six countries are part of a larger research project on the social, political, and psychological consequences of the COVID-19 pandemic and were selected because they were among the most severely hit in Europe at the onset of the pandemic. However, this survey project collected more than purely COVID-19-related data, allowing us to also pursue research on other relevant topics. Additional analyses not documented here use proxies such as the number of personally known infected persons and reported own infections or of close persons to control for pandemic threat exposure. Including these proxies does not substantially affect our main findings reported below (analyses are available upon request). The data used for the present paper can be provided by the author upon request.

items.[5] These were then logarithmised to minimise the impact of social desirability effects. For the distribution of the personality traits among the six countries and the three surveys, see Supporting Information S5a and S5b.

Six commonly used survey items reflect the conceptions of nationhood or the content of national identity emphasised by respondents, asking them about the relevance of different criteria to become a true member of the national ingroup (Erhardt et al., 2021; Helbling et al., 2016; Kunovich, 2009; Reeskens & Hooghe, 2010). Respondents were questioned on the following criteria: having a country's ancestry, being born in the country, adhering to its dominant religion (for all countries under study: being a Christian), sharing its culture, speaking (one of) its official language(s), and respecting its political institutions and laws. Respondents could rate their importance on a 7-point Likert scale ranging from not important at all (1) to very important (7). The first two criteria (ancestry and birth) indisputably refer to an ethnic conception of nationhood, whereas the demand to respect the country's political institutions and laws is agreed as being connected with a civic notion of national identity. The assignment of the remaining items is somewhat more controversial (cf. Helbling et al., 2016, p. 747; Jayet, 2012, p. 74; Reeskens & Hooghe, 2010, p. 583). However, following the majority of relevant literature, the religion criterion leans closer to an ethnic notion and language requirements to a civic notion of nationhood, while sharing a country's culture is positioned somewhere in between the two ideal types (Erhardt et al., 2021; Helbling et al., 2016; Kunovich, 2006; Wright & Reeskens, 2013). In this vein, it has been criticised that conceptions of nationhood are not just bidimensional, but rather in addition to a civic and ethnic form, a cultural dimension of national identity should be distinguished, including

[5] The TIPI is one of the shortest validated instruments to measure the Big Five and enjoys prominence in and beyond psychological research. Gosling et al. (2003) demonstrate that it performs adequately in a series of validity tests, which has been replicated in validation studies across languages (Nunes et al., 2018: 2). Nevertheless, previous international studies using short measures of personality have sometimes reported anomalous psychometric properties of these instruments (Ludeke et al., 2021; Ludeke & Larsen, 2017). Following Ludeke et al. (2021), we look at the within-trait inter-item correlations and adopt their benchmark of $r > .05$. Inter-item correlations for all traits and subsamples are available in Supporting Information S4. Although most of them clearly exceed the critical value of .05, we observe negative correlations between the openness items in Italy and the agreeableness items in Spain. Although the relevant literature frequently reports difficulties in the measurement reliability of these two personality dimensions (John et al., 2008, p. 131; Mondak, 2010, p. 78), we advocate some caution regarding the results for openness in Italy and agreeableness in Spain. As a further check of the robustness of our main findings, we estimated alternative models for these countries by dropping one or both of the negatively related items. Although, of course, the coefficients and their significance levels do not fully correspond to the main models, our main conclusions remain largely unaffected: In a fairly consistent manner, openness to experience contrasts with an ethnic notion of nationhood, and conscientiousness relates positively to a civic national identity (models available upon request).

indicators such as language, culture, and tradition (Reijerse et al., 2013; Shulman, 2002b). Still others reorient themselves towards a unidimensional account and argue that conceptions of nationhood should be understood as the extreme points on a continuous spectrum (Erhardt et al., 2021; Kunovich, 2009; Larsen, 2017; Lenard & Miller, 2018; Reeskens & Hooghe, 2010; Smith, 1991). However, because the dichotomous theoretical framework is still dominant in the relevant literature and "it is generally thought that there is a meaningful dichotomy of outlooks that is important to capture" (Wright et al., 2012, p. 476), this study adopts the civic–ethnic distinction (see also Erhardt et al., 2021, p. 61; Filsinger et al., 2021, p. 659; Lindstam et al., 2021, p. 95). To nevertheless take account of this discussion, several robustness checks will be provided. As such, a more fine-grained analysis looks at the six items separately, and alternative specifications of the civic–ethnic framework will be addressed.

Because there is no conclusive consensus in the literature regarding the assignment of membership criteria to conceptions of nationhood, we first examine the latent structure of the civic-ethnic dichotomy (Reeskens & Hooghe, 2010, p. 591). We follow previous research (Erhardt et al., 2021; Helbling et al., 2016; Reeskens & Hooghe, 2010) to run a principal component factor analysis with promax rotation.[6] In line with the civic-ethnic distinction, a first analysis with pooled data shows two latent factors: a first one referring to ethnic criteria with high loadings for ancestry (0.89), birth (0.85), and religion (0.83) and a second which refers to civic criteria, where political institutions (0.91) and language (0.81) load strongly. The culture requirement shows rather weak loadings on both the ethnic (0.50) and civic (0.50) factors. This pattern is empirically supported in nearly all of the country and time subsamples, with the culture criterion sometimes loading somewhat more strongly on the ethnic (especially in Germany) or civic factor (especially in the United Kingdom).[7] Against this background, ethnic and civic conceptions of nationhood are recoded into two arithmetic indices, whereby ethnic national identity is the mean score of the values for the ancestry, birth, and religion items and civic national identity is the mean score of the values achieved on the political institutions and language items. The culture item was no longer considered as it does not unambiguously fit into either category (cf. Erhardt et al., 2021, p. 66; Reeskens & Hooghe, 2010, p. 588).

[6] More specifically, the correlation matrix of the six items was subjected to an exploratory factor analysis using the principal component factor method.

[7] However, in three out of 18 subsamples (Spain spring 2020/2021 and Italy spring 2020), all items load on one factor. When interpreting the results of the main analysis, this should be kept in mind. Not least for this reason, additional single-item analyses are presented that largely support the central findings of the main analysis for these subsamples as well.

As controls, we consider a range of sociodemographic and political covariates that have been shown to affect normative conceptions of nationhood in previous research such as gender, age, residential area, education, income situation, and political ideology (Canan & Simon, 2019; Erhardt et al., 2021; Hadler & Flesken, 2018; Jones & Smith, 2001; Kunovich, 2009).[8] Summary statistics for all variables and question wording for key variables are provided in Supporting Information S2 and S3. To test the various expectations outlined above, we rely on ordinary least squares regression models with robust standard errors.

2.5. Empirical Analysis

We now turn to our main analysis on the question of how personality relates to ethnic and civic conceptions of nationhood as the two ideal types of national identity content. Following an approach exemplified by Weinschenk (2017), the respective relationships are tested separately for each country and time point to provide a broad test of our expectations and assess their cross-country generalisability and stability. Regression coefficients for the main independent variables, the five personality dimensions, are graphically depicted in Figures 1 and 2.

Looking at the personality pattern of an ethnic conception of nationhood (Figure 1), we find a negative association with openness to experience. In line with our theoretical assumptions, people scoring high on this personality dimension systematically reject exclusive and objectivist notions of national belonging. Because only one out of 18 coefficients for this relationship does not reach statistical significance on the conventional significance level of $p < .05$ (the United Kingdom, spring 2021, $p = .105$), it can be considered as highly consistent across the countries and time points studied. Somewhat less consistent in predicting an ethnic conception of nationhood is extraversion with 12 out of 18 coefficients showing a p-value $< .05$ (and one more $p < .10$).

[8] Because political ideology could also act as a mediator in the relationship between personality and conceptions of nationhood, we examined evidence of mediations applying the "difference method" (cf. VanderWeele, 2016; models available upon request). Some changes in the size of the coefficients and their significance levels were discovered; however, we do not find consistent evidence for political ideology to be a full mediator of any of the relationships under study. Of course, other belief systems, such as religious ideologies, could also be relevant in this regard. However, the data available do not allow us to inspect this further.

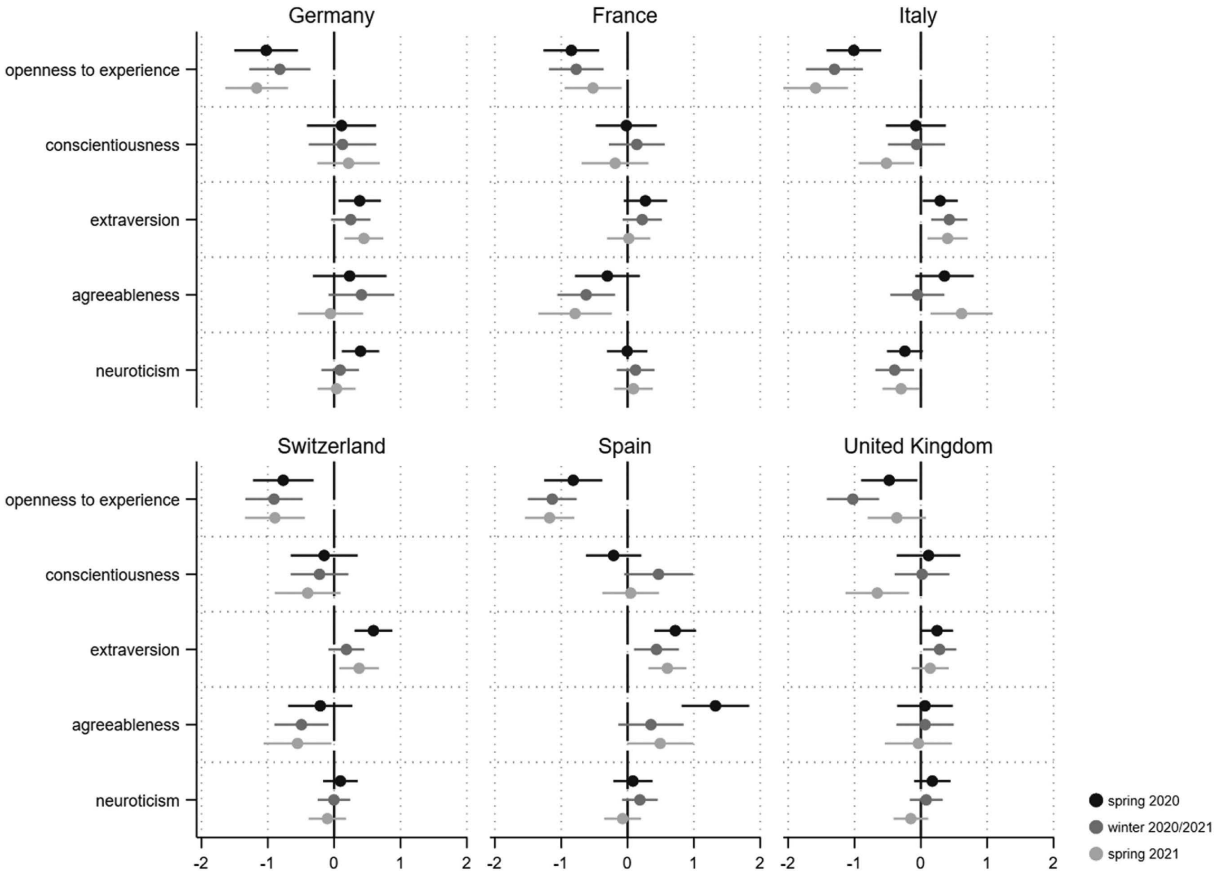


Figure 1: Regression coefficients of the relationship between the Big Five of personality and an ethnic conception of nationhood.

Displayed are linear regression coefficients with their 95% confidence intervals. Models (fully presented in Supporting Information S6a and S6b) control for gender, age, education, income situation, political ideology, citizenship status, migration background, and residential area.

However, while openness prevents the drawing of sharp boundaries between national insiders and outsiders, extraversion is positively related to the ethnic ideal type of national identity content. For Italy and Spain, all respective coefficients are statistically significant.[9] A systematic relationship is further indicated in the models for Germany, Switzerland, and the United Kingdom where the significant coefficients outnumber those indicating that coincidence cannot sufficiently be ruled out. However, for France, all regression coefficients fall short of conventional significance levels. With regard to the remaining personality traits, we find few indications of systematic relationships. In line with our expectations, neuroticism exerts a significant effect in only very few models (mainly in Italy), indicating that there is no systematic dependence of a thick national identity on this

[9] With regard to the additional robustness checks (see footnote 5), it should be pointed out that the positive and significant relationship between extraversion and the ethnic national identity index in Italy is not as clear-cut in these alternative models and does, for example, not reach statistical significance when openness is not considered at all in the model.

characteristic. However, regarding conscientiousness and agreeableness, the empirical findings do not reflect our theoretical expectations. The generally traditional and conservative outlook of conscientious individuals does not translate into narrowly drawn symbolic boundaries between national insiders and outsiders – the only two coefficients for which $p < .05$ even have a negative sign (Italy and the United Kingdom, spring 2021).

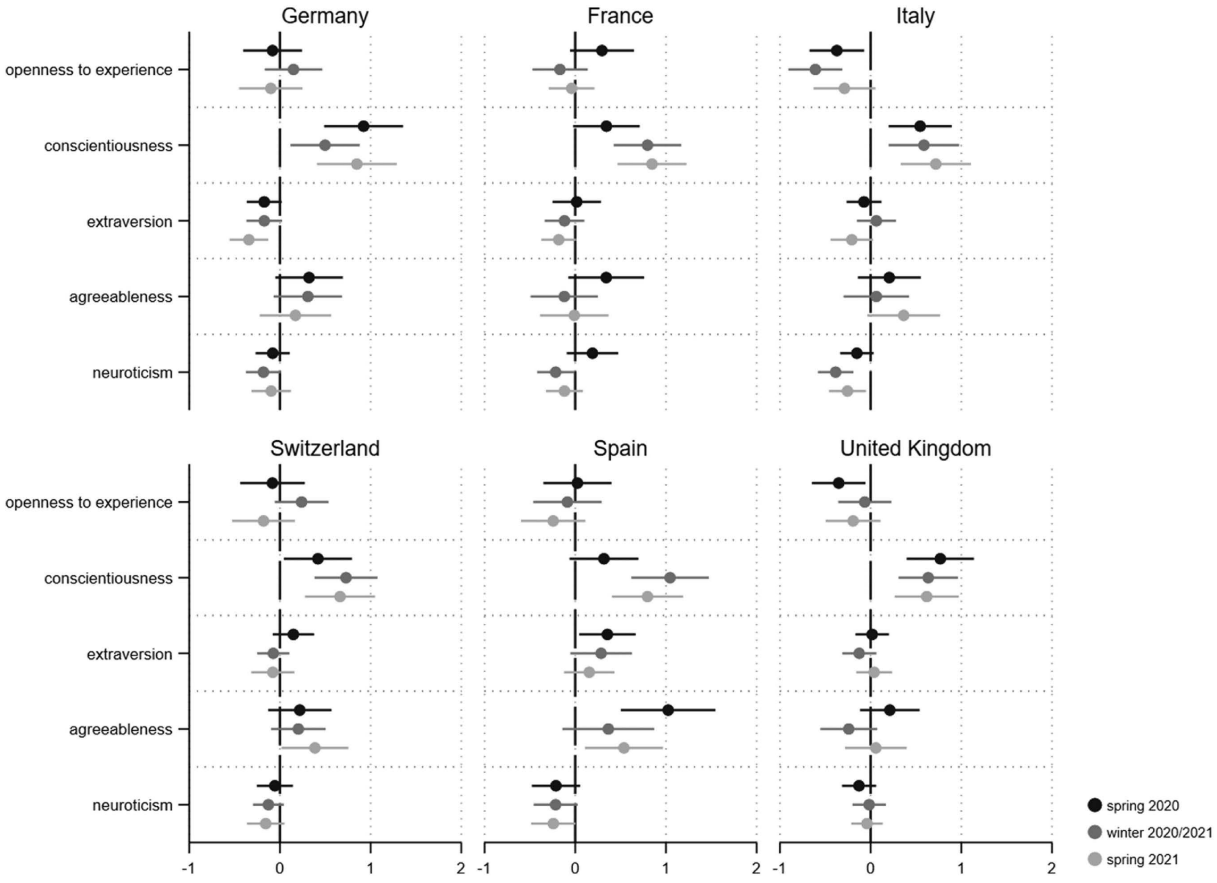


Figure 2: Regression coefficients of the relationship between the Big Five of personality and a civic conception of nationhood.

Displayed are linear regression coefficients with their 95% confidence intervals. Models (fully presented in Supporting Information S7a and S7b) control for gender, age, education, income situation, political ideology, citizenship status, migration background, and residential area.

And although previous research led us to expect that agreeableness would prevent the formation of a "thick" national identity, this assumption is empirically backed in France and Switzerland only – and even there the evidence is not fully consistent. In the two southern European countries of Italy and Spain, however, there are even isolated indications of a positive relationship, and the agreeable in Germany and the United Kingdom seem no more or less inclined to define national belonging in ethnic terms than those less trusting and conflict averse. Taken together, there is no

cross-nationally consistent relationship between agreeableness and an ethnic conception of nationhood. Our models are able to explain a respectable share of variance in ethnic notions of national belonging with values for adjusted R^2 lying between .14 and .23 (see Supporting Information S6a and S6b).

Regarding a civic national identity as the other ideal type, our expectations were less clear-cut, as conflicting arguments can be raised for several of the Big Five. However, regarding conscientiousness, the empirical results displayed in Figure 2 provide empirical support that being very industrious, responsible, and dutiful relates to a civic conception of nationhood: People scoring high on conscientiousness consider a general commitment to the political culture, its values, laws, and social rules as very important to becoming part of their national ingroup. In 16 out of our 18 regression models, the respective coefficient is statistically significant ($p < .05$, one more $p < .10$). Aside from Italy, where there are some indications that openness to experience and neuroticism also relate (negatively) to the civic ideal type of national identity content, the overall pattern for these traits, as well as for extraversion and agreeableness, is characterised by the absence of systematic and cross-nationally consistent relationships. Values for adjusted R^2 lie between .05 and .20 (see Supporting Information S7a and S7b), indicating rather low to moderate predictive power of the models.

Finally, as alluded to in the previous chapter, several robustness checks were performed. A first set of additional analyses examined the role of the Big Five for the relevance given to the individual criteria for national belonging queried (see Supporting Information S8a and S8b). This more fine-grained analysis essentially mirrors the results of our main analysis. First, we find negatively directed relationships between openness to experience and the three ethnic criteria for national membership, which reveal high cross-country and intertemporal consistency.[10] While there is only very weak empirical evidence that conscientiousness, agreeableness, and neuroticism relate to the ethnic criteria studied, individuals scoring high on extraversion are systematically more likely to define national identity- in terms of religious affiliation.[11] Second, the single item analysis further consolidates the notion that there is a positive association between conscientiousness and a civic conception of nationhood, while no consistent relationships can be reported for the other traits. Across the six countries, the more reliable, responsible, and rule-abiding a person is, the more likely they are to conceive of national identity as based on the/a national language and respect for the

[10] In total, 16 (birth item), 17 (ancestry item), and 15 (religion item) out of 18 coefficients are statistically significant ($p < .05$).

[11] Although this relationship seems less systematic in France, it is very consistent across Italy, Spain, and the United Kingdom. In total, for 14 out of 18 coefficients $p < .05$.

country's political institutions and laws.[12] Finally, the single-item analyses reveal some systematic relationships between personality traits and support for the culture criterion, which cannot unambiguously be assigned to either an ethnic or a civic conception of nationhood and therefore was not included in the main analysis. In all countries but Switzerland, there are at least some empirical indications that for people scoring high on conscientiousness, sharing the national culture is an important prerequisite for being part of the national community.[13] In half the countries surveyed (Switzerland, Spain, and Italy), we further find extraversion to be associated with a stronger emphasis and openness with a weaker emphasis on a common culture when it comes to drawing national boundaries.[14]

In a next step, alternative specifications of the civic-ethnic framework were addressed. First, the culture item was included in the arithmetic index reflecting an ethnic conception of nationhood, though this did not substantively change the results (see Supporting Information S9a). We then added the item to the civic national identity index, leaving our main findings largely unchanged (see Supporting Information S9b). Moreover, given that some authors conceptualise the ethnic-civic distinction on a continuous spectrum (Kunovich, 2009; Larsen, 2017; Reeskens & Hooghe, 2010), a single index running from an exclusively ethnic to an exclusively civic national identity was created by subtracting the civic from the ethnic national identity index (cf. Erhardt et al., 2021). Findings from these models are presented in Supporting Information S10. Overall, they show a very similar pattern to the analyses with two separate concepts or dependent variables: People scoring high on extraversion tend to hold more ethnic conceptions of nationhood, and those high in openness to experience and conscientiousness position themselves closer to the other (civic) end of the spectrum. These relationships show considerably high degrees of cross-country consistency and stability.[15]

2.6. Conclusion

In recent years, we have observed a renewed upsurge in public and scientific debates about the concept of national identity and the closely related question of what it means to be a "true" German, Italian, or Swiss, for example. Although the relevant research has already provided

[12] In total, 14 (institutions item) and 13 (language item) out of 18 coefficients are statistically significant ($p < .05$).

[13] In total, slightly more than half of the respective coefficients (10 out of 18) can be considered systematic ($p < .05$).

[14] Regarding openness to experience, this is also true for Germany. The coefficients for extraversion reach statistical significance ($p < .05$) in eight out of 18 models, those for openness to experience in nine out of 18 models.

[15] In 16 out of 18 linear regression models, the coefficients for openness to experience and conscientiousness reach statistical significance ($p < .05$); for extraversion, two thirds of the models indicate a systematic relationship.

meaningful insight into the correlates of conceptions of nationhood, little to no research immerses itself in the study of psychological underpinnings. This study addresses this research gap to shed light on the personality correlates of civic and ethnic national identities. As the first systematic examination of the relationship between the Big Five of personality and the two ideal-typical conceptions of nationhood, this study adds to the growing body of research documenting the crucial role played by personality traits in the formation of political behaviour and attitudes. Using 18 samples from six European countries, our cross-country analysis clearly suggests that personality can help to explain varying conceptions of nationhood. Obtaining relevant explained variances, we demonstrate that looking at national identities from an individual psychological perspective has a valid point. Although this is certainly not to say that national identity should be understood as a purely individual-level phenomenon, we hope this insight will stimulate future research to both contrast and fruitfully combine individual and societal-level approaches to the concept. The comparatively low predictive power of our models of civil national identity in particular suggests much untapped potential for future research in illuminating different understandings of who is (not) part of the nation among the citizenry. Although in the literature, the conceptualisation and measurement of the content dimension is still inconclusive with some pleading for an (ideal-typical) dichotomy and others advocating a continuous understanding, the findings presented here are substantially independent of the approach chosen. Nevertheless, we hope that future research will be able to conclusively elucidate how issues of dimensionality and mutual exclusiveness can be best addressed theoretically and methodologically and provide concepts and measurement tools that overcome the limitations of these two approaches.

Our empirical findings indicate that both openness to experience and extraversion relate to an ethnic national identity, albeit in different ways. In nearly all our samples, openness conflicts with exclusionary notions of national belonging. In contrast, extraversion consistently correlates positively with such notions, although below conventional significance levels in a third of the samples, especially in France. As shown by our single-item analysis, this relationship is largely driven by a fairly consistent positive association between extraversion and the religion criterion. Specifying national identity as a unidimensional construct, there is compelling evidence that the open-minded tend to support more civic criteria than ethnic ones. For extraverts, exactly the opposite is indicated by the exclusively positive coefficients, one third of which are not statistically significant, however. Further, in nearly all of our country and time subsamples, conscientiousness is positively related to a "thin" national identity in which national belonging is based on a shared political culture. While the empirical findings summarised so far are broadly in line with our theoretical expectations, two (non)findings require a closer look. First, the assumption that

agreeable individuals restrain from drawing sharp and impermeable boundaries between national insiders and outsiders is not maintained empirically. In the main analysis, as well as with regard to the individual membership criteria or alternative specifications of the civic–ethnic framework, there is some indication of such a relationship in France and Switzerland but little in the other countries. This might be due to the fact some aspects of agreeableness relate positively to conflict avoidance, liberalism, and benevolence, whereas others facets incline these people to more traditional values and social conservatism (Gerber et al., 2010; Hirsh et al., 2010; Roccas et al., 2002).

Finally, we have also assumed that for the very conscientious, national membership not only presupposes adaptation to the political culture but also a kind of ethnocultural sameness. However, on the unidimensional continuum, these individuals tend to be found closer to the civic pole, and there are few significant coefficients in the models of the main and other robustness analyses. Possibly, here, the pronounced target and achievement orientation of conscientious people countervails their tendency towards traditionalism, conservatism, and the status quo (Gerber et al., 2011a). In this sense, the constant orientation of thought and action towards the achievement of desired goals might provide fertile ground for scepticism towards a(n) (ethnic) conception of nationhood that detaches national membership from individual integration efforts.

By providing these insights, the present study not only extends our understanding of the individual-level correlates of national identity providing evidence that conceptions of nationhood relate to personality traits, but it also enriches research on the role of personality in the political sphere. First, data sets on political variables and measures of personality remain rare (Mondak et al., 2011, p. 211; Weinschenk, 2017, p. 1406). Our analyses, based on 18 samples from six European countries (Germany, France, Italy, Switzerland, Spain, and the United Kingdom), complement previous findings on the relevance of personality in the political domain. Second, we address the lack of cross-national studies in this field by examining our proposed relationships separately across six European countries and three points in time. We thereby follow the approach of Weinschenk (2017) to provide a broad test for our expectations on the link between personality traits and conceptions of nationhood. In addition to reporting some very consistent trait patterns, we were able to show that there is considerable variation in the relationships between personality traits and conceptions of nationhood across different (country) contexts. This underlines the importance of broad hypothesis testing to help accumulate a body of robust evidence and enable valid statements about the generalisability of findings.

However, the context dependency of personality effects illustrated by our analyses also entails a discussion of the main caveats of the present study. First, although providing evidence that links between personality and national identity do vary across country contexts is an indispensable first

step, this context dependency presents a promising avenue for future research. On the one hand, comparative aspects in the study of personality and conceptions of nationhood were largely disregarded. Using more sophisticated methods such as multigroup factor analysis and multigroup structural equation modelling in subsequent research would, for example, allow to formally test measurement equivalences, to directly model country differences and to make statements about the robustness of observed patterns in a more formal sense. Although certainly desirable, this was beyond the aim of providing preliminary insights into the relationship between personality and attitudes towards national membership. On the other hand, multilevel analyses based on data sources which include a broader set of culturally diverse countries or regional entities could enrich our still limited understanding of the interplay between contextual factors and personality traits in shaping national identity and many other individual-level political phenomena. What is more, the consistent associations between some personality traits – openness to experience and conscientiousness in particular – and the two ideal types of national identity content have yet to be tested in other cultural contexts to prove their generalisability outside the six West European countries under study. Second, although personality research commonly assumes a causal link between personality and attitudes because of the genetic anchoring of personality and its high stability over the life course (Gerber et al., 2011b, p. 35), the present paper explicitly investigates associations instead of causal relationships. Using repeated cross-sectional data, our results show correlational relationships, which is why we refrain from making causal claims. Finally, although the comprehensiveness of personality measures is often almost naturally limited in representative multisubject surveys, we encourage future research on the potentially divergent effects of different personality facets. Using more comprehensive personality measures would likely also alleviate measurement issues associated with short scales such as the TIPI, which have also been reported here. Regarding measurements, future research should also consider potential biases, for example, through socially desirable response behaviour.

Nevertheless, our conclusions allow for valuable insights into the psychological or personality profiles of the two ideal types of national identity content lacking in previous research. Regarding the renewed popularity of national identity, not only in scientific research but also in public, media, and political discourse, as well as its meaningful consequences on political behaviour and attitudes, a deeper understanding of the individual-level correlates of different conceptions of nationhood is long overdue.

2.7. Literature

Ackermann, K., & Ackermann, M. (2015). The Big Five in context: Personality, diversity and attitudes toward equal opportunities for immigrants in Switzerland. *Swiss Political Science Review, 21*(3), 396–418. https://doi.org/10.1111/spsr.12170

Aichholzer, J., Kritzinger, S., & Plescia, C. (2021). National identity profiles and support for the European Union. *European Union Politics, 22*(2), 293–315. https://doi.org/10.1177/1465116520980068

Ang, S., Van Dyne, L., & Koh, C. (2006). Personality correlates of the four-factor model of cultural intelligence. *Group and Organization Management, 31*(1), 100–123. https://doi.org/10.1177/1059601105275267

Ariely, G. (2011). Constitutional patriotism, liberal nationalism and membership in the nation: An empirical assessment. *Acta Politica, 46*(3), 294–319. https://doi.org/10.1057/ap.2011.10

Ariely, G. (2012). Globalisation and the decline of national identity? An exploration across sixty-three countries. *Nations and Nationalism, 18*(3), 461–482. https://doi.org/10.1111/j.1469-8129.2011.00532.x

Ariely, G. (2020). Measuring dimensions of national identity across countries: Theoretical and methodological reflections. *National Identities, 22*(3), 265–282. https://doi.org/10.1080/14608944.2019.1694497

Berg, L., & Hjerm, M. (2010). National identity and political trust. Perspectives on European *Politics and Society, 11*(4), 390–407. https://doi.org/10.1080/15705854.2010.524403

Bonikowski, B., & DiMaggio, P. (2016). Varieties of American popular nationalism. *American Sociological Review, 81*(5), 949–980. https://doi.org/10.1177/0003122416663683

Brubaker, R. (1992). *Citizenship and nationhood in France and Germany*. Harvard University Press. https://doi.org/10.4159/9780674028944

Canan, C., & Simon, M. K. (2019). Immigration, diversity and the relevance of ascriptive characteristics in defining national identity across 21 countries and 28 west-German districts. *Migration Studies*, *7*(2), 201–219. https://doi.org/10.1093/migration/mny005

Caprara, G., & Vecchione, M. (2013). Personality approaches to political behavior. In L. Huddy, D. O. Sears, & J. S. Levy (Eds.). *Oxford handbook of political psychology* (2nd ed.). Oxford University Press.

Citrin, J., Wong, C., & Duff, B. (2001). The meaning of American national identity. In R. D. Ashmore, L. Jussim, & D. Wilder (Eds.). *Social identity, intergroup conflict, and conflict reduction*. Oxford University Press.

Crawford, J. T., & Brandt, M. J. (2019). Who is prejudiced, and toward whom? The Big Five traits and generalized prejudice. *Personality and Social Psychology Bulletin*, *45*(10), 1455–1467. https://doi.org/10.1177/0146167219832335

Curtis, K. A., & Miller, S. V. (2021). A (supra)nationalist personality? The Big Five's effects on political-territorial identification. *European Union Politics*, *22*(2), 202–226.

Davidov, E. (2009). Measurement equivalence of nationalism and constructive patriotism in the ISSP: 34 countries in a comparative perspective. *Political Analysis*, *17*(1), 64–82. https://doi.org/10.1093/pan/mpn014

Dinesen, P. T., Klemmensen, R., & Nørgaard, A. S. (2016). Attitudes toward immigration: The role of personal predispositions. *Political Psychology*, *37*(1), 55–72. https://doi.org/10.1111/pops.12220

Dinesen, P. T., Nørgaard, A. S., & Klemmensen, R. (2014). The civic personality: Personality and democratic citizenship. *Political Studies*, *62*(S1), 134–152. https://doi.org/10.1111/1467-9248.12094

Duckitt, J., & Sibley, C. G. (2016). Personality, ideological attitudes, and group identity as predictors of political behavior in majority and minority ethnic groups. *Political Psychology*, *37*(1), 109–124. https://doi.org/10.1111/pops.12222

Ekehammar, B. O., Akrami, N., Gylje, M., & Zakrisson, I. (2004). What matters most to prejudice: Big Five personality, social dominance orientation, or right-wing authoritarianism? *European Journal of Personality*, *18*(6), 463–482. https://doi.org/10.1002/per.526

Erhardt, J., Wamsler, S., & Freitag, M. (2021). National identity between democracy and autocracy: A comparative analysis of 24 countries. *European Political Science Review*, *13*(1), 59–76. https://doi.org/10.1017/S1755773920000351

Filsinger, M., Wamsler, S., Erhardt, J., & Freitag, M. (2021). National identity and populism: The relationship between conceptions of nationhood and populist attitudes. *Nations and Nationalism*, *27*, 656–672. https://doi.org/10.1111/nana.12689

Freitag, M. (2017). *Die Psyche Des Politischen: Was Der Charakter Über Unser Politisches Denken Und Handeln Verrät*. NZZ Libro.

Freitag, M., & Rapp, C. (2015). The personal foundations of political tolerance towards immigrants. *Journal of Ethnic and Migration Studies*, *41*(3), 351–373. https://doi.org/10.1080/1369183X.2014.924847

Gallego, A., & Pardos-Prado, S. (2014). The Big Five personality traits and attitudes towards immigrants. *Journal of Ethnic and Migration Studies*, *40*(1), 79–99. https://doi.org/10.1080/1369183X.2013.826131

Gerber, A. S., Huber, G. A., Doherty, D., & Dowling, C. M. (2011a). The Big Five personality traits in the political arena. *Annual Review of Political Science*, *14*, 265–287. https://doi.org/10.1146/annurev-polisci-051010-111659

Gerber, A. S., Huber, G. A., Doherty, D., & Dowling, C. M. (2011b). Personality traits and the consumption of political information. *American Politics Research*, *39*(1), 32–84. https://doi.org/10.1177/1532673X10381466

Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M., & Ha, S. E. (2010). Personality and political attitudes: Relationships across issue domains and political contexts. *American Political Science Review*, *104*(1), 111–133. https://doi.org/10.1017/S0003055410000031

Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, *37*(6), 504–528. https://doi.org/10.1016/S0092-6566(03)00046-1

Ha, S. E., & Jang, S. J. (2016). National identity in a divided nation: South Koreans' attitudes toward North Korean defectors and the reunification of two Koreas. *International Journal of Intercultural Relations*, *55*, 109–119. https://doi.org/10.1016/j.ijintrel.2016.10.003

Hadler, M., & Flesken, A. (2018). Political rhetoric and attitudes toward nationhood: A time-comparative and cross-national analysis of 39 countries. *International Journal of Comparative Sociology*, *59*(5–6), 362–382. https://doi.org/10.1177/0020715218810331

Helbling, M., Reeskens, T., & Wright, M. (2016). The mobilisation of identities: A study on the relationship between elite rhetoric and public opinion on national identity in developed democracies. *Nations and Nationalism*, *22*(4), 744–767. https://doi.org/10.1111/nana.12235

Hirsh, J. B., DeYoung, C. G., Xu, X., & Peterson, J. B. (2010). Compassionate liberals and polite conservatives: Associations of agreeableness with political ideology and moral values. *Personality and Social Psychology Bulletin*, *36*(5), 655–664. https://doi.org/10.1177/0146167210366854

Hobolt, S. B. (2016). The Brexit vote: A divided nation, a divided continent. *Journal of European Public Policy*, *23*(9), 1259–1277. https://doi.org/10.1080/13501763.2016.1225785

Huddy, L., & Del Ponte, A. (2020). National identity, pride, and chauvinism—Their origins and consequences for globalization attitudes. In G. Gustavsson & D. Miller (Eds.). *Liberal nationalism and its critics: Normative and empirical questions*. Oxford University Press.

Ignatieff, M. (1993). *Blood and belonging: Journeys into the new nationalism*. Viking.

Jayet, C. (2012). The ethnic-civic dichotomy and the explanation of national self-understanding. *European Journal of Sociology*, *53*(1), 65–95. https://doi.org/10.1017/S0003975612000033

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.). *Handbook of personality: Theory and research*. Guilford.

Jones, F. L., & Smith, P. (2001). Individual and societal bases of national identity: A comparative multi-level analysis. *European Sociological Review*, *17*(2), 103–118. https://doi.org/10.1093/esr/17.2.103

Kandler, C., & Riemann, R. (2015). Persönlichkeit Und Politik. In S. Zmerli & O. Feldman (Eds.). *Politische Psychologie—Handbuch Für Studium Und Wissenschaft*. Baden-Baden.

Kohn, H. (1939). The nature of nationalism. *The American Political Science Review*, *33*(6), 1001–1021. https://doi.org/10.2307/1948728

Kunovich, R. M. (2006). An exploration of the salience of Christianity for national identity in Europe. *Sociological Perspectives*, *49*(4), 435–460. https://doi.org/10.1525/sop.2006.49.4.435

Kunovich, R. M. (2009). The sources and consequences of national identification. *American Sociological Review*, *74*(4), 573–593. https://doi.org/10.1177/000312240907400404

Larsen, C. A. (2017). Revitalizing the "civic" and "ethnic" distinction. Perceptions of nationhood across two dimensions, 44 countries and two decades. *Nations and Nationalism*, *23*(4), 970–993. https://doi.org/10.1111/nana.12345

Lenard, P. T., & Miller, D. (2018). Trust and national identity. In E. M. Uslaner (Ed.). *The Oxford handbook of social and political trust*. Oxford University Press.

Lindstam, E., Mader, M., & Schoen, H. (2021). Conceptions of national identity and ambivalence towards immigration. *British Journal of Political Science*, *51*(1), 93–114. https://doi.org/10.1017/S0007123418000522

Ludeke, S. G., & Larsen, E. G. (2017). Problems with the Big Five assessment in the world values survey. *Personality and Individual Differences*, *112*, 103–105. https://doi.org/10.1016/j.paid.2017.02.042

Ludeke, S. G., Vitriol, J. A., Larsen, E. G., & Gensowski, M. (2021). Personality in a pandemic: Social norms moderate associations between personality and social distancing behaviors. *Personality and Individual Differences*, *177*(110828), 1–6.

Meinecke, F. (1908). *Weltbürgertum Und Nationalstaat. Studien Zur Genesis Des Deutschen Nationalstaates*. Oldenbourg.

Mondak, J. J. (2010). *Personality and the foundations of political behavior*. CUP. https://doi.org/10.1017/CBO9780511761515

Mondak, J. J., Canache, D., Seligson, M. A., & Hibbing, M. V. (2011). The participatory personality: Evidence from Latin America. *British Journal of Political Science*, *41*(1), 211–221. https://doi.org/10.1017/S000712341000027X

Mondak, J. J., & Halperin, K. D. (2008). A framework for the study of personality and political behaviour. *British Journal of Political Science*, *38*(2), 335–362. https://doi.org/10.1017/S0007123408000173

Mussotter, M. (2021). We do not measure what we aim to measure: Testing three measurement models for nationalism and patriotism. *Quality & Quantity*, *56*, 2177–2197. https://doi.org/10.1007/s11135-021-01212-9

Nunes, A., Limpo, T., Lima, C. F., Castro, S. L. (2018). Short scales for the assessment of personality traits: Development and validation of the Portuguese Ten-Item Personality Inventory (TIPI). *Frontiers in Psychology*, *9*(461), 1–5. https://doi.org/10.3389/fpsyg.2018.00461

Pehrson, S., Vignoles, V. L., & Brown, R. (2009). National identification and anti-immigrant prejudice: Individual and contextual effects of national definitions. *Social Psychology Quarterly*, *72*(1), 24–38. https://doi.org/10.1177/019027250907200104

Reeskens, T., & Hooghe, M. (2010). Beyond the civic-ethnic dichotomy: Investigating the structure of citizenship concepts across thirty-three countries. *Nations and Nationalism*, *16*(4), 579–597. https://doi.org/10.1111/j.1469-8129.2010.00446.x

Reeskens, T., & Wright, M. (2013). Nationalism and the cohesive society: A multilevel analysis of the interplay among diversity, national identity, and social capital across 27 European

societies. *Comparative Political Studies*, *46*(2), 153–181. https://doi.org/10.1177/0010414012453033

Reijerse, A., Van Acker, K., Vanbeselaere, N., Phalet, K., & Duriez, B. (2013). Beyond the ethnic-civic dichotomy: Cultural citizenship as a new way of excluding immigrants. *Political Psychology*, *34*(4), 611–630. https://doi.org/10.1111/j.1467-9221.2012.00920.x

Roccas, S., Sagiv, L., Schwartz, S. H., & Knafo, A. (2002). The big five personality factors and personal values. *Personality and Social Psychology Bulletin*, *28*(6), 789–801. https://doi.org/10.1177/0146167202289008

Sagiv, L., Roccas, S., & Hazan, O. (2012). Identification with groups: The role of personality and context. *Journal of Personality*, *80*(2), 345–374. https://doi.org/10.1111/j.1467-6494.2011.00733.x

Sarrasin, O., Green, E. G. T., & Van Assche, J. (2020). Consensual versus heterogeneous conceptions of nationhood: The role of citizenship regimes and integration policies across 21 European countries. *Social Indicators Research*, *148*(3), 987–1004. https://doi.org/10.1007/s11205-019-02222-9

Schmidt, P., & Quandt, M. (2018). National identity, nationalism, and attitudes toward migrants in comparative perspective. *International Journal of Comparative Sociology*, *59*(5–6), 355–361. https://doi.org/10.1177/0020715218816242

Shulman, S. (2002a). Sources of civic and ethnic nationalism in Ukraine. *Journal of Communist Studies and Transition Politics*, *18*(4), 1–30.

Shulman, S. (2002b). Challenging the civic/ethnic and west/east dichotomies in the study of nationalism. *Comparative Political Studies*, *35*(5), 554–585. https://doi.org/10.1177/0010414002035005003

Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review*, *12*(3), 248–279. https://doi.org/10.1177/1088868308319226

Simonsen, K. B., & Bonikowski, B. (2020). Is civic nationalism necessarily inclusive? Conceptions of nationhood and anti-Muslim attitudes in Europe. *European Journal of Political Research*, *59*(1), 114–136.

Smith, A. D. (1991). *National identity*. University of Nevada Press.

Tajfel, H. (1981). *Humans groups and social categories: Studies in social psychology*. Cambridge University Press.

VanderWeele, T. J. (2016). Mediation analysis: A practitioner's guide. *Annual Review of Public Health*, *37*, 17–32. https://doi.org/10.1146/annurev-publhealth-032315-021402

Weinschenk, A. C. (2017). Big five personality traits, political participation, and civic engagement: Evidence from 24 countries. *Social Science Quarterly*, *98*(5), 1406–1421. https://doi.org/10.1111/ssqu.12380

Wright, M., Citrin, J., & Wand, J. (2012). Alternative measures of American national identity: Implications for the civic-ethnic distinction. *Political Psychology*, *33*(4), 469–482. https://doi.org/10.1111/j.1467-9221.2012.00885.x

Wright, M., & Reeskens, T. (2013). Of what cloth are the ties that bind? National identity and support for the welfare state across 29 European countries. *Journal of European Public Policy*, *20*(10), 1443–1463. https://doi.org/10.1080/13501763.2013.800796

Zettler, I., Schild, C., Lilleholt, L., Kroencke, L., Utesch, T., Moshagen, M., Böhm, R., Back, M. D., & Geukes, K. (2022). The role of personality in COVID-19-related perceptions, evaluations, and behaviors: Findings across five samples, nine traits, and 17 criteria. *Social Psychological and Personality Science*, *13*(1), 299–310. https://doi.org/10.1177/19485506211001680

Zmigrod, L., Eisenberg, I. W., Bissett, P. G., Robbins, T. W., & Poldrack, R. A. (2021). The cognitive and perceptual correlates of ideological attitudes: A data-driven approach. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *376*, 20200424, 1–14.

Zmigrod, L., Rentfrow, P. J., & Robbins, T. W. (2018). Cognitive underpinnings of nationalistic ideology in the context of Brexit. *Proceedings of the National Academy of Sciences of the United States of America*, *115*(19), E4532–E4540.

2.8. Supporting Information

S1: Description of the Surveys

	Spring 2020	Winter 2020/2021	Spring 2021
Survey period	17 April 2020 to 11 May 2020	24 November 2020 to 18 January 2021	22 April 2021 to 21 May 2021
Target population	Residents aged 18 years or older in Germany, France, Italy, Switzerland, Spain, and the United Kingdom	Residents aged 18 years or older in Germany, France, Italy, Switzerland, Spain, and the United Kingdom	Residents aged 18 years or older in Germany, France, Italy, Switzerland, Spain, and the United Kingdom
Survey mode	Online	Online	Online
Sample size	6,028 respondents (target sample size: 1,000 per country)	6,210 respondents (target sample size: 1,000 per country)	6,069 respondents (target sample size: 1,000 per country)
Quotas	Age, Sex, Education (language for Switzerland)	Age, Sex, Education (language for Switzerland)	Age, Sex, Education (language for Switzerland)
Sampling	Qualtrics panel	Survey Engine panel(s)	Survey Engine panel(s)
Interview language	German, French, Italian, Spanish, English	German, French, Italian, Spanish, English	German, French, Italian, Spanish, English
Response rate	Overall: 8.71%	Overall: 7.03%	Overall: 17.86%
Institute	Survey carried out by Qualtrics	Survey carried out by Survey Engine	Survey carried out by Survey Engine

S2: Summary Statistics

Survey period	N			Mean			SD			[Min:Max]		
	Spring 2020	Winter 2020/21	Spring 2021	Spring 2020	Winter 2020/21	Spring 2021	Spring 2020	Winter 2020/21	Spring 2021	Spring 2020	Winter 2020/21	Spring 2021
Germany												
Ethnic national identity index	996	985	976	3.69	3.37	3.27	1.62	1.54	1.58	[1:7]	[1:7]	[1:7]
Civic national identity index	996	985	976	5.87	5.81	5.71	1.10	1.03	1.14	[1:7]	[1:7]	[1:7]
Big Five: Openness	996	985	976	1.27	1.28	1.27	0.24	0.22	0.23	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Conscientiousness	996	985	976	1.36	1.39	1.39	0.23	0.21	0.22	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Extraversion	996	985	976	1.05	1.04	1.03	0.31	0.33	0.34	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Agreeableness	996	985	976	1.29	1.30	1.30	0.21	0.20	0.21	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Neuroticism	996	985	976	0.78	0.79	0.79	0.41	0.40	0.40	[0:1.61]	[0:1.61]	[0:1.61]
Education												
Upper secondary	996	985	976	0.57	0.57	0.56	0.49	0.50	0.50	[0:1]	[0:1]	[0:1]
Tertiary	996	985	976	0.29	0.29	0.30	0.45	0.46	0.46	[0:1]	[0:1]	[0:1]
Gender (male)	996	985	976	0.50	0.50	0.50	0.50	0.50	0.50	[0:1]	[0:1]	[0:1]
Age (in years)	996	985	976	48.90	48.30	48.55	16.15	16.77	16.38	[18:82]	[18:87]	[18:88]
Income situation	996	985	976	3.09	3.18	3.21	1.05	1.04	1.05	[1:5]	[1:5]	[1:5]
Political ideology (right)	996	985	976	4.71	4.55	4.64	1.91	1.81	1.82	[0:10]	[0:10]	[0:10]
Citizenship status (yes)	996	985	976	0.96	0.97	0.97	0.21	0.16	0.16	[0:1]	[0:1]	[0:1]
Migration background (yes)	996	985	976	0.16	0.11	0.11	0.37	0.31	0.31	[0:1]	[0:1]	[0:1]
Residential area												
Small town	996	985	976	0.21	0.22	0.22	0.41	0.41	0.41	[0:1]	[0:1]	[0:1]
Midsize city	996	985	976	0.16	0.15	0.15	0.37	0.35	0.35	[0:1]	[0:1]	[0:1]
Suburb	996	985	976	0.12	0.12	0.13	0.33	0.33	0.33	[0:1]	[0:1]	[0:1]
City	996	985	976	0.30	0.28	0.28	0.46	0.45	0.45	[0:1]	[0:1]	[0:1]
France												
Ethnic national identity index	1,004	1,013	972	3.87	3.81	3.80	1.63	1.56	1.60	[1:7]	[1:7]	[1:7]
Civic national identity index	1,004	1,013	972	5.88	5.97	6.11	1.25	1.18	1.07	[1:7]	[1:7]	[1:7]

Big Five: Openness	1,004	1,013	972	1.16	1.18	1.17	0.24	0.23	0.25	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Conscientiousness	1,004	1,013	972	1.34	1.35	1.36	0.25	0.23	0.23	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Extraversion	1,004	1,013	972	0.95	0.94	0.95	032	0.33	0.33	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Agreeableness	1,004	1,013	972	1.27	1.28	1.29	0.23	0.23	0.22	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Neuroticism	1,004	1,013	972	0.92	0.92	0.92	0.36	0.35	0.35	[0:1.61]	[0:1.61]	[0:1.61]
Education												
Upper secondary	1,004	1,013	972	0.43	0.43	0.43	0.49	0.49	0.50	[0:1]	[0:1]	[0:1]
Tertiary	1,004	1,013	972	0.38	0.37	0.37	0.49	0.48	0.48	[0:1]	[0:1]	[0:1]
Gender (male)	1,004	1,013	972	0.50	0.51	0.51	0.50	0.50	0.50	[0:1]	[0:1]	[0:1]
Age (in years)	1,004	1,013	972	49.13	48.20	47.74	15.97	16.46	15.99	[18:83]	[18:91]	[18:90]
Income situation	1,004	1,013	972	2.86	2.88	2.93	1.03	1.02	0.99	[1:5]	[1:5]	[1:5]
Political ideology (right)	1,004	1,013	972	5.07	5.17	5.35	2.55	2.45	2.45	[0:10]	[0:10]	[0:10]
Citizenship status (yes)	1,004	1,013	972	0.98	0.98	0.98	0.14	0.15	0.14	[0:1]	[0:1]	[0:1]
Migration background (yes)	1,004	1,013	972	0.13	0.15	0.14	0.34	0.36	0.35	[0:1]	[0:1]	[0:1]
Residential area												
Small town	1,004	1,013	972	0.20	0.23	0.23	0.40	0.42	0.42	[0:1]	[0:1]	[0:1]
Midsize city	1,004	1,013	972	0.16	0.20	0.19	0.37	0.40	0.39	[0:1]	[0:1]	[0:1]
Suburb	1,004	1,013	972	0.13	0.13	0.13	0.34	0.34	0.34	[0:1]	[0:1]	[0:1]
City	1,004	1,013	972	0.22	0.17	0.17	0.42	0.37	0.38	[0:1]	[0:1]	[0:1]
Italy												
Ethnic national identity index	989	972	975	4.52	4.50	4.26	1.51	1.51	1.60	[1:7]	[1:7]	[1:7]
Civic national identity index	989	972	975	5.69	5.59	5.53	1.08	1.14	1.22	[1:7]	[1:7]	[1:7]
Big Five: Openness	989	972	975	1.09	1.10	1.12	0.24	0.24	0.23	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Conscientiousness	989	972	975	1.33	1.31	1.32	0.23	0.25	0.25	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Extraversion	989	972	975	0.96	0.99	0.99	0.34	0.34	0.34	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Agreeableness	989	972	975	1.28	1.27	1.29	0.25	0.24	0.25	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Neuroticism	989	972	975	0.90	0.92	0.88	0.38	0.37	0.38	[0:1.61]	[0:1.61]	[0:1.61]
Education												
Upper secondary	989	972	975	0.43	0.43	0.47	0.50	0.49	0.50	[0:1]	[0:1]	[0:1]
Tertiary	989	972	975	0.20	0.20	0.26	0.40	0.40	0.44	[0:1]	[0:1]	[0:1]
Gender (male)	989	972	975	0.51	0.50	0.50	0.50	0.50	0.50	[0:1]	[0:1]	[0:1]

Age (in years)	989	972	975	48.59	48.12	49.04	16.57	16.11	15.28	[18:87]	[18:89]	[18:86]
Income situation	989	972	975	2.64	2.65	2.81	1.01	1.03	1.04	[1:5]	[1:5]	[1:5]
Political ideology (right)	989	972	975	4.97	5.15	5.05	2.63	2.65	2.64	[0:10]	[0:10]	[0:10]
Citizenship status (yes)	989	972	975	0.99	0.97	0.99	0.10	0.17	0.11	[0:1]	[0:1]	[0:1]
Migration background (yes)	989	972	975	0.05	0.07	0.04	0.21	0.25	0.19	[0:1]	[0:1]	[0:1]
Residential area												
Small town	989	972	975	0.20	0.20	0.23	0.40	0.40	0.42	[0:1]	[0:1]	[0:1]
Midsize city	989	972	975	0.28	0.27	0.27	0.45	0.45	0.44	[0:1]	[0:1]	[0:1]
Suburb	989	972	975	0.08	0.07	0.07	0.27	0.26	0.25	[0:1]	[0:1]	[0:1]
City	989	972	975	0.19	0.18	0.19	0.40	0.38	0.39	[0:1]	[0:1]	[0:1]
Switzerland												
Ethnic national identity index	979	1,112	963	3.66	3.62	3.55	1.58	1.53	1.55	[1:7]	[1:7]	[1:7]
Civic national identity index	979	1,112	963	5.83	5.87	5.77	1.04	1.02	1.08	[1:7]	[1:7]	[1:7]
Big Five: Openness	979	1,112	963	1.27	1.26	1.26	0.22	0.23	0.23	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Conscientiousness	979	1,112	963	1.38	1.38	1.38	0.22	0.21	0.22	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Extraversion	979	1,112	963	1.03	1.03	1.04	0.32	0.33	0.32	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Agreeableness	979	1,112	963	1.31	1.30	1.31	0.22	0.21	0.20	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Neuroticism	979	1,112	963	0.78	0.81	0.80	0.38	0.37	0.39	[0:1.61]	[0:1.61]	[0:1.61]
Education												
Upper secondary	979	1,112	963	0.46	0.45	0.47	0.50	0.50	0.50	[0:1]	[0:1]	[0:1]
Tertiary	979	1,112	963	0.45	0.44	0.46	0.50	0.50	0.50	[0:1]	[0:1]	[0:1]
Gender (male)	979	1,112	963	0.51	0.50	0.52	0.50	0.50	0.50	[0:1]	[0:1]	[0:1]
Age (in years)	979	1,112	963	49.29	48.48	48.91	17.00	17.12	16.55	[18:85]	[18:86]	[18:86]
Income situation	979	1,112	963	3.10	3.12	3.14	1.09	1.11	1.06	[1:5]	[1:5]	[1:5]
Political ideology (right)	979	1,112	963	5.06	4.91	5.00	2.16	2.19	2.23	[0:10]	[0:10]	[0:10]
Citizenship status (yes)	979	1,112	963	0.81	0.87	0.85	0.40	0.34	0.35	[0:1]	[0:1]	[0:1]
Migration background (yes)	979	1,112	963	0.44	0.37	0.39	0.50	0.48	0.49	[0:1]	[0:1]	[0:1]
Residential area												
Small town	979	1,112	963	0.19	0.19	0.21	0.39	0.39	0.41	[0:1]	[0:1]	[0:1]
Midsize city	979	1,112	963	0.14	0.15	0.17	0.35	0.36	0.38	[0:1]	[0:1]	[0:1]
Suburb	979	1,112	963	0.11	0.12	0.11	0.32	0.33	0.31	[0:1]	[0:1]	[0:1]
City	979	1,112	963	0.15	0.15	0.15	0.35	0.35	0.36	[0:1]	[0:1]	[0:1]

Spain												
Ethnic national identity index	990	1,000	1,005	4.00	3.87	3.58	1.57	1.52	1.60	[1:7]	[1:7]	[1:7]
Civic national identity index	990	1,000	1,005	5.43	5.36	5.30	1.32	1.34	1.35	[1:7]	[1:7]	[1:7]
Big Five: Openness	990	1,000	1,005	1.22	1.19	1.21	0.25	0.25	0.25	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Conscientiousness	990	1,000	1,005	1.33	1.32	1.32	0.22	0.22	0.22	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Extraversion	990	1,000	1,005	1.03	1.03	1.01	0.29	0.29	0.32	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Agreeableness	990	1,000	1,005	1.17	1.17	1.17	0.18	0.18	0.18	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Neuroticism	990	1,000	1,005	0.87	0.88	0.86	0.36	0.36	0.35	[0:1.61]	[0:1.61]	[0:1.61]
Education												
Upper secondary	990	1,000	1,005	0.24	0.25	0.29	0.43	0.43	0.46	[0:1]	[0:1]	[0:1]
Tertiary	990	1,000	1,005	0.38	0.38	0.41	0.49	0.49	0.49	[0:1]	[0:1]	[0:1]
Gender (male)	990	1,000	1,005	0.51	0.50	0.52	0.50	0.50	0.50	[0:1]	[0:1]	[0:1]
Age (in years)	990	1,000	1,005	47.89	48.01	47.53	16.12	14.85	15.06	[18:88]	[18:88]	[18:87]
Income situation	990	1,000	1,005	2.66	2.84	2.93	1.08	1.10	1.04	[1:5]	[1:5]	[1:5]
Political ideology (right)	990	1,000	1,005	4.34	4.27	4.40	2.49	2.49	2.60	[0:10]	[0:10]	[0:10]
Citizenship status (yes)	990	1,000	1,005	0.94	0.97	0.98	0.23	0.17	0.14	[0:1]	[0:1]	[0:1]
Migration background (yes)	990	1,000	1,005	0.12	0.08	0.06	0.32	0.27	0.24	[0:1]	[0:1]	[0:1]
Residential area												
Small town	990	1,000	1,005	0.14	0.15	0.17	0.34	0.36	0.38	[0:1]	[0:1]	[0:1]
Midsize city	990	1,000	1,005	0.22	0.25	0.24	0.42	0.43	0.43	[0:1]	[0:1]	[0:1]
Suburb	990	1,000	1,005	0.05	0.06	0.05	0.21	0.23	0.21	[0:1]	[0:1]	[0:1]
City	990	1,000	1,005	0.39	0.31	0.33	0.49	0.46	0.47	[0:1]	[0:1]	[0:1]
United Kingdom												
Ethnic national identity index	996	1,020	971	3.87	3.79	3.75	1.58	1.60	1.69	[1:7]	[1:7]	[1:7]
Civic national identity index	996	1,020	971	5.83	5.68	5.70	1.16	1.20	1.19	[1:7]	[1:7]	[1:7]
Big Five: Openness	996	1,020	971	1.20	1.22	1.23	0.25	0.26	0.25	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Conscientiousness	996	1,020	971	1.34	1.32	1.35	0.23	0.25	0.24	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Extraversion	996	1,020	971	0.96	0.98	0.98	0.38	0.37	0.38	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Agreeableness	996	1,020	971	1.27	1.26	1.28	0.24	0.24	0.24	[0:1.61]	[0:1.61]	[0:1.61]
Big Five: Neuroticism	996	1,020	971	0.86	0.91	0.85	0.41	0.41	0.43	[0:1.61]	[0:1.61]	[0:1.61]

Education											
Upper secondary	996	1,020	971	0.21	0.21	0.22	0.40	0.41	0.42	[0:1]	[0:1]	[0:1]
Tertiary	996	1,020	971	0.46	0.46	0.48	0.50	0.50	0.50	[0:1]	[0:1]	[0:1]
Gender (male)	996	1,020	971	0.50	0.50	0.49	0.50	0.50	0.50	[0:1]	[0:1]	[0:1]
Age (in years)	996	1,020	971	47.42	46.78	47.11	17.28	17.13	17.29	[18:84]	[18:87]	[18:87]
Income situation	996	1,020	971	3.25	3.12	3.39	1.10	1.11	1.10	[1:5]	[1:5]	[1:5]
Political ideology (right)	996	1,020	971	5.12	4.83	5.20	2.14	2.15	2.30	[0:10]	[0:10]	[0:10]
Citizenship status (yes)	996	1,020	971	0.95	0.93	0.94	0.21	0.25	0.24	[0:1]	[0:1]	[0:1]
Migration background (yes)	996	1,020	971	0.19	0.22	0.21	0.39	0.41	0.41	[0:1]	[0:1]	[0:1]
Residential area											
Small town	996	1,020	971	0.25	0.23	0.22	0.43	0.42	0.42	[0:1]	[0:1]	[0:1]
Midsize city	996	1,020	971	0.19	0.20	0.20	0.39	0.40	0.40	[0:1]	[0:1]	[0:1]
Suburb	996	1,020	971	0.24	0.22	0.18	0.43	0.41	0.39	[0:1]	[0:1]	[0:1]
City	996	1,020	971	0.15	0.16	0.19	0.36	0.37	0.39	[0:1]	[0:1]	[0:1]

Note: Reference category for education is “primary and lower secondary”, for residential area it is “rural area”.

S3: Question Wording for Key Variables

Big Five (Ten Item Personality Inventory (TIPI), Gosling et al. 2003)

Here are a number of personality traits that may or may not apply to you. Please indicate using the scale from "strongly disagree" to "strongly agree". You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other. I am ...

… extraverted, enthusiastic (extraversion)
… critical, quarrelsome (agreeableness, reverse coded)
… dependable, self-disciplined (conscientiousness)
… anxious, easily upset (neuroticism)
… open to new experiences, complex (openness to experience)
… reserved, quiet (extraversion, reverse coded)
… sympathetic, warm (agreeableness)
… disorganised, careless (conscientiousness, reverse coded)
… calm, emotionally stable (neuroticism, reverse coded)
… conventional, uncreative (openness to experience, reverse coded)

(1 = strongly disagree; 2 = somewhat disagree; 3 = neither agree nor disagree; 4 = somewhat agree; 5 = strongly agree)

Criteria for national belonging

Some people say that the following things are important for being truly [country nationality]. Others say they are not important. What do you think? How important do you think it is …

… to have been born in [country]?
… to be able to speak [country's language(s)]?
… to have [country nationality] ancestry?
… to respect [country nationality] institutions and laws?
… to share [country nationality] manners and traditions?
… to be a Christian?

(1 = not at all important; 2 = unimportant; 3 = rather unimportant; 4 = neither important nor unimportant; 5 = rather important; 6 = important; 7 = very important)

S4: Big Five: Within-Trait Inter-Item Correlations

	Inter-Item Correlations			
Survey period	Spring 2020	Winter 2020/21	Spring 2021	Total
Germany				
Openness	0.279	0.275	0.260	0.271
Conscientiousness	0.368	0.392	0.436	0.398
Extraversion	0.229	0.383	0.363	0.324
Agreeableness	0.202	0.178	0.198	0.193
Neuroticism	0.472	0.504	0.518	0.496
France				
Openness	0.063	0.058	0.174	0.098
Conscientiousness	0.312	0.301	0.376	0.328
Extraversion	0.176	0.255	0.253	0.228
Agreeableness	0.219	0.206	0.214	0.213
Neuroticism	0.257	0.240	0.270	0.255
Italy				
Openness	-0.009	-0.080	-0.041	-0.044
Conscientiousness	0.325	0.261	0.368	0.316
Extraversion	0.272	0.261	0.305	0.280
Agreeableness	0.189	0.212	0.336	0.244
Neuroticism	0.315	0.241	0.301	0.286
Switzerland				
Openness	0.193	0.156	0.252	0.198
Conscientiousness	0.320	0.388	0.442	0.382
Extraversion	0.343	0.323	0.299	0.322
Agreeableness	0.238	0.200	0.193	0.210
Neuroticism	0.313	0.336	0.413	0.353
Spain				
Openness	0.216	0.240	0.301	0.252
Conscientiousness	0.244	0.225	0.292	0.254

Extraversion	0.175	0.199	0.303	0.226
Agreeableness	-0.195	-0.160	-0.148	-0.168
Neuroticism	0.345	0.407	0.354	0.367
United Kingdom				
Openness	0.175	0.236	0.140	0.184
Conscientiousness	0.335	0.292	0.292	0.305
Extraversion	0.407	0.412	0.348	0.387
Agreeableness	0.211	0.198	0.208	0.205
Neuroticism	0.477	0.414	0.471	0.454

S5a: Descriptive Overview: The Big Five Personality Traits

	Spring 2020	Winter 2020/2021	Spring 2021	Total
Share of respondents scoring high on…				
…Openness to experience	33.5	34.3	35.5	34.4
…Conscientiousness	63.6	63.3	65.0	64.0
…Extraversion	14.9	15.2	15.4	15.2
…Agreeableness	43.8	44.0	45.5	44.4
…Neuroticism	9.32	9.2	9.1	9.2
Observations	5,954	6,102	5,862	17,918

Note: The proportions displayed equal the share of respondents who achieve a value of at least 4 on the arithmetic index [1:5] for the respective personality dimension in each of the three datasets (columns 2-4) and in a pooled dataset that includes the observations from all three surveys (column 5).

S5b: Descriptive Overview: The Big Five Personality Traits Across Countries

	Germany	France	Italy	Switzerland	Spain	United Kingdom
Share of respondents scoring high on…						
…Openness to experience	S1: 45.4 S2: 47.7 S3: 46.9 Total: 46.7	S1: 25.8 S2: 27.3 S3: 30.4 Total: 27.8	S1: 14.8 S2: 15.1 S3: 16.9 Total: 15.6	S1: 46.2 S2: 44.9 S3: 44.6 Total: 45.2	S1: 35.9 S2: 32.0 S3: 34.9 Total: 34.3	S1: 33.3 S2: 37.2 S3: 39.3 Total: 36.6
…Conscientiousness	S1: 66.6 S2: 71.4 S3: 72.4 Total: 70.0	S1: 64.2 S2: 66.7 S3: 67.7 Total: 66.2	S1: 59.4 S2: 55.7 S3: 59.2 Total: 58.1	S1: 68.6 S2: 69.4 S3: 69.9 Total: 69.3	S1: 58.7 S2: 56.1 S3: 56.0 Total: 57.3	S1: 64.3 S2: 60.0 S3: 64.5 Total: 62.9
…Extraversion	S1: 19.6 S2: 20.5 S3: 19.0 Total: 19.7	S1: 9.7 S2: 9.8 S3: 9.6 Total: 9.7	S1: 11.6 S2: 13.5 S3: 13.7 Total: 12.9	S1: 17.4 S2: 18.5 S3: 17.9 Total: 17.9	S1: 14.8 S2: 12.0 S3: 13.9 Total: 13.6	S1: 16.6 S2: 16.7 S3: 18.3 Total: 17.2
…Agreeableness	S1: 48.6 S2: 50.5 S3: 51.3 Total: 50.1	S1: 48.3 S2: 48.1 S3: 49.5 Total: 48.6	S1: 48.5 S2: 47.0 S3: 50.9 Total: 48.8	S1: 53.4 S2: 53.0 S3: 54.3 Total: 53.5	S1: 17.2 S2: 19.5 S3: 19.5 Total: 18.7	S1: 47.0 S2: 45.0 S3: 48.4 Total: 46.8
…Neuroticism	S1: 7.7 S2: 8.1 S3: 7.9 Total: 7.9	S1: 11.0 S2: 9.6 S3: 10.6 Total: 10.4	S1: 11.1 S2: 9.6 S3: 8.9 Total: 9.9	S1: 6.1 S2: 6.3 S3: 7.2 Total: 6.5	S1: 7.9 S2: 7.9 S3: 7.3 Total: 7.7	S1: 12.1 S2: 13.7 S3: 13.0 Total: 12.9
Observations	S1: 996 S2: 985 S3: 976 Total: 2,957	S1: 1,004 S2: 1,013 S3: 972 Total: 2,989	S1: 989 S2: 972 S3: 975 Total: 2,936	S1: 979 S2: 1,112 S3: 963 Total: 3,054	S1: 990 S2: 1,000 S3: 1,005 Total: 2,995	S1: 996 S2: 1,020 S3: 971 Total: 2,987

Note: The proportions displayed equal the share of respondents per country who achieve a value of at least 4 on the arithmetic index for the respective personality dimension in each of the three datasets (S1-S3) and in a pooled dataset that includes the observations from all three surveys.

S6a: Big Five of Personality and Ethnic National Identity in Germany, France and Italy

	Germany			France			Italy		
	Spring 2020	Winter 2020/2021	Spring 2021	Spring 2020	Winter 2020/2021	Spring 2021	Spring 2020	Winter 2020/2021	Spring 2021
Openness to experience	-1.025** (0.244)	-0.819** (0.235)	-1.168** (0.240)	-0.848** (0.213)	-0.773** (0.210)	-0.520** (0.219)	-1.010** (0.210)	-1.303** (0.219)	-1.587** (0.248)
Extraversion	0.385** (0.163)	0.249* (0.151)	0.448** (0.150)	0.269 (0.166)	0.222 (0.151)	0.018 (0.166)	0.290** (0.135)	0.428** (0.139)	0.402** (0.155)
Conscientiousness	0.112 (0.266)	0.125 (0.260)	0.217 (0.240)	-0.018 (0.235)	0.140 (0.214)	-0.187 (0.257)	-0.076 (0.230)	-0.066 (0.219)	-0.519** (0.213)
Agreeableness	0.234 (0.283)	0.412 (0.252)	-0.054 (0.250)	-0.304 (0.249)	-0.623** (0.221)	-0.791** (0.282)	0.356 (0.224)	-0.053 (0.207)	0.614** (0.239)
Neuroticism	0.397** (0.143)	0.091 (0.144)	0.035 (0.146)	-0.005 (0.155)	0.122 (0.145)	0.089 (0.149)	-0.241* (0.137)	-0.395** (0.148)	-0.299** (0.143)
Education									
Upper, post secondary	-0.401** (0.154)	-0.499** (0.140)	-0.324** (0.146)	0.029 (0.135)	0.025 (0.122)	-0.120 (0.127)	-0.229** (0.100)	-0.219** (0.104)	-0.080 (0.117)
Tertiary	-0.501** (0.164)	-0.729** (0.151)	-0.509** (0.156)	-0.101 (0.155)	-0.339** (0.141)	-0.556** (0.147)	-0.327** (0.143)	-0.155 (0.129)	-0.083 (0.140)
Male	0.209** (0.104)	0.137 (0.103)	0.052 (0.102)	-0.084 (0.103)	0.316** (0.092)	0.239** (0.096)	0.073 (0.092)	-0.049 (0.092)	0.141 (0.095)
Age	0.007** (0.003)	0.012** (0.003)	0.010** (0.003)	0.003 (0.004)	0.002 (0.003)	0.002 (0.003)	0.015** (0.003)	0.010** (0.003)	0.010** (0.003)
Income situation	-0.148** (0.048)	-0.060 (0.049)	-0.106** (0.046)	-0.091* (0.053)	-0.069 (0.050)	0.030 (0.049)	-0.073 (0.045)	-0.138** (0.048)	-0.099** (0.045)
Political ideology (right)	0.247** (0.027)	0.272** (0.028)	0.289** (0.026)	0.204** (0.021)	0.216** (0.019)	0.202** (0.020)	0.154** (0.018)	0.142** (0.019)	0.176** (0.019)
Citizenship (yes)	0.117 (0.280)	0.138 (0.320)	0.192 (0.316)	0.274 (0.323)	-0.510* (0.287)	-0.912** (0.327)	-0.429 (0.503)	0.623** (0.307)	0.727* (0.438)
Migration	0.015	0.096	-0.180	-0.456**	-0.381**	-0.508**	-0.056	-0.082	-0.094

background (yes)	(0.155)	(0.170)	(0.171)	(0.151)	(0.134)	(0.153)	(0.200)	(0.232)	(0.235)
Residential area									
Small town	0.171	-0.037	0.161	0.137	0.141	0.013	0.137	0.003	0.129
	(0.145)	(0.138)	(0.136)	(0.138)	(0.121)	(0.130)	(0.126)	(0.134)	(0.133)
Midsize City	0.337**	-0.112	-0.034	0.049	0.159	0.088	0.032	-0.081	0.110
	(0.167)	(0.152)	(0.160)	(0.141)	(0.133)	(0.140)	(0.123)	(0.119)	(0.135)
Suburb	0.039	0.046	-0.028	0.114	-0.055	-0.073	0.192	-0.058	-0.096
	(0.175)	(0.157)	(0.170)	(0.167)	(0.152)	(0.162)	(0.193)	(0.191)	(0.209)
City	0.168	-0.180	0.086	-0.037	0.311**	-0.159	0.332**	-0.067	0.122
	(0.136)	(0.128)	(0.129)	(0.147)	(0.144)	(0.146)	(0.140)	(0.139)	(0.146)
Constant	2.771**	2.114**	2.631**	3.921**	4.406**	5.437**	4.327**	4.784**	3.896**
	(0.691)	(0.673)	(0.665)	(0.686)	(0.581)	(0.639)	(0.709)	(0.597)	(0.667)
R^2	0.166	0.179	0.194	0.157	0.199	0.196	0.174	0.165	0.207
Adjusted R^2	0.152	0.164	0.180	0.143	0.185	0.182	0.160	0.150	0.193
Observations	996	985	976	1004	1013	972	989	972	975

Note: OLS-coefficients with robust standard errors in parentheses. Reference category for education is "primary & lower secondary", for residential area it is "rural/village".

* $p < 0.10$, ** $p < 0.05$

S6b: Big Five of Personality and Ethnic National Identity in Switzerland, Spain and the United Kingdom

	Switzerland			Spain			United Kingdom		
	Spring 2020	Winter 2020/2021	Spring 2021	Spring 2020	Winter 2020/2021	Spring 2021	Spring 2020	Winter 2020/2021	Spring 2021
Openness to experience	-0.767**	-0.906**	-0.893**	-0.819**	-1.134**	-1.175**	-0.477**	-1.025**	-0.363
	(0.232)	(0.220)	(0.230)	(0.224)	(0.187)	(0.190)	(0.216)	(0.201)	(0.224)
Extraversion	0.593**	0.185	0.377**	0.720**	0.436**	0.601**	0.244**	0.284**	0.140
	(0.145)	(0.138)	(0.152)	(0.160)	(0.172)	(0.146)	(0.123)	(0.128)	(0.142)
Conscientiousness	-0.151	-0.221	-0.398	-0.210	0.468*	0.047	0.115	0.018	-0.658**
	(0.257)	(0.222)	(0.253)	(0.213)	(0.264)	(0.217)	(0.244)	(0.210)	(0.244)
Agreeableness	-0.210	-0.492**	-0.552**	1.325**	0.353	0.493*	0.062	0.063	-0.037
	(0.247)	(0.208)	(0.261)	(0.259)	(0.251)	(0.254)	(0.213)	(0.220)	(0.258)
Neuroticism	0.095	-0.004	-0.102	0.082	0.187	-0.074	0.172	0.081	-0.152
	(0.133)	(0.125)	(0.144)	(0.150)	(0.137)	(0.142)	(0.140)	(0.127)	(0.133)
Education									
Upper, post secondary	-0.157	-0.369**	-0.219	-0.062	-0.187	0.089	-0.299**	-0.058	-0.451**
	(0.161)	(0.144)	(0.197)	(0.121)	(0.116)	(0.116)	(0.128)	(0.128)	(0.149)
Tertiary	-0.332**	-0.438**	-0.603**	-0.129	-0.315**	-0.272**	-0.597**	-0.154	-0.421**
	(0.167)	(0.148)	(0.202)	(0.115)	(0.116)	(0.118)	(0.109)	(0.118)	(0.130)
Male	-0.058	0.050	0.251**	0.027	-0.082	-0.169*	-0.092	0.093	0.227**
	(0.094)	(0.087)	(0.100)	(0.091)	(0.089)	(0.089)	(0.098)	(0.099)	(0.109)
Age	0.012**	0.002	-0.003	0.010**	0.003	0.008**	0.011**	0.014**	0.003
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)
Income situation	-0.082**	-0.116**	-0.070	-0.108**	-0.091**	-0.104**	-0.157**	-0.131**	-0.060
	(0.041)	(0.043)	(0.049)	(0.046)	(0.045)	(0.044)	(0.048)	(0.043)	(0.048)
Political ideology (right)	0.256**	0.224**	0.190**	0.226**	0.201**	0.264**	0.217**	0.236**	0.266**
	(0.023)	(0.020)	(0.023)	(0.019)	(0.019)	(0.018)	(0.027)	(0.022)	(0.024)
Citizenship (yes)	-0.059	0.056	0.183	0.356	-0.507	-0.247	0.013	-0.040	0.395*
	(0.141)	(0.150)	(0.147)	(0.285)	(0.332)	(0.339)	(0.253)	(0.221)	(0.221)
Migration	-0.441**	-0.425**	-0.350**	-0.257	-0.677**	-0.528**	-0.249*	-0.303**	-0.178

background (yes)	(0.112)	(0.107)	(0.106)	(0.191)	(0.209)	(0.223)	(0.147)	(0.136)	(0.143)
Residential area									
Small town	-0.272**	-0.138	0.060	-0.181	0.035	0.220*	-0.041	-0.064	0.188
	(0.124)	(0.118)	(0.127)	(0.153)	(0.137)	(0.127)	(0.142)	(0.138)	(0.153)
Midsize City	-0.248*	-0.239*	0.100	-0.196	0.067	0.123	-0.133	-0.283*	0.020
	(0.131)	(0.122)	(0.129)	(0.145)	(0.122)	(0.125)	(0.152)	(0.146)	(0.159)
Suburb	-0.479**	-0.315**	-0.321**	-0.334	0.232	0.311	-0.215	-0.275*	0.045
	(0.143)	(0.134)	(0.149)	(0.235)	(0.172)	(0.250)	(0.150)	(0.143)	(0.160)
City	-0.134	-0.402**	-0.290*	-0.241*	0.200	0.168	-0.138	-0.065	0.182
	(0.144)	(0.138)	(0.153)	(0.131)	(0.125)	(0.123)	(0.171)	(0.158)	(0.177)
Constant	3.445**	5.282**	5.334**	1.659**	3.506**	2.888**	3.233**	3.477**	3.593**
	(0.606)	(0.531)	(0.621)	(0.630)	(0.689)	(0.657)	(0.575)	(0.569)	(0.665)
R^2	0.239	0.207	0.206	0.203	0.224	0.296	0.200	0.227	0.208
Adjusted R^2	0.226	0.195	0.191	0.189	0.211	0.284	0.186	0.214	0.193
Observations	979	1112	963	990	1000	1005	996	1020	971

Note: OLS-coefficients with robust standard errors in parentheses. Reference category for education is "primary & lower secondary", for residential area it is "rural/village".

* $p < 0.10$, ** $p < 0.05$

S7a: Big Five of Personality and Civic National Identity in Germany, France and Italy

	Germany			France			Italy		
	Spring 2020	Winter 2020/2021	Spring 2021	Spring 2020	Winter 2020/2021	Spring 2021	Spring 2020	Winter 2020/2021	Spring 2021
Openness to experience	-0.081	0.150	-0.100	0.295	-0.168	-0.040	-0.372**	-0.609**	-0.288*
	(0.165)	(0.162)	(0.178)	(0.179)	(0.155)	(0.129)	(0.153)	(0.152)	(0.174)
Extraversion	-0.172*	-0.172*	-0.341**	0.017	-0.119	-0.182*	-0.073	0.064	-0.207*
	(0.098)	(0.100)	(0.109)	(0.136)	(0.112)	(0.098)	(0.098)	(0.110)	(0.120)
Conscientiousness	0.923**	0.498**	0.849**	0.344*	0.797**	0.847**	0.547**	0.588**	0.719**
	(0.221)	(0.194)	(0.224)	(0.187)	(0.190)	(0.194)	(0.177)	(0.198)	(0.197)
Agreeableness	0.322*	0.309	0.172	0.342	-0.121	-0.010	0.206	0.063	0.365*
	(0.190)	(0.192)	(0.201)	(0.213)	(0.189)	(0.192)	(0.177)	(0.184)	(0.205)
Neuroticism	-0.079	-0.182*	-0.095	0.191	-0.215**	-0.119	-0.151	-0.385**	-0.255**
	(0.096)	(0.098)	(0.111)	(0.144)	(0.104)	(0.104)	(0.094)	(0.100)	(0.104)
Education									
Upper, post secondary	-0.012	-0.008	-0.088	0.050	0.185*	0.049	-0.052	-0.002	0.100
	(0.101)	(0.098)	(0.106)	(0.115)	(0.097)	(0.083)	(0.075)	(0.078)	(0.088)
Tertiary	0.020	-0.028	-0.142	0.257**	0.409**	0.087	-0.071	-0.067	0.017
	(0.107)	(0.110)	(0.115)	(0.125)	(0.111)	(0.099)	(0.108)	(0.103)	(0.117)
Male	-0.015	-0.005	-0.032	0.034	0.211**	0.052	-0.007	-0.032	0.012
	(0.073)	(0.075)	(0.077)	(0.082)	(0.074)	(0.068)	(0.068)	(0.071)	(0.075)
Age	0.002	0.004*	0.006**	0.006**	0.011**	0.016**	0.007**	0.009**	0.013**
	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
Income situation	-0.015	0.052	0.054	0.100**	0.037	0.056	0.041	0.039	-0.021
	(0.035)	(0.032)	(0.034)	(0.042)	(0.038)	(0.037)	(0.036)	(0.036)	(0.036)
Political ideology (right)	0.114**	0.086**	0.117**	0.066**	0.106**	0.087**	0.056**	0.025*	0.063**
	(0.019)	(0.022)	(0.022)	(0.015)	(0.014)	(0.013)	(0.013)	(0.015)	(0.015)
Citizenship (yes)	0.257	0.031	0.474*	0.690**	0.186	0.384	-0.606*	0.226	0.888
	(0.204)	(0.240)	(0.268)	(0.249)	(0.281)	(0.294)	(0.344)	(0.321)	(0.554)
Migration	0.022	-0.148	-0.002	-0.005	-0.159	-0.133	-0.281	-0.468**	0.201

background (yes)	(0.110)	(0.128)	(0.132)	(0.122)	(0.113)	(0.097)	(0.201)	(0.186)	(0.213)
Residential area									
Small town	-0.010	0.056	0.136	-0.050	-0.050	-0.077	0.288**	-0.180*	0.071
	(0.104)	(0.097)	(0.106)	(0.118)	(0.099)	(0.087)	(0.101)	(0.102)	(0.101)
Midsize City	-0.073	0.110	0.216*	-0.045	-0.245**	-0.041	0.238**	-0.163*	-0.118
	(0.114)	(0.114)	(0.112)	(0.118)	(0.101)	(0.091)	(0.095)	(0.089)	(0.103)
Suburb	-0.031	0.335**	0.152	0.008	-0.077	0.012	0.297**	-0.055	-0.132
	(0.116)	(0.099)	(0.123)	(0.124)	(0.111)	(0.112)	(0.131)	(0.136)	(0.177)
City	-0.107	0.219**	0.274**	-0.016	-0.149	0.063	0.286**	-0.154	-0.001
	(0.100)	(0.086)	(0.098)	(0.115)	(0.109)	(0.099)	(0.108)	(0.108)	(0.110)
Constant	3.748**	3.968**	3.326**	2.719**	3.955**	3.481**	5.027**	4.968**	3.038**
	(0.451)	(0.519)	(0.576)	(0.527)	(0.479)	(0.515)	(0.513)	(0.528)	(0.685)
R^2	0.101	0.089	0.109	0.067	0.160	0.176	0.090	0.139	0.141
Adjusted R^2	0.086	0.073	0.093	0.051	0.146	0.161	0.074	0.124	0.126
Observations	996	985	976	1004	1013	972	989	972	975

Note: OLS-coefficients with robust standard errors in parentheses. Reference category for education is "primary & lower secondary", for residential area it is "rural/village".

* $p < 0.10$, ** $p < 0.05$

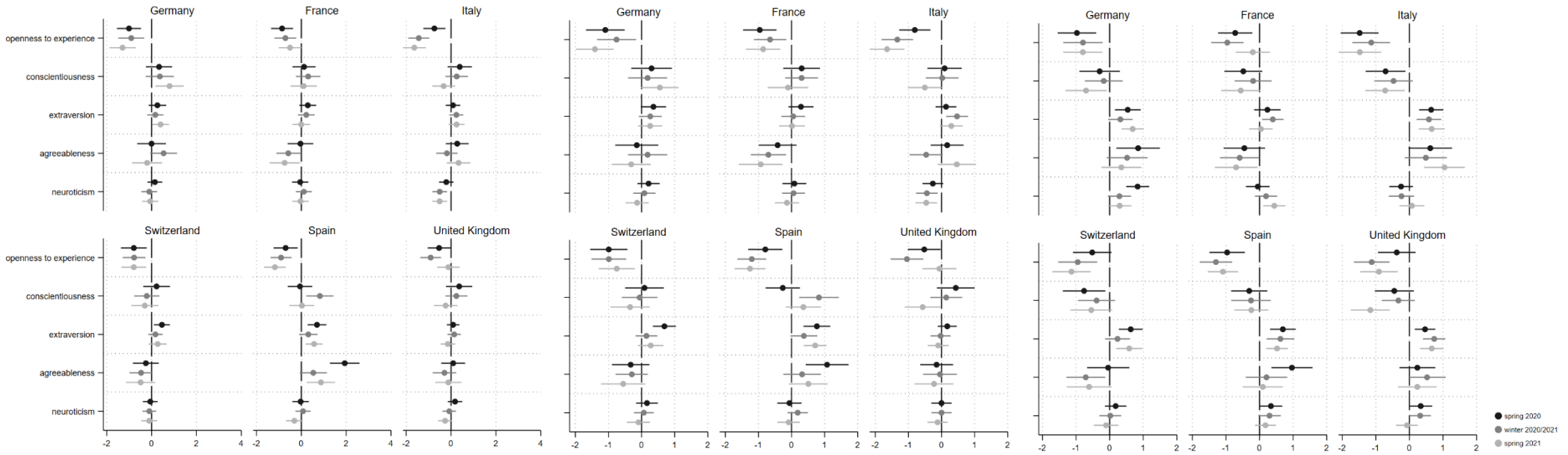
S7b: Big Five of Personality and Civic National Identity in Switzerland, Spain and the United Kingdom

	Switzerland			Spain			United Kingdom		
	Spring 2020	Winter 2020/2021	Spring 2021	Spring 2020	Winter 2020/2021	Spring 2021	Spring 2020	Winter 2020/2021	Spring 2021
Openness to experience	-0.082	0.240	-0.180	0.024	-0.086	-0.243	-0.351**	-0.064	-0.193
	(0.182)	(0.151)	(0.177)	(0.191)	(0.192)	(0.181)	(0.150)	(0.149)	(0.154)
Extraversion	0.149	-0.073	-0.077	0.355**	0.286*	0.155	0.017	-0.125	0.039
	(0.116)	(0.090)	(0.121)	(0.158)	(0.173)	(0.142)	(0.094)	(0.096)	(0.101)
Conscientiousness	0.420**	0.729**	0.664**	0.317	1.046**	0.797**	0.769**	0.635**	0.619**
	(0.191)	(0.176)	(0.197)	(0.193)	(0.217)	(0.200)	(0.189)	(0.167)	(0.180)
Agreeableness	0.220	0.204	0.387**	1.025**	0.365	0.538**	0.213	-0.241	0.058
	(0.178)	(0.153)	(0.188)	(0.266)	(0.258)	(0.219)	(0.167)	(0.160)	(0.173)
Neuroticism	-0.055	-0.126	-0.156	-0.213	-0.216*	-0.242*	-0.127	-0.015	-0.040
	(0.101)	(0.087)	(0.105)	(0.136)	(0.124)	(0.125)	(0.096)	(0.094)	(0.088)
Education									
Upper, post secondary	0.221	0.088	0.073	0.037	-0.040	0.225**	-0.074	0.050	-0.353**
	(0.139)	(0.116)	(0.154)	(0.105)	(0.104)	(0.102)	(0.099)	(0.092)	(0.105)
Tertiary	0.330**	0.266**	0.125	-0.003	-0.022	0.118	-0.157**	-0.004	-0.254**
	(0.138)	(0.118)	(0.155)	(0.099)	(0.105)	(0.105)	(0.080)	(0.093)	(0.088)
Male	0.026	0.038	0.138*	-0.037	0.011	-0.133	0.074	0.009	0.015
	(0.072)	(0.064)	(0.072)	(0.081)	(0.082)	(0.081)	(0.070)	(0.075)	(0.075)
Age	0.006**	0.004**	0.006**	0.008**	0.007**	0.012**	0.009**	0.018**	0.011**
	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
Income situation	0.034	0.053*	0.087**	-0.024	-0.001	-0.031	-0.084**	0.058*	0.025
	(0.033)	(0.030)	(0.036)	(0.042)	(0.043)	(0.040)	(0.033)	(0.035)	(0.033)
Political ideology (right)	0.060**	0.065**	0.054**	0.128**	0.148**	0.156**	0.126**	0.127**	0.158**
	(0.016)	(0.014)	(0.017)	(0.017)	(0.017)	(0.016)	(0.021)	(0.017)	(0.016)
Citizenship (yes)	0.077	0.297**	0.104	-0.101	-0.778**	-0.265	-0.043	-0.396**	0.085
	(0.107)	(0.104)	(0.115)	(0.197)	(0.276)	(0.286)	(0.204)	(0.169)	(0.193)
Migration	0.030	0.067	0.080	-0.095	-0.471**	-0.028	-0.094	-0.144	-0.120

Background (yes)	(0.083)	(0.074)	(0.082)	(0.132)	(0.194)	(0.159)	(0.120)	(0.104)	(0.101)
Residential area									
Small town	0.013	-0.106	0.074	-0.066	0.151	-0.007	0.026	-0.146	-0.108
	(0.097)	(0.087)	(0.092)	(0.141)	(0.127)	(0.130)	(0.102)	(0.099)	(0.100)
Midsize City	-0.145	-0.039	-0.033	-0.180	0.003	-0.112	-0.157	-0.095	-0.204*
	(0.099)	(0.089)	(0.101)	(0.130)	(0.118)	(0.123)	(0.111)	(0.104)	(0.113)
Suburb	-0.114	-0.095	0.062	-0.111	-0.105	-0.289	-0.099	-0.020	0.026
	(0.117)	(0.088)	(0.111)	(0.226)	(0.196)	(0.211)	(0.103)	(0.099)	(0.103)
City	0.169*	0.149*	0.251**	0.054	0.052	0.006	-0.090	-0.154	-0.004
	(0.089)	(0.088)	(0.102)	(0.116)	(0.118)	(0.116)	(0.129)	(0.114)	(0.114)
Constant	3.922**	3.352**	3.633**	2.895**	3.340**	3.046**	4.419**	4.184**	3.799**
	(0.420)	(0.400)	(0.479)	(0.565)	(0.625)	(0.588)	(0.461)	(0.425)	(0.456)
R^2	0.074	0.119	0.100	0.115	0.157	0.177	0.174	0.192	0.210
Adjusted R^2	0.057	0.105	0.084	0.099	0.142	0.163	0.159	0.178	0.196
Observations	979	1112	963	990	1000	1005	996	1020	971

Note: OLS-coefficients with robust standard errors in parentheses. Reference category for education is "primary & lower secondary", for residential area it is "rural/village".

S8a: Regression Coefficients of the Relationship between the Big Five of Personality and Criteria for National Belonging (individual items)

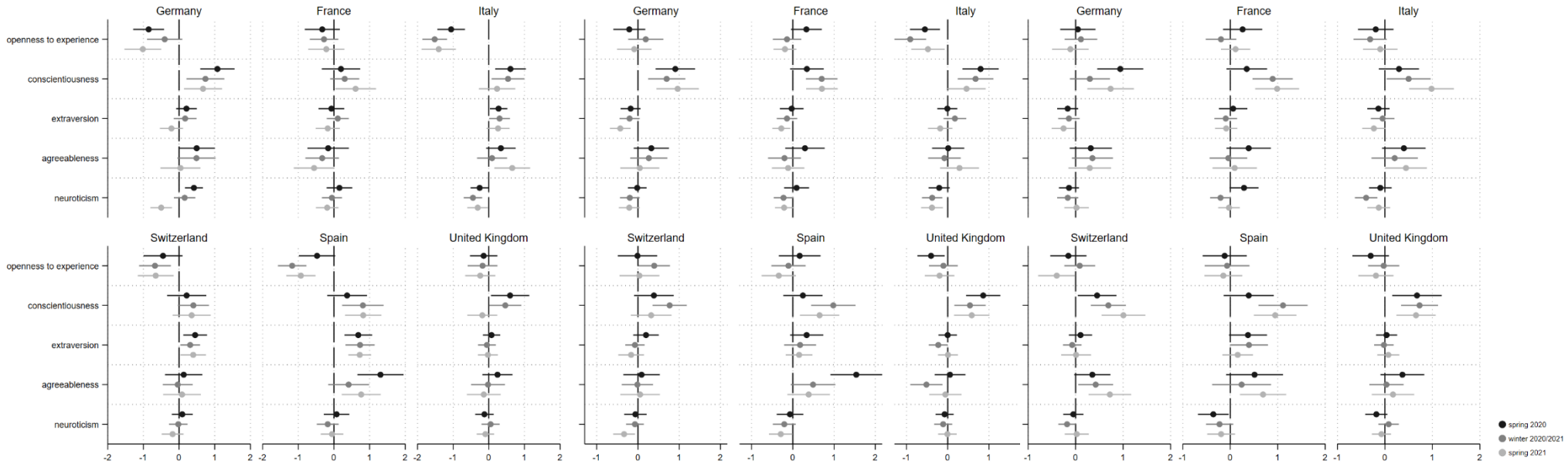


* p < 0.10, ** p < 0.05

a) Born in the Country b) National Ancestry c) Christian

Note: Displayed are linear regression coefficients with their 95% confidence intervals. Models control for gender, age, education, income situation, political ideology, citizenship status, migration background and residential area. Full model results available upon request.

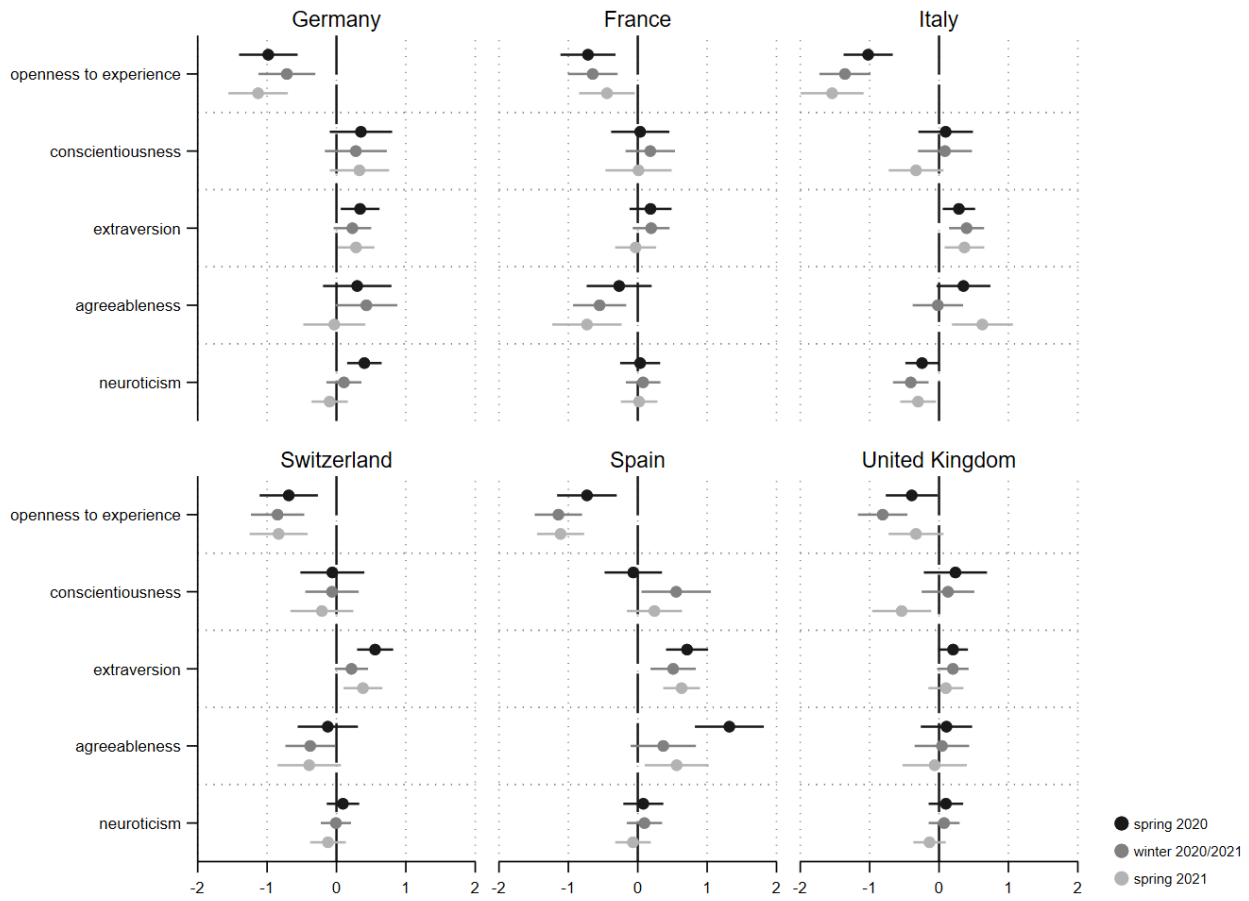
S8b: Regression Coefficients of the Relationship between the Big Five of Personality and Criteria for National Belonging (individual items)



a) Culture b) Language c) Political Institutions and Laws

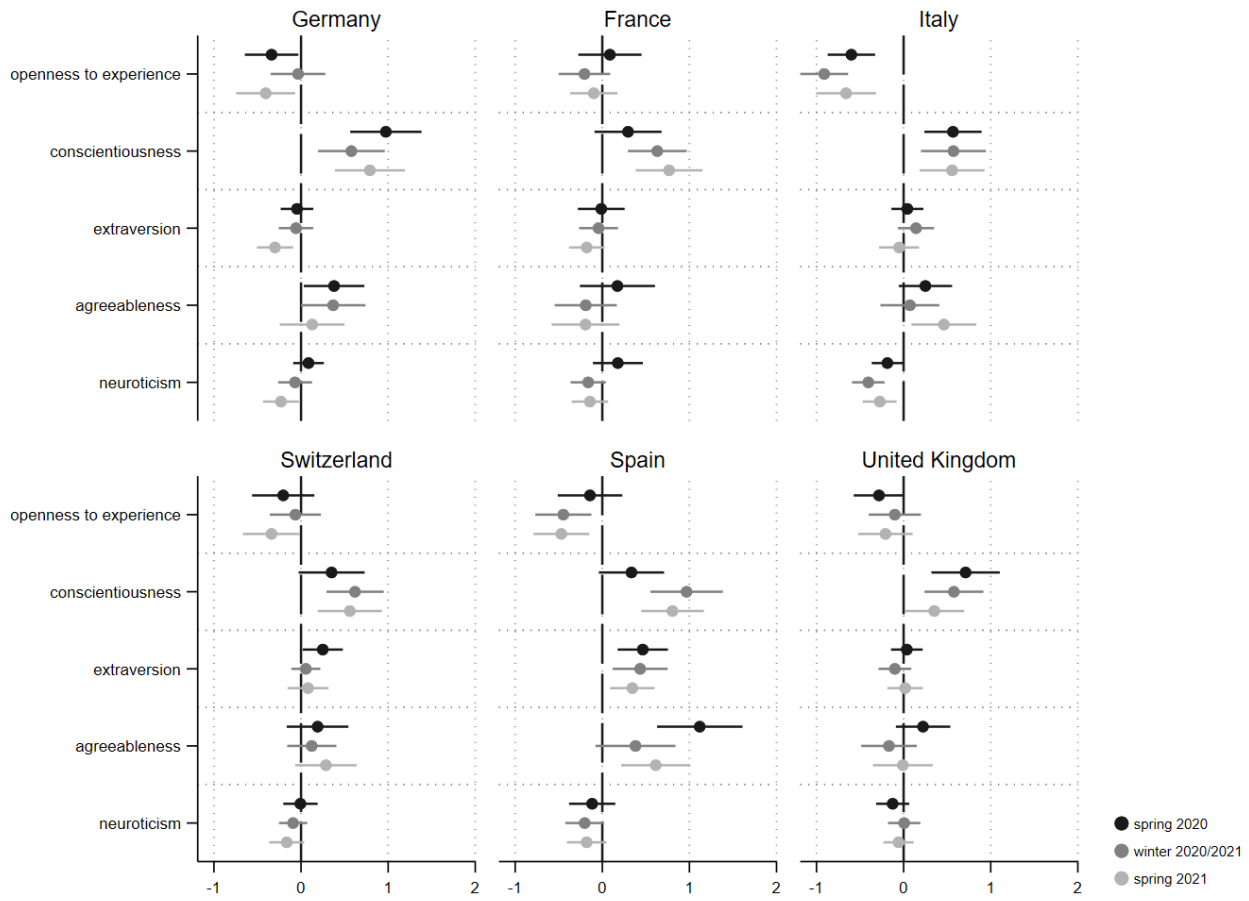
Note: Displayed are linear regression coefficients with their 95% confidence intervals. Models control for gender, age, education, income situation, political ideology, citizenship status, migration background and residential area. Full model results available upon request.

S9a: Regression Coefficients of the Relationship between the Big Five of Personality and Ethnic National Identity (index including the culture criterion)



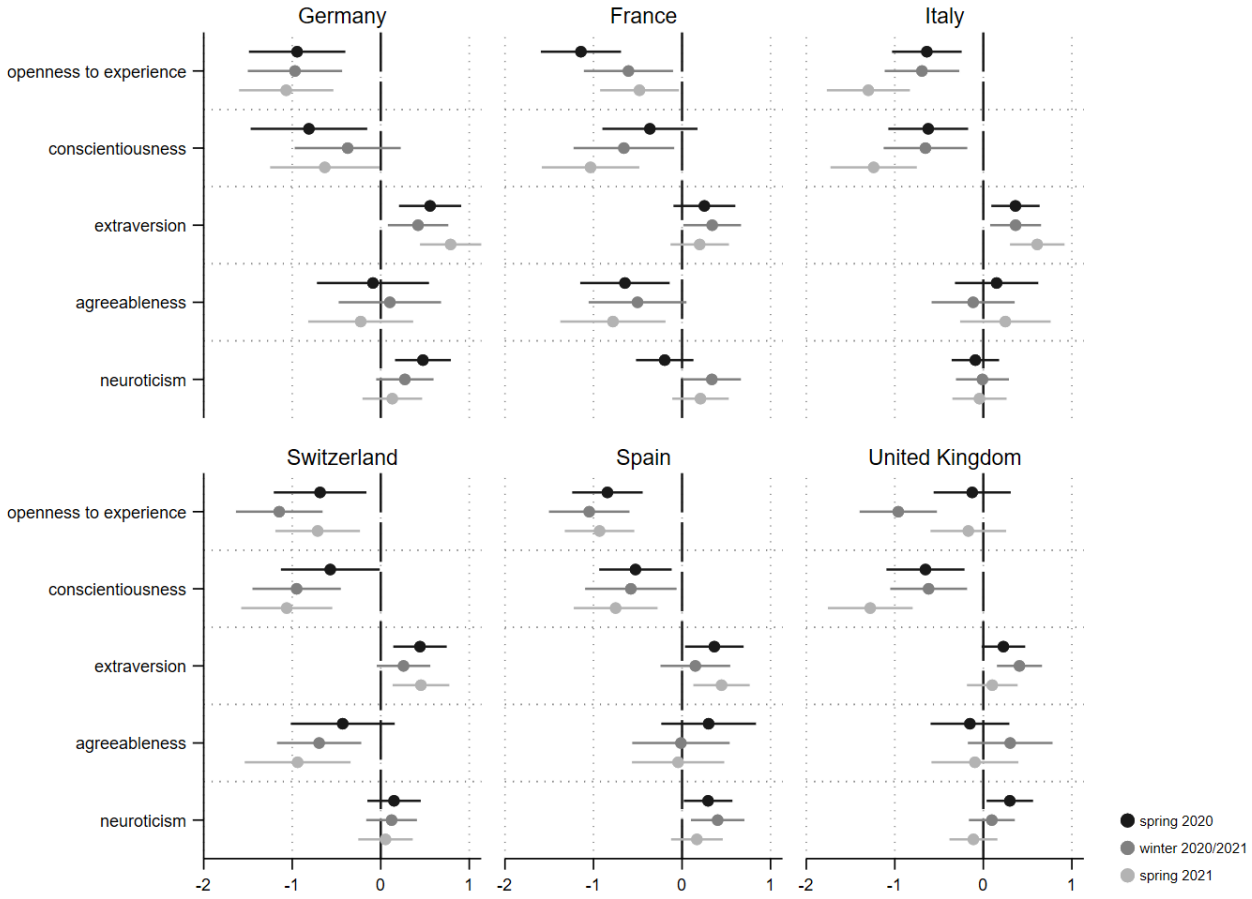
Note: Displayed are linear regression coefficients with their 95% confidence intervals. Models control for gender, age, education, income situation, political ideology, citizenship status, migration background and residential area. Full model results available upon request.

S9b: Regression Coefficients of the Relationship between the Big Five of Personality and Civic National Identity (index including the culture criterion)



Note: Displayed are linear regression coefficients with their 95% confidence intervals. Models control for gender, age, education, income situation, political ideology, citizenship status, migration background and residential area. Full model results available upon request

S10: Regression Coefficients of the Relationship between the Big Five of Personality and a Unidimensional National Identity Index Ranging from an Exclusively Civic National Identity to an Exclusively Ethnic National Identity



Note: Displayed are linear regression coefficients with their 95% confidence intervals. Models control for gender, age, education, income situation, political ideology, citizenship status, migration background and residential area. Full model results available upon request.

3. Article 2: A Justified Bad Reputation After All? Dark Personality Traits and Populist Attitudes in Comparative Perspective

Nathalie Hofstetter and Maximilian Filsinger

This chapter is identical with a manuscript that has been resubmitted to *Electoral Studies* after minor revisions.

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https://doi.org/10.1016/j.electstud.2023.102728

Although scholars have extensively studied populism in recent years, the empirical exploration of dispositional or personality underpinnings of populist attitudes is still in its infancy. Especially the role played by the Dark Triad traits of Machiavellianism, narcissism, and psychopathy is strikingly understudied. The few empirical studies on this subject fail to fully capture the multi-dimensionality and non-compensatory nature of populist attitudes, are confined to particular country contexts, and produced highly inconclusive results. Specifying and expanding previous research, our main aim is to investigate the darker nuances of populists' personalities across six European countries in 2020. Providing first cross-country evidence, our analyses reveal psychopathy as the most significant predictor of populist attitudes and their subdimensions with Machiavellianism playing a less robust role and narcissism appearing largely inconsequential. In general, most relationships seem non-universal, calling for future research into the contextuality of psychological predispositions for populist and other political attitudes.

Keywords: populism, populist attitudes, personality, Big Five, Dark Triad, cross-country research

3.1. Introduction

In an "age of populism" (Oswald, Schäfer, and Broda 2022), the worldwide appeal of populist ideas and actors has sparked considerable academic interest in the populist phenomenon, especially its conceptualization, measurement, and consequences (Hawkins, Read, and Pauwels 2017, 267; Marcos-Marne 2022). We tap into a comparatively understudied line of research that scrutinizes the demand side of populism – including populist voting and populist attitudes – and more specifically the psychological bases of populism. The psychological imprint of populism is just beginning to be understood with recent research scrutinizing the role played by values (e.g., Marcos-Marne 2022), emotions (e.g., Filsinger, Hofstetter, and Freitag 2023; Rico, Guinjoan, and Anduiza 2017), and in particular personality traits (Fatke 2019; Galais and Rico 2021).

Our focus is on the personality foundations of populism. More specifically, we investigate how darker personality traits – the Dark Triad of Machiavellianism, narcissism, and psychopathy (Paulhus and Williams 2002) – relate to populist attitudes in six European democracies. With the notable exceptions of Galais and Rico (2021) in Spain and Pruysers (2020) in Canada, most studies in the field limit their attention to the relationship between broad and general personality traits as commonly captured by the Big Five model. Yet, darker personality traits are important to investigate for three reasons.

First, research has argued that these traits are particularly relevant to the domain of politics and yield additional explanatory power for a variety of political outcomes (Chen, Pruysers, and Blais 2021, 580; Hart, Richardson, and Tortoriello 2018, 59), making their disregard a serious shortcoming, potentially limiting our understanding of the populist personality. Second, since populism is generally described in negative terms as it pits distinct groups in society against each other resulting in a confrontative style of politics, darker personality traits should be particularly conducive to this form of political action. This holds all the more considering how (elite) populists are commonly portrayed by political observers, experts, and the media: as transgressive, bad-mannered, provocative, disagreeable, or even insane – put simply: as socially rather unappreciated personalities (Nai 2022, 1337f.). As Galais and Rico (2021, 1) conclude from relevant research, "populist leaders stand out for their 'dark personalities'", giving the impression that there is something intrinsically "dark" and threatening in populism (Katsambekis 2017, 202). However, to date, it is largely unclear whether this also applies to populist citizens (Galais and Rico 2021, 1). Third, the notable exceptions that study the Dark Triad and populist attitudes do so in a single country context, not addressing the question of whether findings travel across different countries. Yet, since previous research shows that personality traits can play out in different ways across

different contexts (e.g., Fatke 2017) and that contingent effects of psychological attributes are crucial for our understanding of their potential political consequences, this is a key question. In this regard, Federico and Malka (2018) argue that the political information environment – specifically, differences in how political preferences are packaged into ideological bundles by elites – is fundamental in shaping the relationship between individual dispositions and political preferences. For the insights into populist citizens' personality to be relevant in political and social practice, they need to be context-sensitive, which is why cross-country research is needed. Applying a comparative approach also lives up to the call to conduct independent analyses with different data sets in order to enhance our understanding of the role personality plays in the political sphere (Mondak et al. 2010).

Building on these foundations, we study the relationship between personality traits and populist attitudes with a special focus on the Dark triad. Instead of focusing on populist voting and candidate support like most of previous research (e.g., Ackermann, Zampieri, and Freitag 2018; Aichholzer and Zandonella 2016; Bakker, Lelkes, and Malka 2021; Bakker, Rooduijn, and Schumacher 2016; Fortunato, Hibbing, and Mondak 2018; Hart, Richardson, and Tortoriello 2018; Kenny and Bizumic 2020), we are interested in the relationship of (dark) personality traits with populist attitudes, i.e., populism's underlying ideas (Galais and Rico 2021, Pruysers 2020).

More importantly, we scrutinize these relationships across six European countries: Germany, France, Italy, Switzerland, Spain, and the United Kingdom. These countries offer contextual variation that allows testing the general arguments in different institutional, political, and social environments. More importantly, while all countries have seen a rise in populism in recent years, the history and ideological nature of populism varies across the countries. France, Italy, Switzerland, and the United Kingdom have populist parties at least since the 1990s as opposed to Germany and Spain where populism gained traction in the 2010s. And while France, Germany, and Spain have both sizeable radical left- and right-wing populist parties, relevant populist parties in Switzerland and the United Kingdom are only found at the radical right ideological pole and Italy has ideologically inconsistent populist parties (Rooduijn et al. 2019). Some of the countries even have experience with populist parties holding governmental office (e.g., Switzerland, Spain, Italy). Importantly, studying the (dark) personality imprint of populist attitudes across these six countries allows us to gain evidence on the generalizability of the populist personality profile and to identify potential country-differences.

We understand populist attitudes as multidimensional and non-compensatory concept consisting of three relevant subdimensions: people centrism, anti-elitism, and Manicheanism (Hawkins and Rovira Kaltwasser 2018; Wuttke, Schimpf, and Schoen 2020). While Galais and Rico (2021) only

investigate people centrism and anti-elitism, we argue that considering Manicheanism as another constituent dimension of populist attitudes contributes to a more comprehensive understanding of how personality shapes populist attitudes, in particular because the moral dimension of Manicheanism is prone to be shaped by personality traits. In addition to populist attitudes as a whole, we also take a look at the respective components separately as this allows us to see whether certain personality traits make people more susceptible to the respective subdimensions of populism. Given that political actors do not always use all three elements of populism at the same time and to the same extent, these analyses help to shed light on why certain individuals are attracted to certain populist messages and policies but not to others.

Our analyses of original survey data collected in spring 2020 reveal that psychopathy emerges as the most systematic predictor of populist attitudes and its subdimensions. Although people scoring high on psychopathy tend to be less people-centric, they hold comparatively stronger populist attitudes and are in particular characterized by a pronounced Manichean outlook on society and politics. Furthermore, Machiavellianism shows some consistency in promoting populist attitudes, but the cross-country evidence is less systematic, also regarding populism's subdimensions. For narcissism, hardly any significant effects are found. Regarding the Big Five, our results suggest that conscientiousness and agreeableness in particular might be relevant in understanding the populist personality. As for the Dark Triad, we find some evidence that specific traits relate differently to different components of populist attitudes, which might help explain previous inconclusive findings on the personality foundations of populism. However, in general, most relationships between personality traits and populist attitudes and its subdimensions seem to be context-dependent rather than universal.

3.2. Personality Traits and Populist Attitudes: Theory and Previous Research

Despite the blooming research on populism in recent years, the concept remains highly contested (Hawkins and Rovira Kaltwasser 2017b, 2017a; Rooduijn 2019). However, while populism is approached from different theoretical accounts (for a review, see Gidron and Bonikowski 2013), there is a growing consensus around an ideational conceptualization of populism (Akkerman, Mudde, and Zaslove 2014; Hawkins and Rovira Kaltwasser 2017a, 2017b). The ideational approach considers populism as a distinct set of ideas that center around a moral conflict between the homogeneous and glorified people and the vilified elite. Following from this, populism consists of three main features: a) people centrism, b) anti-elitism, and c) Manicheanism (Akkerman, Mudde, and Zaslove 2014; Hawkins and Rovira Kaltwasser 2018). People centrism follows the idea that "the people" form a virtuous and homogenous entity that is able to express a common general will,

which should ultimately guide all political decisions (Castanho Silva et al. 2018). Anti-elitism focuses on the main villain of the people, which is the elite (whose exact definition depends upon time and place) who is accused of actively undermining the welfare of the people (Mudde and Rovira Kaltwasser 2013). The third subdimension, Manicheanism, is best understood as a cosmology that views politics as a moral struggle between the good and the bad, the right and the wrong (Castanho Silva et al. 2018; Hawkins and Rovira Kaltwasser 2017a). Through the concept of populist attitudes, the ideational approach allows to study the demand side of populism (Hawkins and Rovira Kaltwasser 2017b). Crucially, populist attitudes are theorized to represent an "attitudinal syndrome, which is characterized by the concurrent presence of its non-compensatory concept subdimensions" (Wuttke, Schimpf, and Schoen 2020, 356). Thus, populist attitudes are more than the sum of its (not uniquely populist) constituent dimensions but lie at the intersection of people centrism, anti-elitism, and Manicheanism (Hawkins and Rovira Kaltwasser 2018, 6; Wuttke, Schimpf, and Schoen 2020).

Personality refers to an enduring multifaceted system of psychological structures and processes by which individuals differ from each other (Caprara and Vecchione 2013; Mondak et al. 2010, 86). Core to this system are basic personality traits which present abstract, partly inherited, and considerably stable psychological potentials that characterize an individual across different situations. As such, following trait theory, traits shape more concrete manifestations of the personality system such as values, attitudes, and behavior in all spheres of life (McCrae and Costa 2008). This also applies to the political arena, with empirical evidence for personality effects on individual-level political outcomes nowadays abounds (for an early review, see Gerber et al. 2011). From both a theoretical and an empirical perspective, we can therefore assume that populist attitudes to some degree also reflect such basic dispositions.

Albeit our study is especially interested in the role played by dark personality traits, the so-called Big Five model of personality presents an almost natural starting point in the study of personality traits and populism. First, this is because the Big Five taxonomy describes personality on a decidedly general level, meaning that the model's five broad, empirically derived dimensions of personality traits aim to capture the most important differences in human personality (Gosling, Rentfrow, and Swann 2003, 506; Mondak and Halperin 2008, 341). These dimensions are openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Most generally, openness to experience refers to curiosity about new approaches to thinking and acting, while high conscientiousness requires pronounced responsibility, dependability, and diligence (Fatke 2017; Mondak and Halperin 2008). Extraversion describes an energetic approach towards the environment, and agreeableness captures a prosocial, communal, and trusting orientation towards

others (Gerber et al. 2011). Finally, neuroticism contrasts emotional stability and is related to negativity and excitability (Mondak and Halperin 2008). Second, and related, the Big Five model is widely accepted and used in and beyond psychological research with political science almost exclusively focusing on it when studying personality and politics (Chen, Pruysers, and Blais 2021, 580). It follows that existing empirical evidence on the personality bases of populism is also strongly related to the Big Five.

The bulk of existing research on the Big Five and populism is devoted to right-wing populism, which attaches populism to nativism, and studies populist voting. While the respective evidence is far from being fully unambiguous, broadly concluding, this research paints a (right-wing) populist personality profile characterized in particular by low agreeableness and openness to experience, and further tends to include higher levels of conscientiousness and extraversion (and neuroticism) (cf. Ackermann, Zampieri, and Freitag 2018; Aichholzer and Zandonella 2016; Bakker, Rooduijn, and Schumacher 2016; Bakker, Schumacher, and Rooduijn 2021; Fortunato, Hibbing, and Mondak 2018; Kenny and Bizumic 2020; Schimpf and Schoen 2017; Vasilopoulos and Jost 2020). The evidence on the role played by the Big Five for populist attitudes net of specific issue, party, and candidate preferences and ideological alignment, is both more scant and more inconclusive, especially when it comes to populism's subdimensions. It is clearly evident, however, that the insights from studies on (right-wing) populist voting cannot simply be transferred to populist attitudes and their people centrist, anti-elitist, and Manichean components (cf. Fatke 2019; Galais and Rico 2021; Kenny and Bizumic 2020; Pruysers 2020; Vasilopoulos and Jost 2020).

Previous research on personality and populism thus provides some tentative indications of a formative role of the Big Five personality traits for populist attitudes, although this research certainly needs to mature further in order to increase the certainty and generalizability of the revealed patterns and to make sense of inconclusive findings. Contributing to this process, we will examine the empirical associations between the Big Five and populist attitudes in six European countries, and fanning these out into the three constituent dimensions of populism.

However, the main focus of our study is not on the Big Five, but on the darker personality correlates of populist attitudes. While undoubtedly presenting one of the most important and widespread personality frameworks in psychology and beyond, it is still debated whether the Big Five model indeed is able to capture all relevant variation in human personality (Chen, Pruysers, and Blais 2021, 580). In this context, it has been argued that the model comprises "general" or "socially desirable" personality traits, but fails to discriminate between various antisocial tendencies and thus to fully capture darker, socially aversive personality nuances (Galais and Rico 2021; Nai and Maier 2018; Nai and Martínez i Coma 2019). This is where the so-called Dark Triad comes in,

which aims to capture the darker nuances of personality with the trait constructs of Machiavellianism, narcissism, and psychopathy. While doubts about the Dark Triad's incremental validity over the Big Five have been raised (Koehn, Okan, and Jonason 2019, 11), there is empirical evidence suggesting that the latter are unable to adequately capture and predict the Dark Triad, which furthermore yield discrete or additional explanatory power for a variety of political outcomes (Chen, Pruysers, and Blais 2021, 580).[1] Hart, Richardson, and Tortoriello (2018, 59) even argue that malignant personalities can be considered particularly relevant to the domain of politics, however, they are not usually part of the scrutiny dedicated to the psychological underpinnings of political attitudes and behaviors in general and populism in particular (Chen, Pruysers, and Blais 2021; Hart, Richardson, and Tortoriello 2018, 59; Koehn, Okan, and Jonason 2019, 7). Agreeing with Chen, Pruysers, and Blais (2021, 580) that "there is value in extending personality and politics research to include the Dark Triad" and in order to further complement the personality profile of populist citizens, the present study brings in the darker nuances of personality as captured by the Dark Triad (Paulhus and Williams 2002).

The triad comprises Machiavellianism, narcissism, and psychopathy as three partially heritable and socially-aversive personality traits that however still lie within the normal range of functioning (Furnham, Richards, and Paulhus 2013; Koehn, Okan, and Jonason 2019; Paulhus and Williams 2002). The latter is important to note since the concepts of narcissism and psychopathy are used in clinical research and practice and still describe a clinical syndrome therein (Furnham, Richards, and Paulhus 2013). Within the Dark Triad model, however, they describe subclinical forms of these personality traits and are therefore not to be understood as diagnostic labels, but represent non-pathological personality dimensions (Koehn, Okan, and Jonason 2019, 12). Machiavellianism, narcissism, and psychopathy empirically overlap and share a "common core of callous-manipulation" as well as self-promoting, emotionally cold, and aggressive behavioral tendencies, but the three traits are still conceptually different (Furnham, Richards, and Paulhus 2013, 199; Paulhus and Williams 2002, 557). Machiavellianism describes a tendency towards manipulative and calculating behavior which is exclusively focused on the accomplishment of own goals (Chen, Pruysers, and Blais 2021; Peterson and Palmer 2021). Machiavellians typically are cynical, behave

[1] Considering a variety of empirical studies, Furnham et al. (2014: 117f.) conclude that all Dark Triad traits seem to be weakly negatively related to neuroticism and positively to disagreeableness, while narcissism is most consistently and highly related to extraversion and the major Big Five correlates of psychopathy as well as Machiavellianism being low agreeableness along with conscientiousness. Even stronger than their negative association with agreeableness seems the negative relationship between the Dark Triad traits the honesty-humility factor of the HEXACO model of personality (see Ashton and Lee 2008). Still, "[t]o dismiss the Dark Triad as simply low Agreeableness is not warranted" (Furnham et al. 2014, 116).

expediently, and driven by ambition and power motives (Furnham et al. 2014, 115; Furnham, Richards, and Paulhus 2013, 201; Hart, Richardson, and Tortoriello 2018, 60). Narcissism includes exaggerated self-worth and vanity and refers to egoism, grandiosity, entitlement, dominance and superiority (Koehn, Okan, and Jonason 2019; Paulhus and Williams 2002; Peterson and Palmer 2021). Finally, psychopathy is characterized by high impulsivity, fearlessness, thrill-seeking behavior, and low empathy (Furnham, Richards, and Paulhus 2013; Hart, Richardson, and Tortoriello 2018, 60), with individuals scoring high on this trait are described as remorseless and (self-)destructive (Koehn, Okan, and Jonason 2019; Pruysers, Blais, and Chen 2019). While they undoubtedly have negative connotations and have been shown to relate to a wide range of negative behaviors and attitudes in social life (Peterson and Palmer 2021, 2), it should still be noted that each of the Dark Triad traits also has adaptive elements and can be beneficial for its carriers and others (Furnham, Richards, and Paulhus 2013).

As Galais and Rico (2021, 2) note, there are several reasons to expect that "populist ideas might be particularly appealing to […] individuals that score high on the three aforementioned dark personality traits"(see also Nai 2022). The first can be found in the conceptual and empirical overlap between the Big Five, especially agreeableness, and the Dark Triad (see footnote 4). Dark personalities are typically also marked by low agreeableness, which in turn is commonly linked to populism, especially populist voting (Galais and Rico 2021). Second, research around Nai (Nai and Maier 2018; Nai and Martínez i Coma 2019) shows that populist politicians score comparatively high on Machiavellianism, narcissism, and psychopathy. Following the congruency theory of political preference (Caprara and Zimbardo 2004), voters select politicians and parties projecting personalities that match their own (Bakker, Rooduijn, and Schumacher 2016). Empirically supporting such a similarity-liking effect, Hart, Richardson, and Tortoriello (2018) show that voters scoring high on dark traits are more attracted to politicians with dark personalities than voters with less socially aversive traits (see also Bakker, Rooduijn, and Schumacher 2016). What is more, Nai (2022) finds that populist voters are significantly more likely to appreciate candidates who are disagreeable and score high on the Dark Triad. Although one must clearly distinguish populist attitudes from populist voting, the two are obviously related as populist voters can be considered most likely to hold populist attitudes (Pruysers 2020, 6).

However, while the above arguments would lead us to expect that (all) the Dark Triad personality traits and populist attitudes are positively related, both theoretical arguments and existing empirical evidence let us suspect that this relationship is more nuanced. As generally shown by previous research, each member of the dark triad has its unique social perceptions, and the antecedents and consequences of the three traits differ (Jonason et al. 2015, 103), which is also true regarding

political outcomes (e.g. Anderson and Cheers 2018; Chen, Pruysers, and Blais 2021; Rogoza, Marchlewska, and Szczepa 2022). However, the Dark Triad traits might not only vary in their association with populist attitudes, each of them might also be differently connected to the three subdimensions which jointly constitute the populist mindset. To the best of our knowledge, there are only two studies which examine the relationship between both general and dark personality traits and populist attitudes: Pruysers (2020) in Canada and Galais and Rico (2021) in Spain. Both regress an additive populism score on either the Dark Triad (Pruysers 2020) or the Dark Triad and the Big Five (Galais and Rico 2021), while only Galais and Rico (2021) additionally scrutinize their relationships with the people-centrist and anti-elitist subdimensions. Although the two studies await with very different conclusions about the role played by the Dark Triad, both somehow challenge the bad reputation of populists' character, which is widely believed to be dark colored (Galais and Rico 2021). Since research on the darker personality aspects of populist citizens is still that underdeveloped, we refrain from formulating concrete hypotheses in the following. Instead, we limit ourselves to theoretical arguments raised by the relevant research and supplement them with our own theoretical considerations and the few empirical findings available. As a consequence, for many of the relationships under study, we present ambiguous, often even competing expectations, making our endeavor rather explorative.

Starting with Machiavellianism, one could argue that the typically highly cynical Machiavellians are prone to populist attitudes which "reflect a cynical stance towards politicians and established elites as well as political institutions and their functioning" (Papaioannou, Pantazi, and van Prooijen 2023, 160). However, at least some aspects of populist attitudes seem to rather not fit this trait. Individuals scoring high on Machiavellianism are said to distrust others and to deceive and disregard them to maximize their self-interests (Hodson, Hogg, and MacInnis 2009, 686). This makes it rather unlikely that such individuals are attracted by the people-centric narrative of populism. Yet, this tendency could translate into a general distrust of the elites making anti-elitism an attractive position (Galais and Rico 2021, 3). On the other hand, Machiavellians might, due to a perceived similarity, even sympathize with elites accused of ruthlessly realizing their own (and not the people's) interests. Given that they show immoral thinking (Rauthmann and Kolar 2012, 884), one could also expect that people scoring high on Machiavellianism do not perceive politics and society in moral terms and accordingly do not have a Manichean cosmology. However, Pruysers (2020, 6) argues that this trait might not be as political as is often assumed and thus be unrelated to political orientation in general and populist attitudes in particular. This is also what he finds for the Canadian case, while Galais and Rico (2021) report lower levels of populist attitudes, people centrism, and, to their surprise, anti-elitism, among Machiavellians in Spain. Overall, there are

theoretical arguments that suggest a positive relationship between Machiavellianism and populism while previous research seems to suggest otherwise, leaving us with conflicting expectations.

For narcissism, a negative relationship with populist attitudes in general is reported by Pruysers (2020), but no systematic association was found by Galais and Rico (2021). Narcissists are excessively self-loving, highly self-centered and see themselves as superior to others (Hodson, Hogg, and MacInnis 2009, 686). Intuitively, these characteristics should not match the idea of being part of the ordinary people, understood as a virtuous and homogenous entity (Pruysers 2020). A different view is taken by Galais and Rico (2021, 3), who argue that people scoring high on narcissism should defend people centrism because their strong sense of entitlement demands a fundamental role in politics (see also Pruysers, Blais, and Chen 2019, 100). What is more, maintaining a grandiose self-image, narcissists might present themselves as extraordinarily communal (Rogoza, Marchlewska, and Szczepa 2022, 2). Indeed, Galais and Rico (2021) find a significant and positive relationship between narcissism and people centrism in Spain. Additionally, as far as they do not perceive themselves as being part of it, feelings of superiority could lead narcissists to discredit the political elite as incapable and incompetent, abusing their authority (cf. Galais and Rico 2021). However, narcissism has been found to relate positively to respecting authorities within hierarchical relationships (Mededovic and Petrovic 2016), which is why also a negative relationship with anti-elitism is conceivable. Galais and Rico's (2021) null-findings for this relationship do not give priority to either line of reasoning. Regarding Manicheanism as the last subdimension of populism, one might argue that since narcissists are highly convinced of themselves and their opinions, and have a strong need to be right, they should be prone to Manichean thinking, at least in the way that they have rigid stances on who and what is right or wrong, good or bad (Filsinger 2022, 17).

Finally, people scoring high on psychopathy, who are typically lacking empathy, are anti-social and generally negative towards others (Hodson, Hogg, and MacInnis 2009, 686), should neither applaud the people nor the elites, which is why one could expect a negative relationship with people centrism and a positive one with anti-elitism (Galais and Rico 2021, 3). Regarding people centrism, this contention is empirically supported by Galais and Rico (2021), who, however find lower levels of anti-elitism among individuals with pronounced psychopathic traits. Possibly, the way how the elite and its behavior is depicted in the (Spanish) populist discourse awakens feelings of similarity and thus of sympathy among citizens that are manipulative, impulsive, and remorseless. Looking at populist attitudes generally, Galais and Rico (2021) find they are associated with lower psychopathy. However, no such systematic relationship shows up in the Canadian data (Pruysers 2020). Regarding Manicheanism, previous research shows that people scoring high on psychopathy

are morally rather insensitive: for example, psychopathy is negatively related to all moral values captured by the so-called "moral foundations" (Jonason et al. 2015) and to higher stages of moral development, which include a belief in the existence of ethical and "right vs. wrong" standards (Campbell et al. 2008). This might make individuals scoring high on this trait less likely to see the world as good vs. bad. Conversely, their generally negative attitudes towards others might prompt them to see other opinions as bad for themselves and society as a whole. What is more, Stathi et al. (2021, 535) find that (primary) psychopathy associates positively with right-wing authoritarianism, of which a dualistic worldview (bad people threatening good people) is an integral part (Duckitt 2001). This line of reasoning would imply a positive relationship between psychopathy and Manicheanism.

In sum, it is anything but clear yet if and how the Dark Triad of personality relates to populist attitudes and its subdimensions. As shown above, from a conceptual point of view, different and partly conflicting arguments can be raised not only regarding the association between the Dark Triad traits and populist attitudes in general, but also on how they relate to populism's subdimensions separately. While conflicting theoretical expectations might lead us to rely on previous empirical research, to the best of our knowledge, the empirical evidence so far is limited to two studies that both challenge the bad reputation of populists' personalities but await with very different conclusions regarding the role played by dark personality traits. The scarce and inconclusive existing evidence is of little help when it comes to assessing and weighing up different and sometimes competing theoretical arguments. We are thus left with competing expectations regarding the relationship between the Dark Triad and populist attitudes. In this vein, our discussion of potentially contradicting relationships will be put to an empirical test in order to help add another piece to the puzzle and potentially aid in further theory-building.

3.3. Data and Method

In order to empirically scrutinize the relationships between both general and dark personality traits and populist attitudes across different contexts, we make use of original survey data collected in spring 2020 in six European countries: France, Germany, Italy, Switzerland, Spain, and the United Kingdom.[2] Given the different strength, shape, and historical background of populism in these countries hinted at in the introduction, they offer useful variation regarding our dependent variable

[2] The six countries were selected in the context of a larger research project on the political-psychological consequences of the Covid-19 pandemic since they were among the most affected countries in Europe at the onset of the pandemic. However, the data collected allows to investigate research questions on other topics as well. Including measures of individual pandemic threat exposure does not alter our main conclusions.

(see Filsinger 2022). What is more, previous research on the relevance of personality in the political sphere shows that relationships likely differ between countries, which is why comparative research on personality traits and populist attitudes is necessary (cf. Fatke 2017; Federico and Malka 2018).

The approximately 1,000 respondents who completed the survey in each country were compensated by a small financial contribution and were recruited through Qualtrics access panels. Quota sampling in terms of age, gender, and education (for Switzerland also language) was used in order to obtain high representativeness of the samples and thus to allow broader conclusions for the respective populations. A detailed description of the survey and descriptive statistics can be found in the online appendix (A1 and A2).

Our primary independent variables of interest are the dark personality traits as captured by the Dark Triad. To measure the Dark Triad, we use a slightly adapted and shortened version of the Short Dark Triad (SD3) (Jones and Paulhus 2014). As Galais and Rico (2021), we measure Machiavellianism, narcissism, and psychopathy with two items each (see online appendix, A3). The selected items should reflect all three subscales and be distinguished by the highest possible factor loadings on the respective dimensions as well as negligible cross-loadings as presented by Jones and Paulhus (2014) and Persson et al. (2019). We calculate the arithmetic mean of the related items for each of the dark traits. In order to further complement the still very inconclusive empirical evidence on the associations between the Big Five and populist attitudes and to consider (the net effects of) both general and dark personality traits, we also include arithmetic means for the Big Five, measured via the widespread Ten-Item Personality Inventory (TIPI, see A3 in the online appendix) (Gosling, Rentfrow, and Swann 2003). With the TIPI and the shortened SD3, we use two brief, efficiently administrable personality scales, an advantage that comes at the cost of limited nuance in measurement and the need to rest on a higher-order trait level, overlooking subordinate trait facets (cf. Bakker and Lelkes 2018). This is a shortcoming that needs to be acknowledged and accommodated in future research. We return to this point in the discussion. Irrespective of the shortcomings, such short personality measures enjoy high popularity within and beyond psychological research, with the TIPI, for example, performing well in various validity tests (Ehrhart et al. 2009; Nunes et al. 2018). What is more, we use similar (dark) personality scales – that performed well – as previous studies (e.g., Galais and Rico 2021), making our findings more comparable.

To empirically measure populist attitudes in a theoretically sound way, we take into account that populism is both a multidimensional and a non-compensatory concept. Following the idea that being populist requires individuals to "[…] exhibit anti-elitist orientations *and* a Manichean outlook *and* support popular sovereignty" (Wuttke, Schimpf, and Schoen 2020, 358, italics in original), we

follow a methodological approach that accounts for this non-compensatory nature (Filsinger 2022; Mohrenberg, Huber, and Freyburg 2021). To capture each subdimension of populism, we sum up the three corresponding items listed in table 1, which are chosen from previous research and combine items of different populism scales to benefit from their different advantages (Filsinger 2022).[3] Cronbach's alpha as a measure of internal consistency of the subdimensions are reported in the last column of table 1. That the Cronbach's alphas are relatively low is most likely due to the fact that the respective items are designed to grasp different aspects of the relatively broad subdimensions. This is an unfortunate trade-off for many social science constructs given the limited space in surveys. Nevertheless, based on previous research, we consider our items as appropriate measures for populist attitudes. The correlations between the subdimensions support our idea of a non-compensatory approach as they are relatively weak, and in the case of people centrism and Manicheanism even slightly negative (see online appendix, A4). Yet, as pointed out by Wuttke et al. (2020), populism is agnostic about correlations between the subdimensions. After summing up the respective subdimensions, we take the geometric mean of the three to obtain a combined populism scale which is finally rescaled to range from 0 to 1 to facilitate interpretation (Mohrenberg, Huber, and Freyburg 2021). This means that individuals scoring 0 on either subdimension also score 0 on the overall scale. In addition to this approach, we also re-estimate our models with an arithmetic mean. Previewing our results, we see that both approaches are mainly in line with each other. A look at the descriptive statistics shows that populist attitudes are relatively widespread across the six countries with an overall mean of 0.49 on scale from 0 to 1. Yet, there is also considerable variation across countries with France and Spain having a mean of 0.53 at the upper end of the distribution and Switzerland with a mean of 0.43 at the lower end.

In our models, we include the same controls as Galais and Rico (2021) in their study. Accordingly, the relationships between personality traits and populist attitudes are tested holding constant the respondents' age, gender, education, and ideological left-right self-placement (11-point measure). The last is squared in order to account for extremity.

[3] Not in all accounts of populism, Manicheanism is used as a part of the concept. Some scholars focus on a less stringent antagonism that zooms in on the conflict between the people and the elite (Hobolt and Tilley 2016, Schulz et al. 2018). However, we follow Castanho Silva et al. (2018) to include Manicheanism. This is because populism has an inherent tendency to paint political and societal conflict in an antagonistic way, pitting not only people and elite against each other but also different groups of people as well as making politics not about differences of opinion but a question of right and wrong (Castanho Silva et al. 2020).

Table 1: Measurement of Populist Attitudes

Items	Dimension	Mean	Cronbach's alpha
"The will of the people should be the highest principle in this country's politics." (POP 1)	people centrism	2.97	
"Politicians don't have to spend time among ordinary people to do a good job." (POP 2 – R)	people centrism	2.52	.32
"The differences between ordinary people and the ruling elite are much greater than the differences between ordinary people." (POP 3)	people centrism	2.71	
"I would rather be represented by a citizen than by a specialized politician." (POP 4)	anti-elitism	2.32	
"Government officials use their power to try to improve people's lives." (POP 5 - R)	anti-elitism	2.04	.56
"The particular interests of the political class negatively affect the welfare of the people." (POP 6)	anti-elitism	3.70	
"The people I disagree with politically are not evil." (POP 7 – R)	Manicheanism	1.22	
"You can tell if a person is good or bad if you know their politics." (POP 8)	Manicheanism	1.43	.50
"The people I disagree with politically are just misinformed." (POP 9)	Manicheanism	1.74	

Notes: Items adjusted from different scales (Akkerman, Mudde, and Zaslove 2014; Castanho Silva et al. 2018; Van Hauwaert, Schimpf, and Azevedo 2020). R= Reverse coded statements. Items range from 0 (strongly disagree) to 4 (strongly agree). Means and Cronbach's alpha are based on the pooled sample.

In a first series of models, we regress populist attitudes on both the Big Five and the Dark Triad personality traits as well as the control variables outlined above.[4] We use OLS-regressions with country-fixed effects and region clustered standard errors to mitigate bias due to potential non-independence of observations exposed to similar environmental conditions (e.g. in terms of the economic context, political institutions, or parties).[5] We provide coefficients for the full sample, but also present coefficients for each country separately. The same strategy is then employed to

[4] Regarding potential overlaps between the personality traits, the highest correlations are found for extraversion and narcissism (0.35), conscientiousness and agreeableness (0.37), and conscientiousness and neuroticism (-0.34). As Galais and Rico (2021), we do not consider these correlations high enough to justify an exclusion of any of these variables nor does it cause multicollinearity problems. Excluding the Big Five from the analyses does not alter our main conclusions.

[5] In order to cluster at the level of the highest politically meaningful subdivision in each country, we refer to different stages of the European NUTS-standard: NUTS1 in Germany, France, and the United Kingdom, NUTS2 in Italy and Spain, and NUTS3 in Switzerland. This allows us to account for specific political, economic, and social circumstances on a regional level. For example, in Germany, certain Bundesländer such as Saxony have particularly high level of populist support.

model the relationships between personality traits and the three subdimensions of populism. Even though we clearly understand populist attitudes as a non-compensatory combination of people centrism, anti-elitism, and Manicheanism, we believe this somewhat more fine-grained analysis is still worthwhile by being able to reveal potentially divergent associations between different aspects of personality and particular components of the populist mindset (see Filsinger, Hofstetter, and Freitag 2023; Galais and Rico 2021). Given that political actors do not always emphasize all three elements of populism equally, our analyses of the subdimensions potentially can help to shed light on why certain individuals are attracted to certain populist messages and policies but not to others.

3.4. Empirical Results

We start our analyses with a pooled sample analysis where we regress populist attitudes on the Dark Triad, the Big Five, and the control variables. Figure 1 shows the coefficients for our main variables of interest, the Dark Triad. We find significant coefficients for two dimensions. First, higher levels of Machiavellianism are associated with higher levels of populist attitudes. Compared to those with the highest level, people with the lowest level of Machiavellianism have around a quarter of a standard deviation lower level of populist attitudes (0.46 compared to 0.5). Second, psychopathy also displays a positive and significant coefficient that is almost double the size, revealing that people with psychopathic personality traits have higher levels of populist attitudes (0.46 for the least psychopathic compared to 0.53 for the most psychopathic). Conversely, narcissism does not have a significant relationship with populist attitudes.

One of the aims of our study is to see whether (dark) personality traits relate the same way to populist attitudes across the different countries in our sample. Turning to the country-specific coefficients, our analyses reveal considerable variation in the relationship between the Dark Triad and populist attitudes. Starting with Machiavellianism, we find that it relates positively and significantly to populist attitudes in three out of the six countries, namely in Germany, Switzerland, and the UK. Psychopathy displays five positive and significant coefficients, whereby only in France populist attitudes are unrelated to this socially aversive trait. Narcissism only displays one significant and positive coefficient in Italy (at the 10% level) but is not systematically related to populist attitudes in the other countries. Overall, we see that there is considerable cross-country variation when it comes to the relationship between the Dark Triad and populist attitudes. While the pooled sample coefficients for Machiavellianism and psychopathy are significant, these findings do not replicate in every country. This might hint at contextual factors that might shape how attractive populism is for certain personalities. We will return to this in the discussion.

When using an arithmetic index as a different aggregation technique for populist attitudes, our results remain largely the same so that overall, this robustness check is in line with our initial findings (see online appendix, A6 and A7).[6]

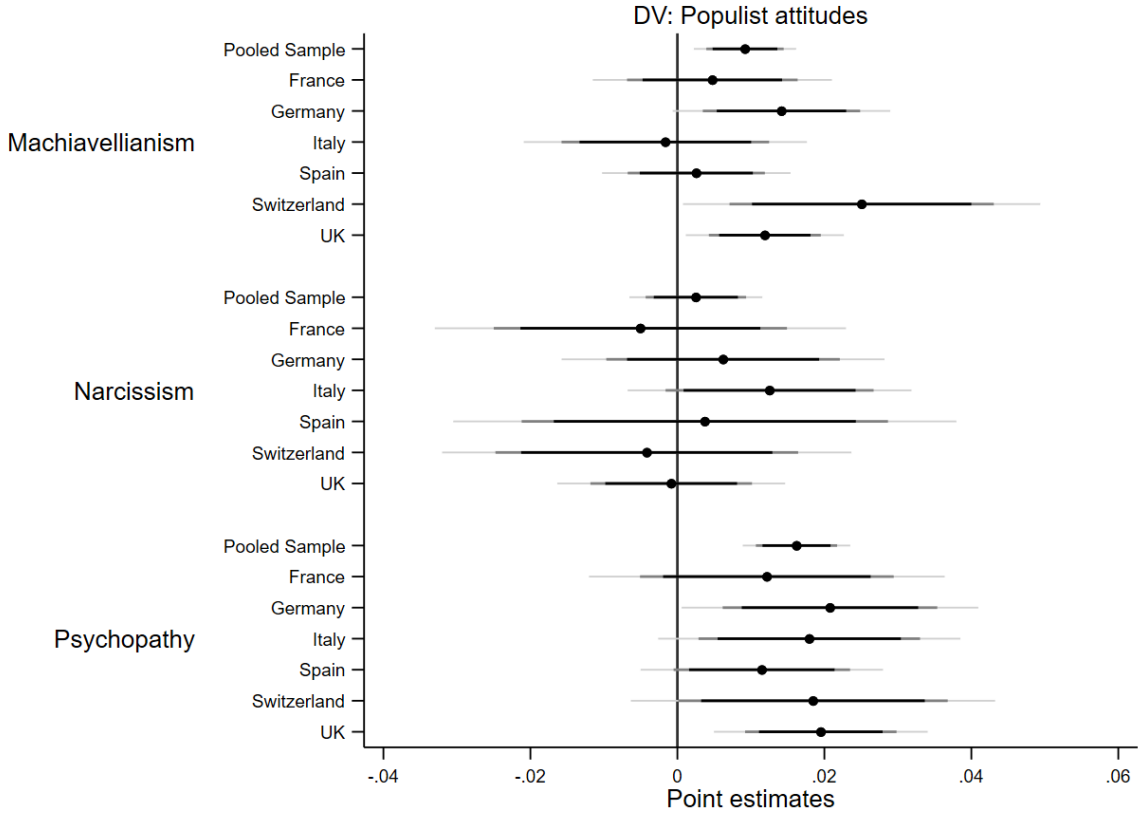


Figure 1: Coefficient Plot for the Country-wise Relationships between the Dark Triad Traits and Populist Attitudes

Notes: Estimates are based on the models in table A5 in the online appendix. Displayed are coefficients of the personality traits with 99% (light grey bars), 95% (dark grey bars), and 90% (black bars) confidence intervals. Source: original survey data.

Since we also include the Big Five in our models, it is worthwhile to discuss their association with populist attitudes in a little detail (full results are presented in the online appendix, A11). In general, our findings for the Big Five echo the mixed evidence from previous research. We find no significant relationship between extraversion, openness to experience and populist attitudes in the pooled sample or in any of the six countries. For the other three personality traits, we do find significant coefficients. For the pooled sample and half of the countries under study (France, Italy,

[6] Only three of the 21 coefficients are somewhat different: The coefficient for Machiavellianism is positive and significant in Spain and psychopathy turns insignificant in Spain and Switzerland when using the arithmetic mean.

and the UK), these imply that people who are more agreeable have lower levels of populist attitudes. We find a similar negative relationship for conscientiousness and populist attitudes, although the coefficient is only significant in the pooled sample, Germany, and the UK. Lastly, for neuroticism, we find a positive and significant coefficient in the pooled sample, Switzerland, and the UK. The control variables are mainly in line with the literature: People with higher education express lower levels of populist attitudes while people with extreme right or left political ideology have higher levels of populist attitudes (see online appendix, A5).

Another aim of our study is to see whether the dark personality traits relate the same way to the people centrism, anti-elitism, and Manicheanism (across countries). To do so, we re-estimated our models with the dependent variable being one of the three subdimension scores individually. Figure 2 shows the results for the relationships between the Dark Triad and people centrism. Starting with Machiavellianism, we find a positive and significant coefficient in the pooled sample as well as in Germany, Spain, and the UK, implying that people who score high on this dark personality trait are more likely to think of the people as a homogeneous and glorified group that articulates a common will, at least in these three countries. For narcissism, we find no overall significant coefficient, but a negative relationship in Spain. Lastly, while psychopathy showed a positive coefficient for populist attitudes in general, we find the reverse relationship for people centrism in the pooled sample as well as in France, Italy, Spain, and the UK: people who score high on psychopathy are less supportive of the idea that there is a homogeneous group of the people which should guide all political decisions. Although one might generally expect that such individuals are attracted to the confrontative style of populism, this might not be true for people centrism as this form follows a collectivist idea of decision-making potentially unattractive for a psychopathic personality type. This finding is also in line with the results from Galais and Rico (2021). Next, we look at the dark personality correlates of anti-elitism. Starting with Machiavellianism, we find a significant positive relationship in the pooled sample, Spain, and the UK. It seems that in these countries, a personality trait associated with egocentric and manipulating behavior seems to be in line with a general aversion to the elites. Narcissism shows a negative and significant coefficient in the pooled sample, France, Germany, and Spain, which is in line with the findings by Galais and Rico (2021). Lastly, for psychopathy, we find a significant negative relationship with anti-elitist stances, at least in Italy and Spain.

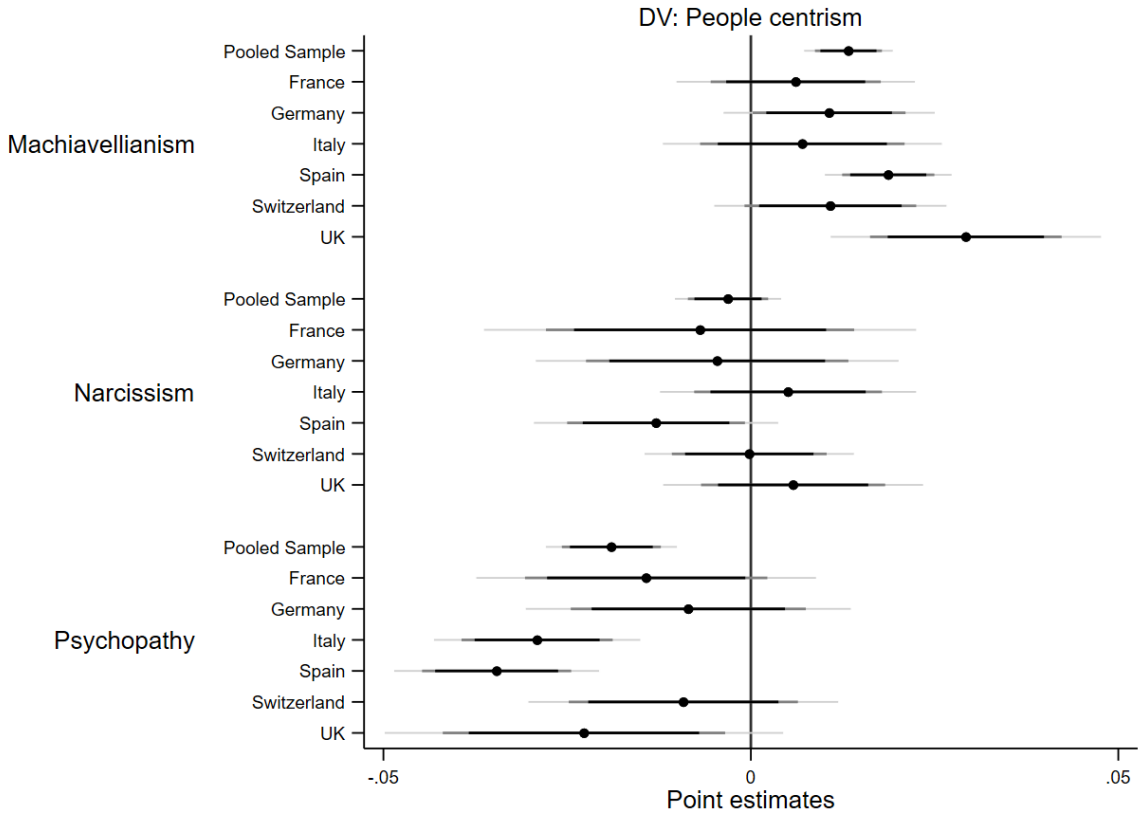


Figure 2: Coefficient Plot for the Country-wise Relationships between the Dark Triad Traits and People Centrism

Notes: Estimates are based on the models in table A8 in the online appendix. Displayed are coefficients of the personality traits with 99% (light grey bars), 95% (dark grey bars), and 90% (black bars) confidence intervals. Source: original survey data.

Lastly and opposed to previous research, we also look at Manicheanism as a third subdimension of populist attitudes. Here, we do not find a significant coefficient for Machiavellianism in any country nor in the pooled sample. For narcissism, we find positive and significant coefficients in the pooled sample, Germany, and Italy. The most consistent findings are for psychopathy. In the pooled sample and across all six countries, people scoring high on psychopathy are more likely to have a dualistic, Manichean perception of politics and society. Overall, we find a relatively inconsistent picture regarding the relationships between the Dark Triad and populist attitudes and its subdimensions. Psychopathy emerges as the most systematic dark personality correlate of populist attitudes and its subdimensions with 20 out of 28 coefficients reaching statistical significance, which however vary in their direction (positive for populist attitudes and Manicheanism, negative for people centrism). Noteworthy is also Machiavellianism with 12 significant coefficients out of 28 possible coefficients, nearly all of them indicating positive relationships. Still, in general, most relationships seem to be differentiated and context-dependent

rather than universal. This calls for future research into the contextual effects of different personality foundations of populist and other political attitudes.

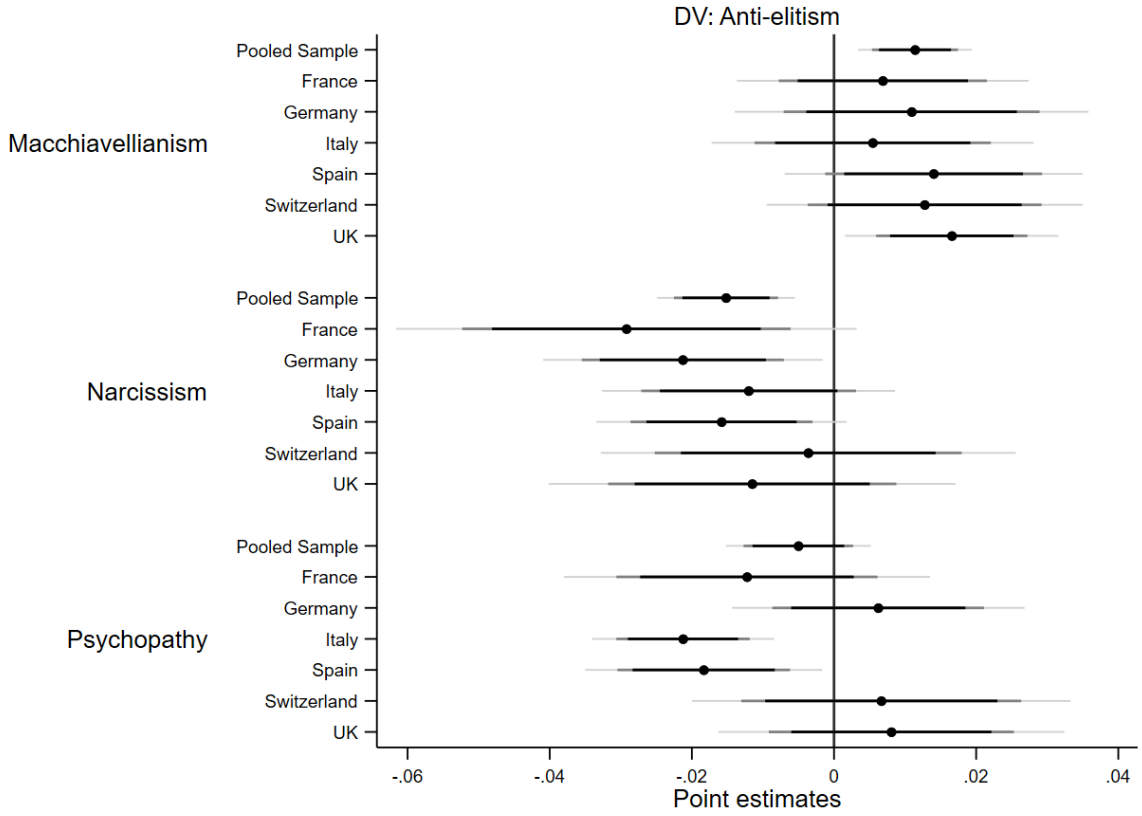


Figure 3: Coefficient Plot for the Country-wise Relationships between the Dark Triad Traits and Anti-elitism

Notes: Estimates are based on the models in table A9 in the online appendix. Displayed are coefficients of the personality traits with 99% (light grey bars), 95% (dark grey bars), and 90% (black bars) confidence intervals. Source: original survey data.

We close the results section with a short note on the role played by the Big Five (for a detailed account, see online appendix A11-A14): Our results suggest that conscientiousness and agreeableness in particular might be relevant in understanding the populist personality, while the three remaining traits only occasionally gain statistical significance. At least among half of the countries studied, agreeableness is negatively related to populist attitudes and their Manichean component. Conscientiousness consistently prevents such a dualistic worldview, and in a few countries also populist attitudes in general. Contrary, people centrism is higher among conscientious individuals in nearly all countries. Accordingly, as for the Dark Triad, we find some evidence that specific traits relate differently to different components of populist attitudes, which might help explain previous inconclusive findings on the role played by personality for populism.

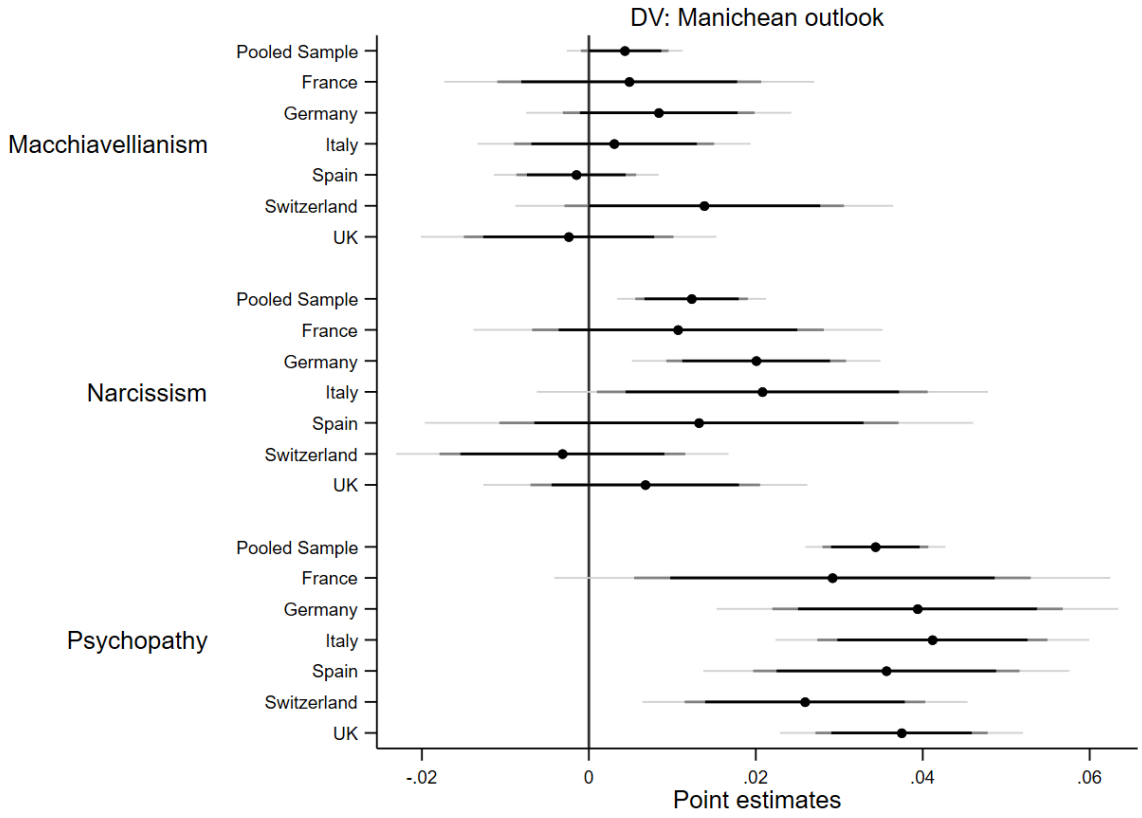


Figure 4: Coefficient Plot for the Country-wise Relationship between the Dark Triad Traits and Manicheanism

Notes: Estimates are based on the models in table A10 in the online appendix. Displayed are coefficients of the personality traits with 99% (light grey bars), 95% (dark grey bars), and 90% (black bars) confidence intervals. Source: original survey data.

3.5. Discussion and Conclusion

In this study, we extend the relatively new line of research that investigates the role personality traits play in shaping populist attitudes. While most research featured general personality traits, we focus on the role of darker nuances of personality about which even less is known. This is surprising as populism is generally described in negative terms as it pits distinct groups against each other resulting in a confrontative style of politics. Furthermore, the Dark Triad traits of Machiavellianism, narcissism, and psychopathy are believed to have distinct relevance to the domain of politics (Hart, Richardson, and Tortoriello 2018, 59) and have been shown to characterize populist leaders (e.g., Nai and Maier 2018; Nai and Martínez i Coma 2019).

We extend the few existing empirical studies that question the bad reputation of populists' character by investigating how the Dark Triad personality traits relate to populist attitudes and their subdimensions in six European countries. Our analyses of original survey data in 2020 reveal that

the populists' personality profile is highly differentiated and context-dependent. Yet, what seems to emerge is that psychopathy is a relatively consistent trait of populist individuals. Interestingly, people scoring high on psychopathy tend to be less people-centric, but they hold comparatively stronger populist attitudes in general and are in particular characterized by a pronounced Manichean outlook on society and politics. For Machiavellianism, regardless the dependent measure, we find almost exclusively positive coefficients, which however do not always gain statistical significance. Narcissism does not seem to be very predictive, neither for populist attitudes nor their specific components. Regarding the Big Five, our analyses suggest that conscientiousness and agreeableness in particular might be relevant in understanding the populist personality. While both traits tend to prevent populist attitudes in general and their Manichean component in particular, conscientiousness consistently relates positively to people centrism.

In essence, our study indicates that it is difficult to speak of a consistent personality profile of populist individuals, echoing the inconclusiveness of previous research with regard to the Dark Triad, the Big Five, and populist attitudes. One tentative explanation for these findings are the respective country contexts. In this vein, it seems that the supply side has a crucial role to play when it comes to whether certain personalities are attracted to populism and its ideas. The way in which populism manifests itself in the political system varies with ideology, institutional, historical, and cultural factors, which seem to crucially condition the way personality affects populist stances. While our data does not allow an empirical illumination of county differences with multilevel analyses, there are potential supply side effects to be found here that can inform future research (cf. Federico & Malka, 2018). For example, our findings reveal that populist attitudes are driven by Machiavellianism only in Germany, Switzerland, and the UK as opposed to the three Southern European countries. Looking at the supply side, one potential explanation is that in these countries, right-wing populism is the dominant form of populism. As opposed to left-wing populism or valence populism, right-wing populism is more exclusionary, relating to Machiavellianism's exclusive focus on the accomplishment of own goals (Chen, Pruysers, and Blais 2021; Peterson and Palmer 2021). Similarly, radical right-wing parties are increasingly cynical about the political system as well as focused on gaining power to overthrow the status quo. While France, Italy, and Spain also have strong radical right-wing populist parties, they also have more inclusive populist movements such as "Podemos" or "La Fance Insoumise" that potentially act as counterweight. Irrespective, the interaction of context and personality traits is a promising avenue for future studies.

Following from this, our study has several limitations that need to be addressed. Most obviously, while moving beyond previous single case studies in scrutinizing the relationship between (dark)

personality traits and populist attitudes and proving contextual variation is an indispensable first step, our inconclusive findings and tentative explanations call for future cross-context research. Such research should develop and test specific arguments regarding the contingent effects of personality traits across contexts, also beyond our selection of Western and Southern European democracies. It could for example capitalize on the supplementation of individual-level survey data with contextual data on party platforms, media discourse or political communication to see whether these factors have a role to play in the relationship between personality and populism. Hierarchical analyses that take contextual factors seriously and allow for empirical investigation into potential cross-level interactions thus represent a natural step forward.

Additionally, similar to previous studies, we rely on short scales to capture personality traits. While this allows for more comparability, these measures suffer in terms of conceptual breadth and empirical depth. This implies that some of our findings could be due to the lack of nuance in measuring a certain trait. Concerning Machiavellianism, for example, our items are more focused on cynical and distrusting aspects of this trait, rather than the power-driven ambition inherent in it (see Galais and Rico 2021).. In this vein, more comprehensive scales that combine the advantages of different items would certainly be desirable regarding psychometric quality, conceptual breadth as well as empirical versatility. They would also allow to illuminate differentiated effects of individual traits, i.e., at their facet level. Lastly, as our analyses are based on cross-sectional (online) survey data, the issue of causality has to be addressed. Despite the genetic anchoring of personality traits and their high stability over the life course, we cannot rule out endogeneity issues and thus consciously refrain from making causal claims. More precisely, we encourage the use of more sophisticated research designs able to empirically address causal questions. Moreover, although online survey panels are popular, they come with well-known drawbacks.

Despite these caveats, we are confident that the present study is a meaningful contribution to the still very sparse and inconclusive literature on the (dark) personality correlates of populist attitudes and provides important implications for future research in the field. Our study investigates the dark personality foundations of citizens holding populist attitudes, thereby examining whether their personality profile really matches the dark portrayal of populism, populist politics, and politicians. By using cross-country evidence, we provide a nuanced picture showing that the relationships between dark personality traits and populist attitudes are highly context-dependent, potentially in parts due to supply side factors such as the dominant ideological nature of populism. In this regard, our study provides a stepping-stone for a more rigorous testing of the contingent effects of personality on populist attitudes.

The question of whether populist citizens have a distinctively dark personality profile is not only of crucial importance for research on politics, but also bears electoral implications. If one aims to tackle the populist challenge to liberal democracy, it is crucial to know what populist citizens are, feel, and think like. Put differently, in order to reach populists socially and politically, scholars, practitioners, and politicians alike need to know what characterizes them psychologically. From the perspective of electoral politics, distinctive psychological profiles matter for the messages that parties can use to target voters, making this study also relevant for those that are more explicitly concerned with voting behavior as well as party strategy.

Despite the non-universality of most relationships, our findings show that certain personalities are generally more open or aversive towards populism. Somewhat challenging Galais and Rico's (2021) notion of an unjustified bad reputation of the populist character, at least psychopathy and Machiavellianism seem to be darker aspects of personality conducive to the attitudinal syndrome of populism, though not for all its subdimensions individually. Agreeableness and conscientiousness, on the other hand, rather tend to prevent populist attitudes in general, with the latter however consistently being related to higher levels of people centrism.

3.6. References

Ackermann, Kathrin, Eros Zampieri, and Markus Freitag. 2018. "Personality and Voting for a Right-Wing Populist Party – Evidence from Switzerland." *Swiss Political Science Review* 24(4): 545–64.

Aichholzer, Julian, and Martina Zandonella. 2016. "Psychological Bases of Support for Radical Right Parties." *Personality and Individual Differences* 96: 185–90.

Akkerman, Agnes, Cas Mudde, and Andrej Zaslove. 2014. "How Populist Are the People? Measuring Populist Attitudes in Voters." *Comparative Political Studies* 47(9): 1324–53.

Anderson, Joel, and Christopher Cheers. 2018. "Does the Dark Triad Predict Prejudice?: The Role of Machiavellianism, Psychopathy, and Narcissism in Explaining Negativity Toward Asylum Seekers." *Australian Psychologist* 53(3): 271–81.

Ashton, Michael C., and Kibeom Lee. 2008. "The HEXACO Model of Personality Structure." *Social and Personality Psychology Compass* 2(5): 1952–62.

Bakker, Bert N., and Yphtach Lelkes. 2018. "Selling Ourselves Short? How Abbreviated Measures of Personality Change the Way We Think about Personality and Politics." *Journal of Politics* 80(4): 1311–25.

Bakker, Bert N., Matthijs Rooduijn, and Gijs Schumacher. 2016. "The Psychological Roots of Populist Voting: Evidence from the United States, the Netherlands and Germany." *European Journal of Political Research* 55(2): 302–20.

Bakker, Bert N., Gijs Schumacher, and Matthijs Rooduijn. 2021. "The Populist Appeal: Personality and Antiestablishment Communication." *Journal of Politics* 83(2): 589–601.

Campbell, Jennifer et al. 2008. "A Behavioral Genetic Study of the Dark Triad of Personality and Moral Development." *Twin Research and Human Genetics Volume* 12(2): 132–36.

Caprara, Gian V., and Michele Vecchione. 2013. "Personality Approaches to Political Behavior." In *Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, and Jack S. Levy. Oxford: Oxford University Press, 23–35.

Caprara, Gian V., and Philip G. Zimbardo. 2004. "Personalizing Politics: A Congruency Model of Political Preference." *American Psychologist* 59(7): 581–94.

Castanho Silva, Bruno et al. 2018. "Public Opinion Surveys: A New Scale." In *The Ideational Approach to Populism: Concept, Theory, and Analysis*, eds. Kirk A. Hawkins, Ryan E. Carlin, Levente Littvay, and Cristóbal Rovira Kaltwasser. Abingdon: Routledge, 150–78.

Chen, Philip, Scott Pruysers, and Julie Blais. 2021. "The Dark Side of Politics: Participation and the Dark Triad." *Political Studies* 69(3): 577–601.

Duckitt, John. 2001. "A Dual-Process Cognitive-Motivational Theory of Ideology and Prejudice." *Advances in Experimental Social Psychology* 33: 41–113.

Ehrhart, Mark G. et al. 2009. "Testing the Latent Factor Structure and Construct Validity of the Ten-Item Personality Inventory." *Personality and Individual Differences* 47(8): 900–905. http://dx.doi.org/10.1016/j.paid.2009.07.012.

Fatke, Matthias. 2017. "Personality Traits and Political Ideology: A First Global Assessment." *Political Psychology* 38(5): 881–99.

———. 2019. "The Personality of Populists: How the Big Five Traits Relate to Populist Attitudes." *Personality and Individual Differences* 139: 138–51.

Federico, Christopher M., and Ariel Malka. 2018. "The Contingent, Contextual Nature of the Relationship Between Needs for Security and Certainty and Political Preferences: Evidence and Implications." *Political Psychology* 39(Suppl. 1): 3–48.

Filsinger, Maximilian. 2022. *Populism as a Problem of Social Disintegration? A Comparative Analysis of the Socio-Integrational Underpinnings of Populism in Europe*. Dissertation. Bern: University of Bern, Faculty of Business, Economics and Social Sciences.

Filsinger, Maximilian, Nathalie Hofstetter, and Markus Freitag. 2023. "The Emotional Fabric of Populism during a Public Health Crisis: How Anger Shapes the Relationship between Pandemic Threat and Populist Attitudes." *European Political Science Review*: DOI: 10.1017/S1755773923000036.

Fortunato, David, Matthew V. Hibbing, and Jeffery J. Mondak. 2018. "The Trump Draw: Voter Personality and Support for Donald Trump in the 2016 Republican Nomination Campaign." *American Politics Research* 46(5): 785–810.

Furnham, Adrian, Steven C Richards, and Delroy L Paulhus. 2013. "The Dark Traid of Personality: A 10 Year Review." *Social and Personality Psychology Compass* 7(3): 199–216.

Furnham, Adrian, Steven Richards, Luis Rangel, and Daniel N. Jones. 2014. "Measuring Malevolence: Quantitative Issues Surrounding the Dark Triad of Personality." *Personality and Individual Differences* 67: 114–21.

Galais, Carol, and Guillem Rico. 2021. "An Unjustified Bad Reputation? The Dark Triad and Support for Populism." *Electoral Studies* 72(102357): 1–6.

Gerber, Alan S., Gregory A. Huber, David Doherty, and Conor M. Dowling. 2011. "The Big Five Personality Traits in the Political Arena." *Annual Review of Political Science* 14: 265–87.

Gidron, Noam, and Bart Bonikowski. 2013. "Varieties of Populism: Literature Review and Research Agenda." *Weatherhead Center Working Paper Series* 13(0004): 1–38.

Gosling, Samuel D., Peter J. Rentfrow, and William B. Swann. 2003. "A Very Brief Measure of the Big-Five Personality Domains." *Journal of Research in Personality* 37(6): 504–28.

Hart, William, Kyle Richardson, and Gregory K. Tortoriello. 2018. "Dark Personality Voters Find Dark Politicians More Relatable and Fit for Office." *Journal of Research in Personality* 75: 59–68.

Van Hauwaert, Steven M., Christian H. Schimpf, and Flavio Azevedo. 2020. "The Measurement of Populist Attitudes: Testing Cross-National Scales Using Item Response Theory." *Politics* 40(1): 3–21.

Hawkins, Kirk A., Madeleine Read, and Teun Pauwels. 2017. "Populism and Its Causes." In *The Oxford Handbook on Populism*, eds. Cristóbal Rovira Kaltwasser, Paul Taggart, Paulina Ochoa Espejo, and Pierre Ostiguy. Oxford: Oxford University Press, 267–86.

Hawkins, Kirk A., and Cristóbal Rovira Kaltwasser. 2017a. "The Ideational Approach to Populism." *Latin American Research Review* 52(4): 513–28.

———. 2017b. "What the (Ideational) Study of Populism Can Teach Us, and What It Can't." *Swiss Political Science Review* 23(4): 526–42.

———. 2018. "Introduction: The Ideational Approach." In *The Ideational Approach to Populism: Concept, Theory, and Analysis*, eds. Kirk A. Hawkins, Ryan E. Carlin, Levente Littvay, and Cristóbal Rovira Kaltwasser. Abingdon: Routledge, 1–24.

Hodson, Gordon, Sarah M. Hogg, and Cara C. MacInnis. 2009. "The Role of 'Dark Personalities' (Narcissism, Machiavellianism, Psychopathy), Big Five Personality Factors, and Ideology in Explaining Prejudice." *Journal of Research in Personality* 43(4): 686–90.

Jonason, Peter K. et al. 2015. "Valuing Myself over Others: The Dark Triad Traits and Moral and Social Values." *Personality and Individual Differences* 81: 102–6.

Jones, Daniel N., and Delroy L. Paulhus. 2014. "Introducing the Short Dark Triad (SD3): A Brief Measure of Dark Personality Traits." *Assessment* 21(1): 28–41.

Kenny, Paul D., and Boris Bizumic. 2020. "Is There a Populist Personality? Populist Attitudes, Personality, and Voter Preference in Australian Public Opinion." In *The Australian Conference on Personality and Individual Differences (ACPID)*, Virtual conference, December 4-5, 2020.

Koehn, Monica A., Ceylan Okan, and Peter K. Jonason. 2019. "A Primer on the Dark Triad Traits." *Australian Journal of Psychology* 71(1): 7–15.

Marcos-Marne, Hugo. 2022. "The Effects of Basic Human Values on Populist Voting. An Analysis of 13 European Democracies." *Political Behavior* 44(4): 1863–81.

McCrae, Robert R, and Paul T Costa. 2008. "The Five-Factor Theory of Personality." In *Handbook of Personality: Theory and Research*, eds. Oliver P. John, Richard W. Robins, and Lawrence A. Pervin. New York: Guilford, 159–81.

Mededovic, Janko, and Boban Petrovic. 2016. "Can There Be an Immoral Morality? Dark Personality Traits as a Predictor of Moral Foundations." *Psihologija* 49(2): 185–97.

Mohrenberg, Steffen, Robert A Huber, and Tina Freyburg. 2021. "Love at First Sight? Populist Attitudes and Support for Direct Democracy." *Party Politics* 27(3): 528–39.

Mondak, Jeffery J. et al. 2010. "Personality and Civic Engagement: An Integrative Framework for the Study of Trait Effects on Political Behavior." *American Political Science Review* 104(1): 85–110.

Mudde, Cas, and Cristóbal Rovira Kaltwasser. 2013. "Populism." In *The Oxford Handbook of Political Ideologies*, eds. Michael Freeden and Marc Stears. Oxford: Oxford University Press, 493–512.

Nai, Alessandro. 2022. "Populist Voters like Dark Politicians." *Personality and Individual Differences* 187(111412): 1–7.

Nai, Alessandro, and Jürgen Maier. 2018. "Perceived Personality and Campaign Style of Hillary Clinton and Donald Trump." *Personality and Individual Differences* 121: 80–83.

Nai, Alessandro, and Ferran Martínez i Coma. 2019. "The Personality of Populists: Provocateurs, Charismatic Leaders, or Drunken Dinner Guests?" *West European Politics* 42(7): 1337–67.

Nunes, Andreia, Teresa Limpo, César F. Lima, and São Luís Castro. 2018. "Short Scales for the Assessment of Personality Traits: Development and Validation of the Portuguese Ten-Item Personality Inventory (TIPI)." *Frontiers in Psychology* 9(461): 1–5.

Oswald, Michael, Mario Schäfer, and Elena Broda. 2022. "The New Age of Populism: Reapproaching a Diffuse Concept." In *The Palgrave Handbook of Populism*, ed. Michael Oswald. Cham: Palgrave Macmillan, 3–27.

Papaioannou, Kostas, Myrto Pantazi, and Jan Willem van Prooijen. 2023. "Unravelling the Relationship between Populism and Belief in Conspiracy Theories: The Role of Cynicism, Powerlessness and Zero-Sum Thinking." *British Journal of Psychology* 114(1): 159–75.

Paulhus, Delroy L., and Kevin M. Williams. 2002. "The Dark Triad of Personality: Narcissism, Machiavellianism, and Psychopathy." *Journal of Research in Personality* 36: 556–63.

Persson, Björn N., Petri J. Kajonius, and Danilo Garcia. 2019. "Revisiting the Structure of the Short Dark Triad." *Assessment* 26(1): 3–16.

Peterson, Rolfe Daus, and Carl L. Palmer. 2021. "The Dark Is Rising: Contrasting the Dark Triad and Light Triad on Measures of Political Ambition and Participation." *Frontiers in Political Science* 3(657750): 1–9.

Pruysers, Scott. 2020. "A Psychological Predisposition towards Populism? Evidence from Canada." *Contemporary Politics*: 1–20. doi: 10.1080/13569775.2020.1851930.

Pruysers, Scott, Julie Blais, and Phillip G. Chen. 2019. "Who Makes a Good Citizen? The Role of Personality." *Personality and Individual Difference* 146: 99–104.

Rauthmann, John F., and Gerald P. Kolar. 2012. "How 'Dark' Are the Dark Triad Traits? Examining the Perceived Darkness of Narcissism, Machiavellianism, and Psychopathy." *Personality and Individual Differences* 53(7): 884–89.

Rico, Guillem, Marc Guinjoan, and Eva Anduiza. 2017. "The Emotional Underpinnings of Populism: How Anger and Fear Affect Populist Attitudes." *Swiss Political Science Review* 23(4): 444–61.

Rogoza, Marta, Marta Marchlewska, and Dagmara Szczepa. 2022. "Why Dark Personalities Participate in Politics?" *Personality and Individual Differences* 186(111319): 1–7.

Rooduijn, Matthijs. 2019. "State of the Field: How to Study Populism and Adjacent Topics? A Plea for Both More and Less Focus." *European Journal of Political Research* 58(1): 362–72.

Rovira Kaltwasser, Cristóbal, Paul Taggart, Paulina Ochoa Espejo, and Pierre Ostiguy. 2017. "Populism: An Overview of the Concept and the State of the Art." In *The Oxford Handbook of*

Populism, eds. Cristóbal Rovira Kaltwasser, Paul Taggart, Paulina Ochoa Espejo, and Pierre Ostiguy. Oxford: Oxford University Press, 1–24.

Schimpf, Christian, and Harald Schoen. 2017. "On the Psychological Roots of Populist Voting: A Discussion of Bakker, Rooduijn, and Schumacher (2016)." *Working Paper*: 1–26.

Stathi, Sofia, Sajid Humayun, Reay Stoddart, and Isaac Demi. 2021. "Psychopathy and Prejudice: The Mediating Role of Empathy , Social Dominance Orientation and Right- - Wing Authoritarianism." *Journal of Theoretical Social Psychology* 5: 530–41.

Vasilopoulos, Pavlos, and John T. Jost. 2020. "Psychological Similarities and Dissimilarities between Left-Wing and Right-Wing Populists: Evidence from a Nationally Representative Survey in France." *Journal of Research in Personality* 88(104004): 1–11.

Wuttke, Alexander, Christian Schimpf, and Harald Schoen. 2020. "When the Whole Is Greater than the Sum of Its Parts: On the Conceptualization and Measurement of Populist Attitudes and Other Multidimensional Constructs." *American Political Science Review* 114(2): 356–74.

3.7. Online Appendix

A1: Description of the Survey

Target population	Residents aged 18 years or older in Germany, France, Italy, Switzerland, Spain and the United Kingdom
Survey mode	Online
Sample size	6,028 respondents (target sample size: 1,000 per country)
Quotas	Age, Sex, Education (for Switzerland additionally language)
Sampling	Qualtrics panel
Interview language	German, French, Italian, Spanish, English
Date of Interviews	17 April 2020 – 08 May 2020
Response rate	RR5/6: Completion Rate = 8.71 (The American Association for Public Opinion Research (AAPOR) (2016))
Institute	The survey was carried out by Qualtrics

A2: Summary Statistics

	N	Mean	SD	Min	Max
Populist attitudes	5,871	.49	.17	0	1
People centrism	5,871	.69	.17	.08	1
Anti-elitism	5,871	.59	.19	0	1
Manichean outlook	5,871	.36	.19	0	1
Machiavellianism	5,871	3.5	.88	1	5
Narcissism	5,871	2.84	.79	1	5
Psychopathy	5,871	2.23	.78	1	5
Extraversion	5,871	2.85	.85	1	5
Agreeableness	5,871	3.63	.75	1	5
Conscientiousness	5,871	3.94	.79	1	5
Neuroticism	5,871	2.52	.9	1	5
Openness	5,871	3.42	.78	1	5
Left-right self-placement	5,871	4.88	2.35	0	10
Alter	5,871	48.61	16.53	18	88
Sex	5,871	.51	.50	0	1
Education	5,871	2.1	.78	1	3
Lower secondary and lower	1,490				
Upper, post-secondary	2,278				
Tertiary	2,103				
Observations	5,871				

A3: Question Wording for the Personality Variables

Big Five: Ten Item Personality Inventory (TIPI), Gosling et al. 2003	
Here are a number of personality traits that may or may not apply to you. Please indicate using the scale from "strongly disagree" to "strongly agree". You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other. I am ...	
… extraverted, enthusiastic	extraversion
… critical, quarrelsome	agreeableness, reverse coded
… dependable, self-disciplined	conscientiousness
… anxious, easily upset	neuroticism
… open to new experiences, complex	openness to experience
… reserved, quiet	extraversion, reverse coded
… sympathetic, warm	agreeableness
… disorganised, careless	conscientiousness, reverse coded
… calm, emotionally stable	neuroticism, reverse coded
… conventional, uncreative	openness to experience, reverse coded)
1 = strongly disagree; 2 = somewhat disagree; 3 = neither agree nor disagree; 4 = somewhat agree; 5 = strongly agree	
Dark Triad: Short Dark Triad (SD3), Jones and Paulhus 2014, slightly adapted and shortened version	
To what extent do you agree or disagree with the following statements?	
There are things you should hide from other people because they don't need to know.	Machiavellianism
People see me as a natural leader.	narcissism
It's not wise to tell your secrets.	Machiavellianism
I avoid dangerous situations.	psychopathy, reverse coded
I'll say anything to get what I want.	psychopathy
I feel embarrassed if someone compliments me.	Narcissism, reverse coded
1 = strongly disagree; 2 = somewhat disagree; 3 = neither agree nor disagree; 4 = somewhat agree; 5 = strongly agree	

A4: Correlations between Populist Subdimensions

Dimension	People centrism	Anti-elitism	Manicheanism
People centrism	1		
Anti-elitism	.43	1	
Manicheanism	-.14	.1	1

Notes: Shows Pearson's r. Source: Original survey data collected by Qualtrics (17 April 2020 – 08 May 2020).

A5: Regression Tables: Personality Traits and Populist Attitudes

	Pooled Sample	France	Germany	Italy	Spain	Switzerland	UK
DV: Populist attitudes							
Machiavellianism	0.009***	0.005	0.014*	-0.002	0.003	0.025**	0.012**
	(0.003)	(0.005)	(0.005)	(0.007)	(0.004)	(0.009)	(0.003)
Narcissism	0.003	-0.005	0.006	0.013	0.004	-0.004	-0.001
	(0.003)	(0.009)	(0.007)	(0.007)	(0.012)	(0.010)	(0.005)
Psychopathy	0.016***	0.012	0.021**	0.018*	0.011	0.018*	0.020**
	(0.003)	(0.008)	(0.007)	(0.007)	(0.006)	(0.009)	(0.005)
Extraversion	-0.001	0.012	-0.009	-0.010	0.013	-0.001	-0.001
	(0.003)	(0.006)	(0.011)	(0.007)	(0.007)	(0.010)	(0.005)
Agreeableness	-0.017***	-0.024**	0.004	-0.032**	-0.013	-0.014	-0.014*
	(0.003)	(0.007)	(0.007)	(0.009)	(0.009)	(0.009)	(0.005)
Conscientious-ness	-0.012**	-0.001	-0.033***	-0.007	0.008	-0.011	-0.019**
	(0.004)	(0.004)	(0.008)	(0.008)	(0.010)	(0.008)	(0.005)
Neuroticism	0.012***	0.007	0.011	0.008	0.003	0.019*	0.011*
	(0.003)	(0.005)	(0.007)	(0.010)	(0.003)	(0.007)	(0.005)
Openness	-0.004	-0.005	-0.003	-0.005	-0.006	-0.012	0.004
	(0.004)	(0.008)	(0.012)	(0.008)	(0.008)	(0.011)	(0.008)
Age	-0.000	-0.000	-0.000	0.001***	-0.000	0.001*	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Sex							
Male	0.004	-0.019*	0.005	0.007	0.011	0.010	0.013
	(0.004)	(0.007)	(0.013)	(0.012)	(0.008)	(0.011)	(0.009)
Education							
Upper, post-secondary	-0.010	-0.014	0.009	0.004	-0.011	-0.012	-0.059**
	(0.006)	(0.010)	(0.015)	(0.013)	(0.017)	(0.021)	(0.019)
Tertiary	-0.027***	-0.042***	-0.017	-0.005	-0.041**	-0.024	-0.040**
	(0.006)	(0.010)	(0.019)	(0.015)	(0.012)	(0.023)	(0.011)
Left-right self-placement	-0.027***	-0.026***	-0.019**	-0.022**	-0.035***	-0.016*	-0.039**
	(0.003)	(0.003)	(0.006)	(0.006)	(0.003)	(0.007)	(0.011)
Left-right self-placement (squared)	0.003***	0.002***	0.002**	0.002**	0.004***	0.002*	0.003*
	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)
Constant	0.616***	0.660***	0.521***	0.546***	0.565***	0.427***	0.657***
	(0.026)	(0.057)	(0.060)	(0.072)	(0.049)	(0.080)	(0.058)
Observations	5871	1002	993	983	986	914	993
Country FE	✓	-	-	-	-	-	-
R^2	0.097	0.076	0.077	0.080	0.062	0.066	0.141
Adjusted R^2	0.095	0.063	0.064	0.067	0.049	0.051	0.129

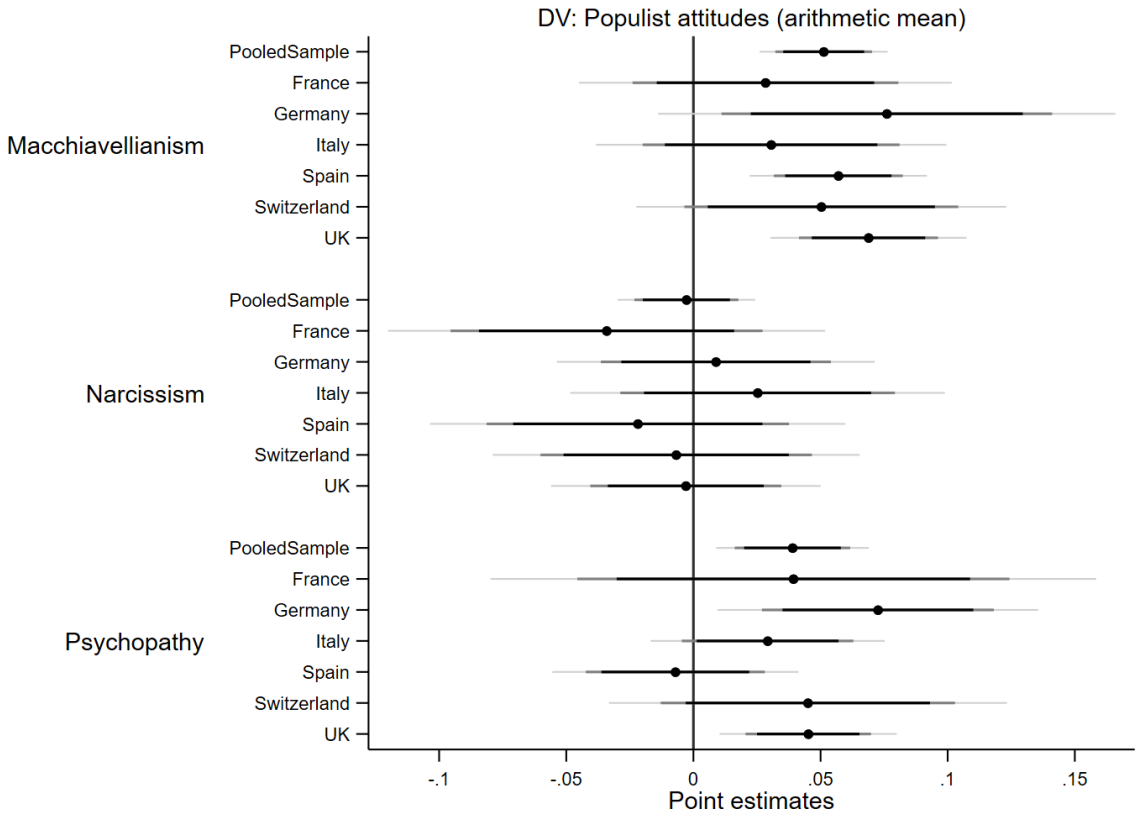
Notes: Region-clustered standard errors * p<0.05, ** p<0.01, *** p<0.001. Reference Category (RF) for sex: female; RF Education: lower secondary or less; Source: Original survey data.

A6: Regression Tables: Personality Traits and Populist Attitudes (Arithmetic Mean)

	Pooled Sample	France	Germany	Italy	Spain	Switzerland	UK
DV: Populist attitudes (arithmetic mean)							
Machiavellianism	0.051***	0.028	0.076*	0.031	0.057***	0.050	0.069***
	(0.010)	(0.024)	(0.031)	(0.024)	(0.012)	(0.026)	(0.012)
Narcissism	-0.003	-0.034	0.009	0.025	-0.022	-0.007	-0.003
	(0.010)	(0.028)	(0.021)	(0.026)	(0.028)	(0.026)	(0.017)
Psychopathy	0.039***	0.039	0.073**	0.029	-0.007	0.045	0.045**
	(0.011)	(0.039)	(0.021)	(0.016)	(0.017)	(0.028)	(0.011)
Extraversion	0.007	0.036	0.005	-0.010	0.048	-0.014	0.002
	(0.009)	(0.029)	(0.023)	(0.017)	(0.023)	(0.022)	(0.008)
Agreeableness	-0.033**	-0.065*	0.025	-0.039	-0.038	-0.015	-0.019
	(0.010)	(0.026)	(0.021)	(0.023)	(0.026)	(0.024)	(0.020)
Conscientiousness	-0.020	-0.003	-0.063**	-0.017	0.069	-0.006	-0.074**
	(0.012)	(0.017)	(0.018)	(0.017)	(0.034)	(0.026)	(0.017)
Neuroticism	0.026**	0.043	0.038	-0.008	-0.003	0.048*	0.025
	(0.010)	(0.025)	(0.022)	(0.023)	(0.015)	(0.022)	(0.015)
Openness	0.010	0.024	-0.016	-0.007	0.016	0.020	0.025
	(0.010)	(0.022)	(0.029)	(0.016)	(0.018)	(0.028)	(0.027)
Age	-0.000	-0.002	0.001	0.003*	-0.002	0.001	-0.004**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Sex							
Male	0.051**	-0.084	0.059	0.053	0.098***	0.095*	0.112**
	(0.018)	(0.040)	(0.052)	(0.054)	(0.020)	(0.035)	(0.029)
Education							
Upper, post-secondary	-0.025	-0.053	-0.004	-0.017	-0.006	-0.080	-0.130*
	(0.016)	(0.037)	(0.039)	(0.037)	(0.049)	(0.047)	(0.049)
Tertiary	-0.100***	-0.207***	-0.113*	-0.044	-0.101**	-0.180**	-0.091
	(0.018)	(0.035)	(0.047)	(0.037)	(0.032)	(0.054)	(0.043)
Left-right self-placement	-0.112***	-0.135***	-0.109**	-0.090***	-0.106***	-0.083**	-0.144**
	(0.010)	(0.026)	(0.030)	(0.018)	(0.013)	(0.022)	(0.043)
Left-right self-placement (squared)	0.012***	0.012***	0.015***	0.010***	0.012***	0.009***	0.012*
	(0.001)	(0.002)	(0.003)	(0.002)	(0.001)	(0.002)	(0.004)
Constant	3.430***	3.786***	2.926***	3.314***	3.249***	2.873***	3.618***
	(0.104)	(0.316)	(0.189)	(0.202)	(0.163)	(0.232)	(0.227)
Observations	5871	1002	993	983	986	914	993
Country FE	✓	-	-	-	-	-	-
R^2	0.115	0.102	0.106	0.072	0.074	0.066	0.131
Adjusted R^2	0.112	0.089	0.093	0.058	0.061	0.052	0.118

Notes: Region-clustered standard errors * p<0.05, ** p<0.01, *** p<0.001. Reference Category (RF) for sex: female; RF Education: lower secondary or less; Source: Original survey data.

A7: Coefficient Plot for the Country-wise Relationships between the Big Five Traits and Populist Attitudes (Arithmetic Mean)



A8: Regression Tables: Personality Traits and People Centrism

	Pooled Sample	France	Germany	Italy	Spain	Switzerland	UK
DV: People centrism							
Machiavellianism	0.013***	0.006	0.011*	0.007	0.019***	0.011	0.029***
	(0.002)	(0.005)	(0.005)	(0.007)	(0.003)	(0.006)	(0.006)
Narcissism	-0.003	-0.007	-0.005	0.005	-0.013*	-0.000	0.006
	(0.003)	(0.010)	(0.008)	(0.006)	(0.006)	(0.005)	(0.006)
Psychopathy	-0.019***	-0.014	-0.009	-0.029***	-0.035***	-0.009	-0.023*
	(0.003)	(0.008)	(0.008)	(0.005)	(0.005)	(0.008)	(0.009)
Extraversion	0.006*	0.005	-0.004	0.003	0.019*	0.002	0.013**
	(0.003)	(0.010)	(0.007)	(0.005)	(0.007)	(0.008)	(0.004)
Agreeableness	0.000	-0.007	0.022*	-0.006	-0.013	0.005	0.007
	(0.003)	(0.007)	(0.009)	(0.008)	(0.007)	(0.006)	(0.005)
Conscientiousness	0.026***	0.034***	0.025*	0.028*	0.041**	0.021**	0.003
	(0.004)	(0.007)	(0.009)	(0.010)	(0.012)	(0.007)	(0.006)
Neuroticism	-0.001	0.007	-0.005	-0.017*	-0.001	0.010	0.003
	(0.003)	(0.008)	(0.005)	(0.008)	(0.006)	(0.006)	(0.006)
Openness	0.015***	0.014	0.009	-0.003	0.025***	0.030***	0.005
	(0.003)	(0.008)	(0.008)	(0.006)	(0.005)	(0.007)	(0.007)
Age	0.001***	0.000	0.001***	0.001*	0.000	0.001**	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Sex							
Male	0.013*	-0.006	0.014	-0.009	0.039***	0.010	0.027***
	(0.006)	(0.011)	(0.017)	(0.016)	(0.008)	(0.015)	(0.006)
Education							
Upper, post-secondary	0.000	-0.019	0.006	-0.010	0.016	0.000	-0.004
	(0.006)	(0.023)	(0.019)	(0.007)	(0.010)	(0.018)	(0.010)
Tertiary	-0.020**	-0.049*	-0.030	-0.042**	0.006	-0.021	-0.016
	(0.006)	(0.020)	(0.015)	(0.014)	(0.012)	(0.018)	(0.013)
Left-right self-placement	-	-	-0.028*	-0.010	-0.016*	-0.013	-0.025*
	0.021***	0.036***	(0.011)	(0.005)	(0.006)	(0.008)	(0.011)
	(0.003)	(0.005)					
Left-right self-placement (squared)	0.002***	0.003***	0.003**	0.001*	0.001*	0.001*	0.002
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Constant	0.522***	0.631***	0.469***	0.647***	0.507***	0.396***	0.540***
	(0.029)	(0.090)	(0.057)	(0.054)	(0.062)	(0.054)	(0.055)
Observations	5871	1002	993	983	986	914	993
Country FE	✓	-	-	-	-	-	-
R^2	0.079	0.093	0.096	0.095	0.118	0.068	0.067
Adjusted R^2	0.076	0.080	0.083	0.082	0.105	0.053	0.053

Notes: Region-clustered standard errors * p<0.05, ** p<0.01, *** p<0.001. Reference Category (RF) for sex: female; RF Education: lower secondary or less; Source: Original survey data.

A9: Regression Tables: Personality Traits and Anti-elitism

	Pooled Sample	France	Germany	Italy	Spain	Switzerland	UK
DV: Anti-elitism							
Machiavellianism	0.011***	0.007	0.011	0.005	0.014	0.013	0.017**
	(0.003)	(0.007)	(0.008)	(0.008)	(0.007)	(0.008)	(0.005)
Narcissism	-0.015***	-0.029*	-0.021**	-0.012	-0.016*	-0.004	-0.012
	(0.004)	(0.011)	(0.007)	(0.007)	(0.006)	(0.011)	(0.009)
Psychopathy	-0.005	-0.012	0.006	-0.021***	-0.018**	0.007	0.008
	(0.004)	(0.008)	(0.007)	(0.004)	(0.006)	(0.010)	(0.008)
Extraversion	-0.003	0.003	0.001	0.001	0.003	-0.007	-0.006
	(0.003)	(0.009)	(0.009)	(0.007)	(0.006)	(0.008)	(0.006)
Agreeableness	-0.012**	-0.016*	-0.014	0.005	-0.005	-0.021*	-0.008
	(0.004)	(0.006)	(0.009)	(0.010)	(0.008)	(0.009)	(0.007)
Conscientiousness	0.006	0.011	-0.003	0.022**	0.031**	0.006	-0.026***
	(0.004)	(0.007)	(0.005)	(0.006)	(0.009)	(0.008)	(0.005)
Neuroticism	0.005	0.008	0.005	0.000	0.003	0.004	0.009
	(0.003)	(0.009)	(0.007)	(0.008)	(0.008)	(0.007)	(0.006)
Openness	0.005	0.015	-0.008	0.004	0.004	0.009	0.016*
	(0.004)	(0.010)	(0.009)	(0.008)	(0.008)	(0.009)	(0.006)
Age	-0.000	-0.000	0.000	0.001*	-0.000	-0.000	-0.001
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Sex							
Male	0.006	-0.041**	-0.002	0.019	0.030*	0.009	0.025
	(0.006)	(0.010)	(0.021)	(0.013)	(0.013)	(0.010)	(0.013)
Education							
Upper, post-secondary	-0.005	-0.023	0.014	-0.008	-0.016	-0.000	-0.030
	(0.007)	(0.016)	(0.025)	(0.018)	(0.015)	(0.021)	(0.014)
Tertiary	-0.023***	-0.057**	-0.028	-0.028	-0.026	-0.023	-0.011
	(0.007)	(0.016)	(0.027)	(0.017)	(0.013)	(0.021)	(0.011)
Left-right self-placement	-0.024***	-0.042**	-0.041**	-0.023**	-0.009	-0.006	-0.033*
	(0.004)	(0.010)	(0.011)	(0.006)	(0.006)	(0.013)	(0.013)
Left-right self-placement (squared)	0.003***	0.004***	0.005***	0.003***	0.002***	0.001	0.002
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Constant	0.686***	0.801***	0.673***	0.546***	0.557***	0.513***	0.706***
	(0.036)	(0.099)	(0.074)	(0.082)	(0.079)	(0.069)	(0.080)
Observations	5871	1002	993	983	986	914	993
Country FE	✓	-	-	-	-	-	-
R^2	0.121	0.091	0.081	0.099	0.063	0.024	0.115
Adjusted R^2	0.118	0.078	0.068	0.086	0.049	0.009	0.103

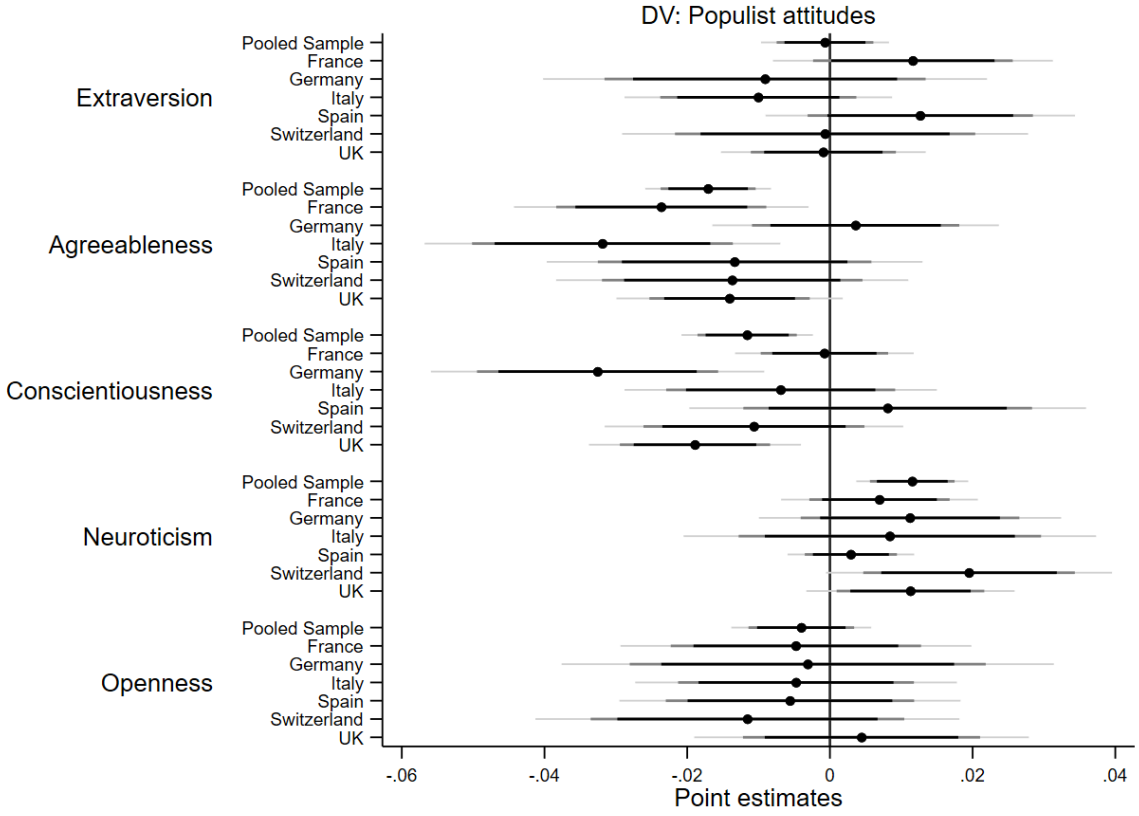
Notes: Region-clustered standard errors * p<0.05, ** p<0.01, *** p<0.001. Reference Category (RF) for sex: female; RF Education: lower secondary or less; Source: Original survey data.

A10: Regression Tables: Personality Traits and Manicheanism

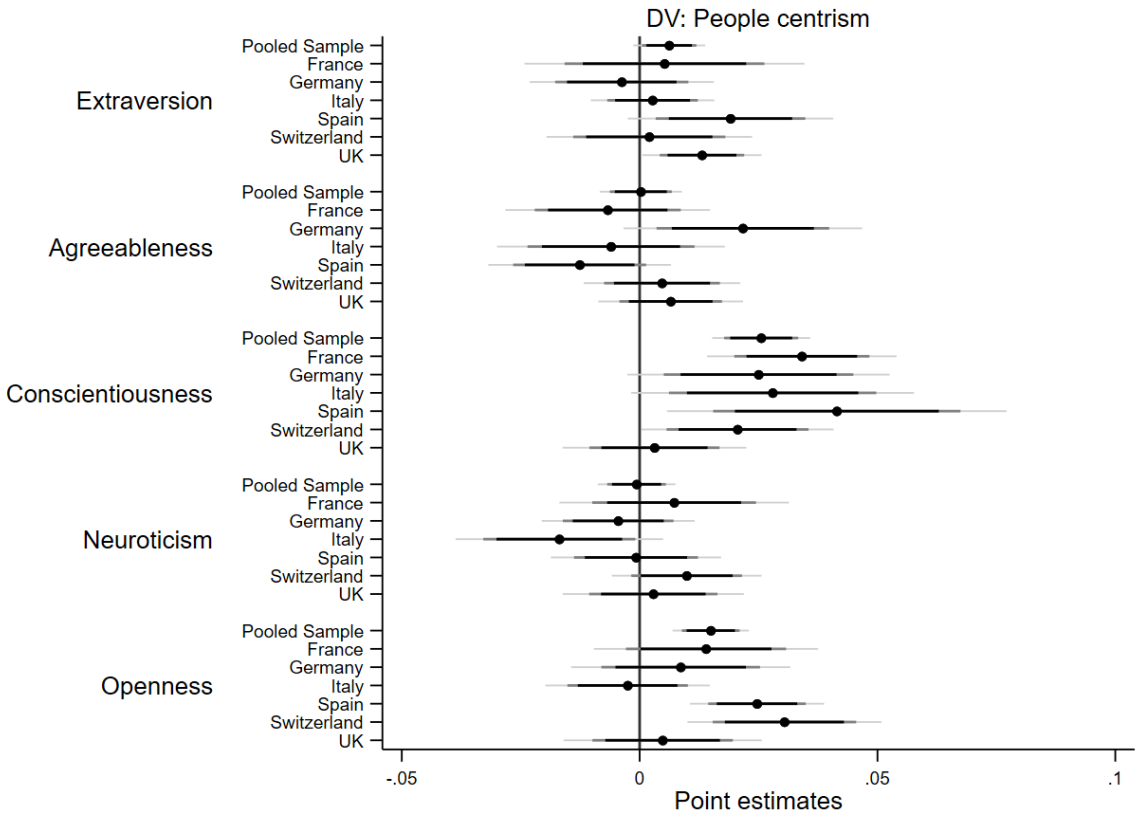
	Pooled Sample	France	Germany	Italy	Spain	Switzerland	UK
DV: Manichean Outlook							
Machiavellianism	0.004	0.005	0.008	0.003	-0.002	0.014	-0.002
	(0.003)	(0.007)	(0.005)	(0.006)	(0.003)	(0.008)	(0.006)
Narcissism	0.012***	0.011	0.020**	0.021*	0.013	-0.003	0.007
	(0.003)	(0.008)	(0.005)	(0.009)	(0.011)	(0.007)	(0.006)
Psychopathy	0.034***	0.029*	0.039***	0.041***	0.036***	0.026**	0.037***
	(0.003)	(0.011)	(0.008)	(0.007)	(0.008)	(0.007)	(0.005)
Extraversion	-0.002	0.014	-0.007	-0.008	0.005	-0.001	-0.006
	(0.003)	(0.007)	(0.009)	(0.008)	(0.007)	(0.007)	(0.005)
Agreeableness	-0.016***	-0.021	0.001	-0.034**	-0.017	-0.005	-0.016*
	(0.004)	(0.010)	(0.009)	(0.009)	(0.012)	(0.010)	(0.006)
Conscientiousness	-0.029***	-0.022**	-0.044***	-0.036**	-0.017*	-0.024**	-0.021*
	(0.004)	(0.006)	(0.009)	(0.011)	(0.008)	(0.008)	(0.007)
Neuroticism	0.015***	0.009*	0.016*	0.010	0.003	0.026**	0.017*
	(0.003)	(0.004)	(0.007)	(0.009)	(0.005)	(0.009)	(0.006)
Openness	-0.011**	-0.009	-0.004	-0.007	-0.017	-0.026*	-0.003
	(0.004)	(0.010)	(0.011)	(0.013)	(0.009)	(0.012)	(0.008)
Age	-0.001***	-0.001	-0.001**	0.001	-0.001**	-0.000	-0.002***
	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Sex							
Male	0.002	-0.010	-0.001	0.005	-0.005	0.025	0.006
	(0.005)	(0.014)	(0.010)	(0.011)	(0.014)	(0.012)	(0.009)
Education							
Upper, post-secondary	-0.013	-0.001	-0.011	0.011	-0.008	-0.037	-0.065**
	(0.007)	(0.013)	(0.015)	(0.015)	(0.015)	(0.024)	(0.019)
Tertiary	-0.021***	-0.015	-0.020	0.013	-0.033*	-0.040	-0.046**
	(0.006)	(0.013)	(0.017)	(0.015)	(0.014)	(0.020)	(0.012)
Left-right self-placement	-0.026***	-0.013*	-0.014	-0.020**	-0.038***	-0.028**	-0.038**
	(0.003)	(0.004)	(0.010)	(0.006)	(0.007)	(0.009)	(0.011)
Left-right self-placement (squared)	0.003***	0.001**	0.002	0.002*	0.004***	0.003**	0.004**
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Constant	0.558***	0.503***	0.440***	0.483***	0.577***	0.460***	0.604***
	(0.030)	(0.071)	(0.052)	(0.093)	(0.069)	(0.071)	(0.064)
Observations	5871	1002	993	983	986	914	993
Country FE	✓	-	-	-	-	-	-
R^2	0.129	0.111	0.133	0.134	0.109	0.102	0.187
Adjusted R^2	0.126	0.099	0.120	0.122	0.096	0.088	0.175

Notes: Region-clustered standard errors * p<0.05, ** p<0.01, *** p<0.001. Reference Category (RF) for sex: female; RF Education: lower secondary or less; Source: Original survey data.

A11: Coefficient Plot for the Country-wise Relationships between the Big Five Traits and Populist Attitudes



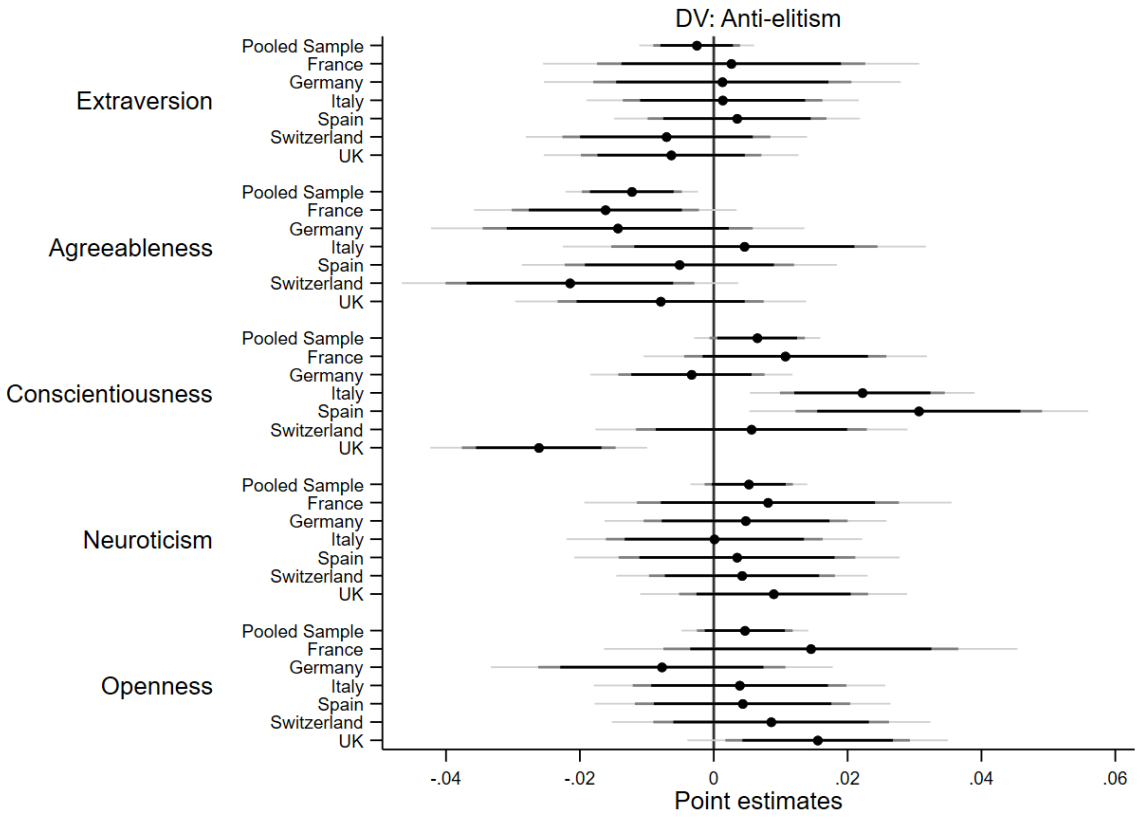
A12: Coefficient Plot for the Country-wise Relationships between the Big Five Traits and People Centrism



Regarding the relationship between the Big Five and people centrism, we also see some surprising findings. Starting with extraversion, we find positive and significant coefficients for the pooled sample and in two countries. It seems that the extraverted Spaniards and British are attracted to idea of a common popular will that guides political decisions-making. Agreeableness is very inconsistently related to people centrism. While most coefficients are insignificant, we find a positive coefficient in Germany and a negative one in Switzerland. Conversely, conscientiousness offers a consistent picture with 6 out of 7 positive coefficients reaching statistical significance. Only in the UK this trait is unrelated to people centrism. For neuroticism, we can only report one (slightly) significant coefficient in Switzerland. Neurotic individuals are more in favour of the idea of popular sovereignty, yet only in a country that has a very strong direct democratic tradition. Lastly, openness and people centrism are positively related in the pooled sample as well as in Spain and Switzerland. As with Extraversion, we suspect that people centrism plays a rather special role given that it is less confrontational than the other subdimensions of populism. Previous research has argued that people centrism, with its focus on the people whose preferences should guide political decisions, is not completely at odds with the understandings of liberal democracy making

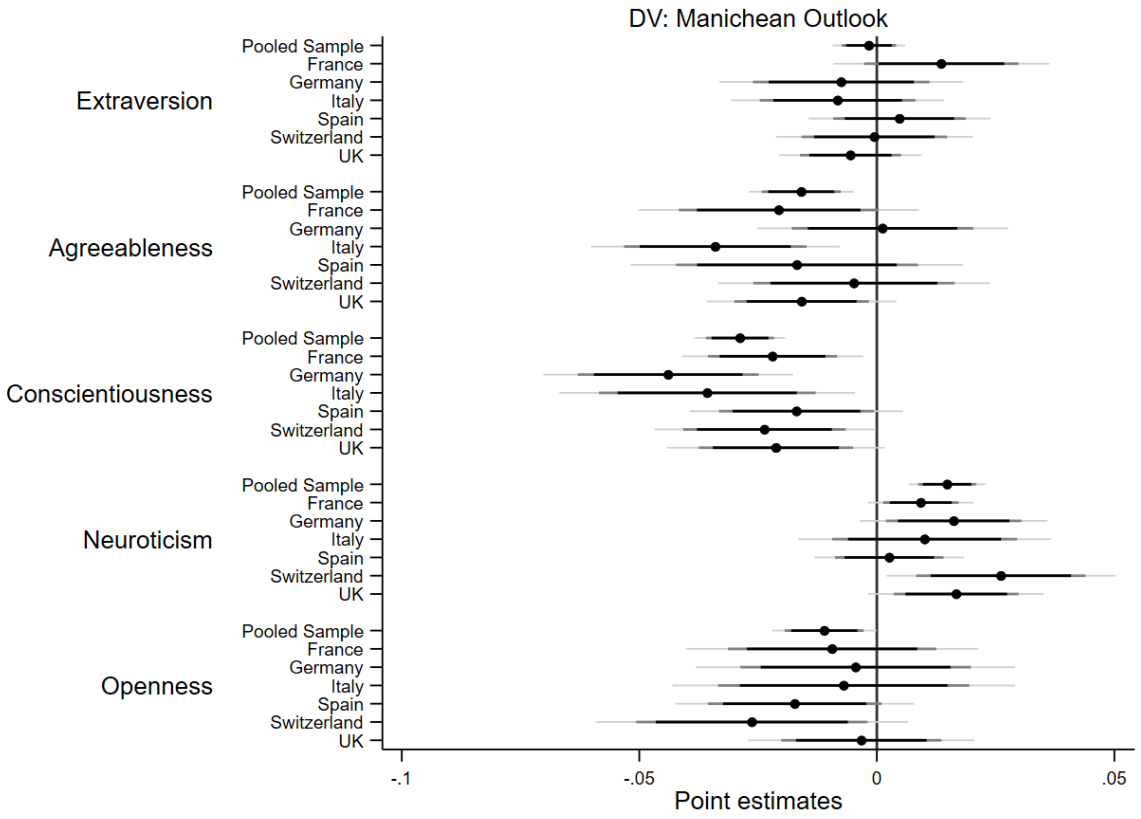
it potentially attractive for open (and extraverted) individuals who value the freedom of expression as well as democratic rights.

A13: Coefficient Plot for the Country-wise Relationships between the Big Five Traits and Anti-elitism



We now turn to the Big Five and their relationship with anti-elitism. Extraversion shows no significant coefficients. For agreeableness, we find negative and significant coefficients in the pooled sample, France, and Switzerland, which is in line with the expectation that agreeable individuals are unlikely to be confrontative towards political elites. Conscientiousness displays inconsistent relationships with anti-elitism. While in the UK conscientiousness is – as expected – negatively related to anti-elitist stances, the opposite is true in Italy and Spain where conscientious individuals seem to be more anti-elitist. This finding could be explained with a long tradition of political failure and corruption in these two countries making conscientious citizens even more critical towards the political elites. Neuroticism displays no significant relationship with anti-elitism. Lastly, openness to experience is generally unrelated to anti-elitism, with the exception of the UK where open individuals seem to be more critical of the political elite.

A14: Coefficient Plot for the Country-wise Relationships between the Big Five Traits and Manicheanism



Turning to the Big Five and Manicheanism, we find a diverse set of relationships. First, we do not find any significant coefficient for extraversion. As expected, we find a negative relationship between agreeableness and Manicheanism in the pooled sample as well as in France, Italy, and the UK. A very consistent picture emerges for conscientiousness. Conscientious individuals in all six countries are significantly less likely to have a dualistic perception of politics and society. Conversely, neurotic individuals in France, Germany, Switzerland, and the UK are more likely to have a Manichean outlook on society and politics. Lastly, openness displays significant negative coefficients in the pooled sample, Spain, and Switzerland, pointing towards a context dependent relationship.

4. Article 3: Pandemic Threat and Intergroup Relations: How Negative Emotions Associated with the Threat of Covid-19 Shape Attitudes towards Immigrants

Markus Freitag and Nathalie Hofstetter

This chapter is identical with the following article published in *The Journal of Ethnic and Migration Studies*:

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Behavioural immune system theory predicts that attitudes towards immigrants become more hostile during times of increased threat from pathogens, as pandemic threat triggers aversive emotional responses, which in turn foster outgroup hostility. We test this notion in the context of the current Covid-19 crisis. Combining both original individual-level survey data of around 6,000 European respondents during the second Corona wave in winter 2020/2021 and regional data of pandemic threat in a multilevel design, we show that Covid-19 pandemic threat exposure in 105 European regions is indeed associated with more negative attitudes towards immigrants. Moreover, hierarchical path models indicate that Covid-19-induced anger fosters anti-immigrant attitudes, while we find no evidence that disgust as a pivotal avoidance-oriented emotion is crucial. In contrast to conventional wisdom, individuals reacting with fear to the pandemic hold more immigrant-friendly orientations. Taken together, our results indicate that the behavioural immune system (BIS) appears as a compelling obstacle to inclusive orientations. However, our findings challenge the notion that every emotion triggered by the BIS translates the pandemic threat into negative attitudes towards immigrants.

Keywords: Behavioural immune system hypothesis; affective intelligence theory; attitudes towards immigrants; Covid-19; pandemic

4.1. Introduction

Pandemics have produced serious disease and death throughout human history (Saunders-Hastings and Krewski 2016).[1] To protect against such public health threats, individuals have a physiological immune system as well as a range of culturally and biologically evolved behavioural adaptations which are often referred to as the 'behavioural immune system' (Ackerman, Hill, and Murray 2018; Murray and Schaller 2016). The behavioural immune system (BIS) detects and avoids physical contact with pathogens before they penetrate the organism. According to the BIS-hypothesis, resentments towards unfamiliar and outgroup targets such as immigrants may reduce pathogen risks in the relationship with intergroup contact (Aarøe, Petersen, and Arceneaux 2017; Ackerman, Hill, and Murray 2018; Faulkner et al. 2004; Hodson and Costello 2007; Murray and Schaller 2016; Murray, Schaller, and Suedfeld 2013; Navarrete and Fessler 2006; O'Shea et al. 2020; Thornhill and Fincher 2014).[2]

This is the starting point of our investigation. In the present study, we build on previous research to evaluate individuals' intergroup relations in response to a naturally occurring pathogen threat: the Covid-19 pandemic. Figures from Johns-Hopkins-University illustrate the immense reach and scope of this public health threat: as of January 2022, more than 335 million people have been infected with the virus, with over 5.5 million deaths in connection with the disease.[3] The apparent intractability of Covid-19 and people's fear of a novel and deadly illness that can spread rapidly make the pandemic a substantial threat, which is amplified in the context of the recent viral mutations. As a consequence, intercultural exchange and integration have been significantly hampered by the closure of borders, restrictions on entry and exit, and far-reaching travel restrictions, recommended by epidemiologists and issued by political leaders worldwide.

Although not every pandemic gives rise to negative attitudes towards outgroups, disease threat can nonetheless lead to discrimination against stigmatised or scapegoated groups. The bubonic plague, for example, unleashed massive violence in Europe, including the murder of Catalans in Sicily,

[1] This article was written as part of a research project on 'The Politics of Public Health Threat' that is financially supported by the Swiss National Science Foundation (SNSF, Grant No. 100017_204507) and the Berne University Research Foundation (25/2020). In this context, reference should also be made to the contributions by Filsinger and Freitag (2022) and Wamsler et al. (2022), who are elaborating theoretically and empirically similar designs in a coherent research program.

[2] It must be noted that a few studies find no empirical support for this hypothesis (Adam-Troian and Bagci 2021; Cashdan and Steele 2013; Tybur et al. 2016; van Leeuwen and Petersen 2018).

[3] Johns Hopkins University & Medicine, Coronavirus Research Center, URL: https://coronavirus.jhu.edu/ [20.1.2022].

clerics and beggars in some locations, and pogroms against Jews, wiping out over a thousand communities. In the wake of the Covid-19 pandemic, there were physical attacks on ethnically Asian people in predominantly white countries, and repeatedly SARS-CoV-2 was referred to as the 'Chinese virus' (Van Bavel et al. 2020).

Against this background, we want to find out whether exposure to Covid-19 pandemic threat is reflected in more hostile attitudes towards immigrants across Europe. Following the BIS-hypothesis, we argue that a perceived infection risk activates adaptive psychological responses that promote an 'increased aversion and avoidance of unfamiliar and outgroup targets' (Ackerman, Hill, and Murray 2018, 3). According to this approach, such responses include the arousal of particular kinds of aversive emotional responses that expedite behavioural avoidance or the demand for controlling the infectious disease (Schaller and Park 2011, 99; Thornhill and Fincher 2014, 12). To explicitly consider these emotional states, we refer to accounts of evolutionary biology and psychology and to a standard political science model of emotional processing.

Combining both original individual-level survey data of around 6,000 European respondents during the second Corona wave in winter 2020/2021 and regional data of pandemic threat in a multilevel design, we show that Covid-19 pandemic threat exposure in 105 European regions is associated with more negative attitudes towards immigrants.[4] Moreover, hierarchical path models indicate that not every emotion triggered by the BIS translates the pandemic threat into anti-immigrant sentiments. While Covid-19-induced anger indeed fosters anti-immigrant attitudes, individuals reacting with fear to the pandemic hold more immigrant-friendly orientations. In addition, we find no evidence that disgust as a pivotal avoidance oriented emotion is crucial. Taken together, our results indicate that the BIS could appear as a compelling obstacle to inclusive orientations.

The present study contributes to existing research in several respects. First, although the world has been repeatedly hit by pandemics such as Spanish flu, SARS and swine flu, the emergence of Covid-19 now makes it possible for the first time to analyze the impact of exposure to a pandemic threat on attitudes towards immigrants in a real-world situation. The issue is pressing because globalisation boosts global disease transmission and accelerates immigration, creating a need to

[4] The term 'second Corona wave' does refer to a very general European trend and is not intended to deny that European countries were affected by the pandemic to different degrees at different times. This overall trend is illustrated, for example, by the New York Times, which uses average deaths and hospitalizations in Europe to speak of a spring wave (peak: April 9, 2020) and an autumn wave (peak: November 28, 2020) (The New York Times, 04.12.2020, URL: https://www.nytimes.com/interactive/2020/12/04/world/europe/europe-covid-deaths.html [31.05.2021]).

understand the relationship between the two phenomena. Second, while existing studies mostly aim to account for the impact of disgust as one single pathogen avoidance-oriented emotion on political attitudes (e.g. Aarøe, Petersen, and Arceneaux 2017; Hodson and Costello 2007; Kam and Estes 2016; Navarrete and Fessler 2006), we study emotional states more broadly, uncovering new psychological mechanisms. By doing so, we follow a central demand in threat literature to detect the emotions which do the work (Albertson and Gadarian 2015; Murray and Schaller 2016; Schaller and Neuberg 2012). Third, while more recent studies on the effects of pandemics on attitudes towards immigrants rely on single country studies (Bartoš et al. 2021; Drouhot et al. 2021; Hartman et al. 2021; Sorokowski et al. 2020), we provide a broader comparative perspective to examine the effects of the Coronavirus pandemic in more than 100 regions in six European countries, which have all been severely affected by the pandemic (France, Germany, Italy, Spain, Switzerland, and the United Kingdom).

4.2. Theoretical Framework: Exposure to Pandemic Threat, Emotional Responses, and Attitudes towards Immigrants

Preventing contagion with infectious diseases and coping with its consequences have been major drivers of human attitudes and behaviour from ancestral times right into today's societies (Faulkner et al. 2004; Navarrete and Fessler 2006; Thornhill and Fincher 2014). Consequently, humans evolved a variety of defenses that mitigate the threat posed by disease-causing pathogens (Aarøe, Petersen, and Arceneaux 2017; Schaller and Park 2011; Thornhill and Fincher 2014). While these defenses most obviously include sophisticated physiological mechanisms (the classical immune system), the high metabolic costs associated with immunological defenses also led to the evolution of an additional, psycho-motivational system as a means of facilitating behavioural prophylaxis against infectious diseases (Navarrete and Fessler 2006; Troisi 2020; Tybur and Lieberman 2016). This so-called behavioural immune system (BIS) facilitates behavioural avoidance of infection in the first place and manages the effects of diseases once they stroke in (Ackerman, Hill, and Murray 2018; Murray and Schaller 2016; Schaller and Park 2011; Thornhill and Fincher 2014). Another feature of the BIS is its hypersensitivity or overgeneralisation (the so-called 'smoke-detector principle'), meaning that it is highly sensitive to broad categories of perceptual cues that imperfectly connote actual infection risk (Ackerman, Hill, and Murray 2018; Kusche and Barker 2019; Murray and Schaller 2016; Thornhill and Fincher 2014). As a hypervigilant monitoring system, the BIS – 'given the asymmetry in costs of false alarm versus misses' (Tybur and Lieberman 2016, 7) – errs on the side of treating any hint of disease as a potential threat which results in a bias towards false-positive alarms (Aarøe, Petersen, and Arceneaux 2017). In addition, the BIS exhibits functional flexibility, i.e. it is sensitive to the costs and benefits of pathogen avoidance by calibrating its

response to the threat posed by the environment and the individual's ability to cope with it (Aarøe, Petersen, and Arceneaux 2017; Ackerman, Hill, and Murray 2018; Murray and Schaller 2016; Schaller and Park 2011). Following these insights, research has referred to outgroup hostility as one key social consequence once this highly complex psychological system is activated by a perceived infection risk (Aarøe, Petersen, and Arceneaux 2017; Faulkner et al. 2004; Hodson and Costello 2007; Murray, Schaller, and Suedfeld 2013; O'Shea et al. 2020; Thornhill and Fincher 2014).[5] Outgroup members trigger the BIS by physical appearances subjectively perceived as anomalous and therefore (mistakenly) as a perceptual cue signalling pathogen risk (Aarøe, Petersen, and Arceneaux 2017; O'Shea et al. 2020; Schaller and Neuberg 2012). In addition, since adaptive immunity is highly localised, outgroup members may be (perceived as) hosts to novel parasites to which the immunological defenses of one's ingroup (including one's self) are not yet adapted (Krings et al. 2012; Thornhill and Fincher 2014). Moreover, cultural outsiders are likely to be unaware of – and thus violating – local rituals, norms, and customs implicitly relevant in preventing infection with local parasites (Kusche and Barker 2019; Schaller and Park 2011; Thornhill and Fincher 2014). In this sense, foreigners may be implicitly perceived as posing an infection risk, whereby this risk is perceived as particularly great in situations where the perceivers feel especially vulnerable to infection (e.g., high parasite stress).[6] These arguments lead us to our first hypothesis regarding the consequences of exposure to the Covid-19 pandemic threat:

> Hypothesis 1: Exposure to the pandemic threat posed by Covid-19 leads to more hostile attitudes towards immigrants.

While proponents of the BIS-hypothesis argue that perceptions of infectious threats activate psychological mechanisms including aversive emotions, and these emotional states in turn expedite behavioural avoidance, to date it is unclear which emotions do the work (Murray and Schaller 2016; Schaller and Park 2011). BIS and psychological research generally understand disgust as the affective response associated with a threat of infection and refer to it as one single pathogen avoidance-oriented emotion and as a key component of the BIS (Schaller and Park 2011, 100). As the consciously accessible output of the activated BIS (Aarøe, Petersen, and Arceneaux 2017, 279),

[5] Even though we should be careful about considering any pandemic as a direct trigger for the BIS (see Ackerman, Tybur, and Blackwell 2021), recent research suggests that the Covid-19 pandemic has had noticeable effects on BIS-related factors (Szymkow, Frankowska, and Gałasińska 2021).

[6] Here, a reference can also be made to more classical explanations of outgroup hostility and prejudice such as intergroup threat theory or integrated threat theory. According to these theoretical approaches, (perceived) threats to the existence and well-being of the ingroup or its members as well as to the sociocultural identity of the ingroup are the main drivers of intergroup hostility, basically in line with the BIS hypothesis (Brewer 2010; Kachanoff et al. 2021).

disgust is said to be an affective-protective reaction designed to ward off contamination within the body and society and can – like the activation of the BIS itself – emerge even in the absence of a real or objective threat of contamination (Kam and Estes 2016). Either way, this basic emotion seems to exert powerful consequences for intergroup attitudes (Brader and Cikanek 2019, 226). Navarrete and Fessler (2006, 276) argue that the experience of disgust can be understood 'as a psychological signal indicating some immediate threat of contamination or contagion', which acts 'as the visceral cue that provides the motivation for changes in intergroup attitudes'. By motivating avoidance of (potentially) contaminating individuals, groups, or behaviours, the action tendencies typically associated with disgust are withdrawal, avoidance, and the motivation 'to expel, or otherwise break off contact with the offending entity' (Haidt 2003, 857; see also Faulkner et al. 2004). Referring to the BIS, immigrants are at a particularly high risk of being perceived as posing an infection risk, which is why it is assumed that disgust motivates anti-immigrant sentiment (Aarøe, Petersen, and Arceneaux 2017). Against this background, our second hypothesis referring to a possible mediation reads as follows:

> Hypothesis 2: Exposure to Covid-19 pandemic threat activates disgust, which in turn leads to more hostile attitudes towards immigrants.

Yet, there is no need to constrain the analysis of emotional states to disgust (Russell and Giner-Sorolla 2011). Schaller (2011, 3419), for example, argues that psychological responses to cues connoting an infection risk include 'not only the emotional experience of disgust but also the activation of aversive cognitions into working memory, and the arousal of a motivational system that guides decision-making strategies and motor movements in ways that minimise the infection risk'. While he also refers to aversive or aggressive responses (Schaller 2011, 3423; see also Murray and Schaller 2016; Schaller and Neuberg 2012), Troisi (2020) emphasises the emotional state of fear. In addition, Ackerman, Hill, and Murray (2018, 5) explicitly refer to the BIS as a system involving multiple psychological processes such as different emotions including disgust, anger and worry.

This perspective is supported by the insights of political models of emotional processing which indicate that anger and fear in particular are two other common emotional responses to different types of threats (Brader and Marcus 2013; Erisen, Vasilopoulou, and Kentmen-Cin 2020; Marcus et al. 2019; Vasilopoulos et al. 2019; Vergani and Tacchi 2016; Wagner 2014). Here, the dominant model is affective intelligence theory (AIT) which emerged in the late 1980s as the first political theory fully relying on neuroscience (Marcus, Russell Neuman, and MacKuen 2000). AIT posits that three brain systems operate constantly and routinely to sort information we confront, thus

leading to the affective appraisals of enthusiasm, fear and anger.[7] The literature argues that there are two emotional states that emerge as a response to threat: anger and fear (Marcus et al. 2019; Vasilopoulos et al. 2019). Both emotions are neural correlates to different regions of the brain and are activated as responses to distinct kinds of threats (Vasilopoulos et al. 2019). While anger signals that a threat is harmful to familiar norms and practices of thought, fear signifies the extent to which the threat is novel or uncertain. AIT holds that all relevant appraisals are executed simultaneously and largely independently. Thus, rather than feeling angry or fearful, the theory assumes that it is common for individuals to feel both emotions when confronted with a threat (Vasilopoulos et al. 2019). Whichever is the more robust, at any given moment, will determine the course taken (Marcus, Russell Neuman, and MacKuen 2000; Marcus et al. 2019).

Against this background, we assume that the novelty of the Covid-19 pandemic activates fear, since what is unknown may also be dangerous, disrupts security, and induces uncertainty. However, according to the literature, different directions of influence are plausible. On the one hand, fear stimulates people to remove themselves from the threat by turning to risk-aversive behaviour and isolationism. Moreover, fearful people approve actions aimed to prevent and protect to mitigate danger and create a safer environment (Albertson and Gadarian 2015; Brader and Marcus 2013). In the BIS framework, fear can be understood as another negative and aversive emotional response to pandemic threat, which leads us to expect that this emotion will also foster negative attitudes towards immigrants (Ackerman, Hill, and Murray 2018, 5). This notion is not only supported by evolutionary psychology but also by conventional wisdom that threats, by triggering the emotional experience of fear, activate conservative, politically right-leaning and anti-immigrant dispositions (Huddy et al. 2005; Marcus et al. 2019; Oesterreich 2005; Turper 2017; Vasilopoulos et al. 2019). Thus, we derive the following expectation about the role of fear in the relationship between pandemic threat and hostility towards immigrants:

> Hypothesis 3a: Exposure to Covid-19 pandemic threat activates fear, which in turn leads to more hostile attitudes towards immigrants.

On the other hand, as fear is related to cautious and risk-aversive behaviour, and to openness to compromise, this emotional response could also prevent intercultural conflict and discrimination (Brader and Cikanek 2019; Erisen, Vasilopoulou, and Kentmen-Cin 2020; Wagner 2014; Wake,

[7] Anger is located within an emotional cluster called aversion (Brader and Marcus 2013). The terms 'aversion' and 'anger' are sometimes used interchangeably in the relevant literature, i.e., naming the same appraisal dimension. Whether one understands the two as synonymous or sees anger as part of the broader concept of aversion, the underlying neural process is the same (Marcus et al. 2019, 121).

Wormwood, and Satpute 2020). In addition, fear usually promotes the systematic and careful processing of contemporary information for judgment making and reasoning in political decisions (Birch, Allen, and Sarmiento-Mirwaldt 2017; Brader and Marcus 2013; Rico, Guinjoan, and Anduiza 2017; Wagner and Morisi 2019). Fear thus promotes learning about the fear-inducing threat and enables the adoption of new perspectives (Albertson and Gadarian 2015; Marcus et al. 2019; Vasilopoulos et al. 2019). In this regard, 'fear does not guarantee a change of mind, but does prompt 'second thoughts' about the decision' (Brader and Cikanek 2019, 217). As a result, information processing should likely result in a differentiated and more concentrated assessment of the current pandemic, acknowledging its complexity and recognising that a simple construction of scapegoats, like blaming outgroups for the diseaseoutbreak and spread, is oversimplified and thus inappropriate.[8] What is more, the in-depth information processing nudged by fear is not only designed to reach a contemporaneous understanding of threatening circumstances, but also to identify possible coalitions to best address these circumstances (Marcus et al. 2019, 117). While previous research has particularly emphasised the attraction of ingroups when individuals are confronted with a threatening environment, it is also conceivable that frightened individuals seek protection in newly or more broadly defined social groups (Schaller 2011, 3423). Particularly in view of the global reach of the current pandemic and the wide radius of its effects, intergroup cooperation may seem both necessary and promising for good reason. Relying on the common ingroup identity model (Gaertner and Dovidio 2000), Adam-Troian and Bagci (2021) find that Covid-19 threat is associated with both pro- and anti-immigrant attitudes in Turkey. From these assessments, we formulate the following hypothesis:

> Hypothesis 3b: Exposure to Covid-19 pandemic threat activates fear, which in turn leads to more pro-immigrant attitudes.

While fear (like disgust) serves as an emotional signal for an immediate threat of infection, anger can be activated by norm violations that may arise in the course of the pandemic and its containment (Murray and Schaller 2016, 28f.). In this regard, anger results from goal frustration and arises in particular when individuals face challenges to central norms they consider fundamental to the social, political or economic order (Birch, Allen, and Sarmiento-Mirwaldt 2017; Brader and Marcus 2013). Anger can develop when the pandemic thwarts goals set by the individual or when

[8] While the relevant literature generally agrees that fear leads people to search for more information about the threat, it has to be noted that the consequences of this increased information consumption on beliefs and attitudes are less clear and must not always lead to more unbiased and reasoned judgments. For example, Gadarian and Albertson (2014) show that feeling anxious about immigration leads people to seek out more threatening information about immigration and to consider this information as more persuasive.

the measures taken to combat the pandemic do not meet the expectations of the individual. In the context of the current pandemic, one can think of numerous examples of such challenges, which are due to health but also financial and social threats, and restrict individual liberties and violate justice norms. What is more, anger is a moral emotion, boosted by the perception that an (threatening) event is externally caused, unfair or illegitimate. In this vein, anger is connected to the search and definition of scapegoats, which are held as the responsible agents for the negatively judged event (Rico, Guinjoan, and Anduiza 2017). Accordingly, anger also leads people to attribute negative outcomes to certain individuals rather than circumstances (Birch, Allen, and Sarmiento-Mirwaldt 2017, 896). Many political elites worldwide constructed the Covid-19 pandemic as an externally grown threat to their own nation, and its spread was not only linked to cross-border mobility and globalisation in general, but also to migration and migrants specifically (Hartman et al. 2021; McKee et al. 2021; Nossem 2020; Wondreys and Mudde 2020). As an approach emotion, anger inspires people to attack and remove the source of the threat implementing punitive and aggressive policies (Marcus et al. 2019; Smith, Cronin, and Kessler 2008). What is more, anger causes individuals to engage in superficial information processing and reliance on prior convictions, habits and heuristics such as (racial) stereotyping (Birch, Allen, and Sarmiento-Mirwaldt 2017; Rico, Guinjoan, and Anduiza 2017; Wagner and Morisi 2019). Against this background, we hypothesise that anger constitutes a complementary mediator in the relationship between Covid-19 pandemic threat and anti-immigrant sentiments (cf. Zhao, Lynch, and Chen 2010).

> Hypothesis 4: Exposure to Covid-19 pandemic threat activates anger, which in turn leads to more hostile attitudes towards immigrants.

4.3. Data and Method

To test the theoretical arguments outlined above empirically, we rely on original individual-level survey data of around 6,000 European respondents during the second Corona wave in winter 2020/2021 in six European countries severely hit by the pandemic (France, Germany, Italy, Spain, Switzerland, and the United Kingdom) and combine them with regional data of pandemic threat in a multilevel design. For the individual-level data, an online survey was conducted by SurveyEngine using quota on age, gender and education for each country (including language for Switzerland) to mirror the distribution of these variables representative for the entire population. The description of the survey and descriptive statistics are presented in the online appendix (tables A1 and A2).

Regarding our independent variable, pandemic threat exposure is measured directly by two objective indicators of Covid-19 pandemic prevalence at the regional level, i.e. in 105 NUTS-

regions across six European countries.[9] The indicators are the cumulative numbers of confirmed Covid-19 cases and Covid-19-related deaths, both per 100,000 inhabitants and until November 23, 2020.[10] This data was collected from the responsible statistical offices of the respective countries. The focus on the regional level as opposed to the national level was chosen to take into account the different ways in which the pandemic developed within national borders. Objective indicators were preferred to subjective measures of pandemic threat as the latter can be influenced by trait anxiety (Pan 2020), which is particularly problematic in a research strategy that explicitly considers threat-induced emotions.[11] With these measures we thus explore contextual effects on individual level emotions and attitudes, which, according to Books and Prysby (1988, 223) emerge as 'individual reactions to contextually patterned information'. This information may be attained through social interactions, involvement, media or observations and influences individual attitudes and behaviour through various mechanisms. For our dependent variable – attitudes towards immigrants – we employ five items (see Pellegrini et al. 2021). Two of the items focus on the extent to which the government should allow people from other countries to come and live in the host nation.[12] Participants expressed their opinion on a 4-point Likert scale ranging from 1 ('allow many') to 4 ('allow none'). The remaining three items: that immigrants increase crime rates, take away jobs from natives, and undermine the national culture, concentrate on the perception of immigrants as a threat, rather than as an opportunity for the host country. Respondents answered on a 5-point Likert scale ranging from 1 ('strongly agree') to 5 ('strongly disagree'). An overall index was then obtained by recoding the items to run in the same direction, standardising their values and averaging the answers to all five items. The five items show a Cronbach's alpha of $\alpha = 0.87$. High scores reflect negative attitudes towards immigrants.[13]

[9] NUTS ('nomenclature of territorial units for statistics') is the European standard for referencing the subdivisions of countries and is generally based on existing national administrative subdivisions. We refer to different stages of this hierarchical system for the different countries to ensure that our regional entities represent the highest (politically) meaningful subnational levels in each country (NUTS1 in Germany, France and the United Kingdom, NUTS2 in Italy and Spain, NUTS3 in Switzerland).

[10] Since both variables are strongly skewed towards lower values, they were logarithmized for the subsequent analyses.

[11] Since we cannot be entirely sure whether the objective indicators are in fact behind these emotions and attitudes or whether they are a result of certain omitted variables, we control for subjectively perceived health threat in additional analyses (see tables A5 and A6 in the online appendix). Our central findings remain unaffected.

[12] One of the items referred to people from other countries but of the same race or ethnic group to most people in the host country, while the other asked about people from other countries who are of a different race or ethnic group to most people in the host country.

[13] The overall index investigates anti-immigrant attitudes through two dimensions: one relating to policy preferences regarding the openness of the host country for immigrants and another linked to perceived threats related to

Disgust is measured with the pathogen subscale of the three-domain disgust scale (TDDS), composed of seven items (Tybur, Lieberman, and Griskevicius 2009).[14] Respondents were asked how disgusting they find the situations described in the items on a scale from 1 ('not at all disgusting') to 7 ('extremely disgusting'). Items include 'shaking hands with a stranger who has sweaty palms' and 'stepping on dog poop' and show a high degree of internal consistency (Cronbach's alpha $\alpha = 0.87$). To measure the other emotions we asked respondents the following question: 'Thinking back to the last weeks and months: How often have you felt the following emotions in relation to a possible infection with Coronavirus?'. Possible answers ranged from 1 ('never') to 5 ('very often'). We included 'anxious' and 'worried' to measure Covid-19 induced fear, while for anger, we used the emotional states of being 'angry' and 'hostile'.[15] To operationalise these emotional reactions, we built arithmetic indices with the respective items. Because of the negative nature of both emotions, a CFA was run and supported a two-factor solution.[16]

In accordance with previous research, we control for a range of confounding variables that likely affect attitudes towards immigrants as well as exposure to the pandemic, such as age, gender, education, income situation, residential area, health status, migration background, citizenship, and left-right self-placement (cf. Jaccard and Jacoby 2009). Furthermore, we include population density, old-age dependency ratio and the share of foreigners as controls at the regional level.[17]

We aim to empirically examine the impact of the current pandemic threat posed by Covid-19 on attitudes towards immigrants. Of particular interest are the psychological mechanisms underlying this relationship, i.e. the role played by disgust, anger and fear as possible emotional reactions to

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immigrants. Confirmatory factor analysis revealed that the two-dimensional model has satisfactory fit with the empirical data (model vs. saturated $\chi2[4] = 105.17$, $p < 0.01$; CFI = 0.994; TLI = 0.986; SRMR = 0.012; RMSEA = 0.064; CD = 0.988).

[14] The TDDS is an 21-item instrument with three seven-item subscales to assess pathogen, sexual and moral disgust (Tybur, Lieberman, and Griskevicius 2009). As we are not interested in disgust related to sexual and moral concerns, we only use the pathogen disgust subscale.

[15] Marcus et al. (2006) regard worry as a central dimension of fear.

[16] Comparing the fit statistics, our results indicate that the two factor solution is superior (model fit one factor solution: model vs. saturated $\chi2[2]= 1041.18$; CFI = 0.856; TLI = 0.568; SRMR = 0.075; RMSEA = 0.289; CD = 0.784 vs. model fit two factor solution: model vs. saturated $\chi2[1]= 48.391$; CFI = 0.993; TLI = 0.961; SRMR = 0.012; RMSEA = 0.087; CD = 0.928). Using Cronbach's Alpha, we also tested the internal consistency of our two emotion scales (although Cronbach's Alpha is usually only recommended for a minimum of three items). Despite the small number of items, we get convincing degrees of internal consistency (anger = 0.73; fear = 0.75).

[17] Data on the regions' properties were obtained from the websites of the respective countries' statistical offices (Germany: www.destatis.de; France: www.ined.fr and www.insee.fr; Italy: www.istat.it; Switzerland: www.bfs.admin.ch; Spain: www.ine.es; United Kingdom: www.ons.gov.uk).

pathogenic threat, which in turn, it is argued, shape attitudes towards immigrants. As our data reveals a hierarchical structure with respondents nested within 105 regions across the six countries surveyed, multilevel models are appropriate for our empirical analyses.

To test our theoretical framework empirically, we follow a two-stage analysis strategy. In the first step of our analysis, we conduct multilevel linear regression models with random intercepts to test the classical BIS assumption formulated in hypothesis 1, i.e. the effect of pandemic threat on attitudes towards immigrants. One model is estimated for each of our indicators of Covid-19 imposed threat on the regional level. In a second step, multilevel structural equation models (SEMs) or multi-level path models are used to investigate the emotional mechanisms underlying this relationship.[18] Such modelling makes it possible to simultaneously test the direct effect of pathogenic threat on attitudes toward immigrants, as well as the role that disgust, anger and fear play in this process. Taking into account that different emotional responses likely occur simultaneously (Marcus, Russell Neuman, and MacKuen 2000), we analyze disgust, anger and fear in a single, comprehensive model. One such model is estimated for each of our pandemic threat indicators, i.e. for the cumulative number of infections as well as for that of Covid-19 related deaths per 100,000 inhabitants.

4.4. Empirical Results

Results obtained from our first step of analysis, the multilevel linear regression models with random intercepts, are presented in Table 1. Model 1 in the first column operationalises regional level pandemic threat with the number of confirmed Covid-19 cases, while model 2 in the second column displays the effect of the number of Covid-19 related deaths. For both regional-level indicators of Covid-19 imposed threat, we find positive and significant coefficients. The higher the cumulative number of confirmed Covid-19 cases and Covid-19 related deaths in a region, the more hostile the attitudes towards immigrants expressed by individuals living in this region.

Regarding the controls, as expected, right-leaning, older and less educated individuals with a more unfavourable income situation and an inferior state of personal health are more likely to express a hostile attitude towards immigrants. Individuals with a migration background exhibit more positive sentiments towards this group, which tends to be true also for people living in a big city (compared to those living in a rural environment). We do not find any systematic effects of gender and citizenship nor do we for our regional-level controls.

[18] (Multilevel) path models are understood as the simplest form of (multilevel) structural equation models.

Table 1: Results from Multilevel Linear Regression Models

	Model 1		Model 2	
Independent variables (level 2)				
#Covid-19 cases per 100,000 inhabitants	0.082	(0.029)***		
#Covid-19 related deaths per 100,000 inhabitants			0.040	(0.019)**
Controls (level 1)				
Political ideology (right)	0.139	(0.005)***	0.139	(0.005)***
Age	0.002	(0.001)***	0.002	(0.001)***
Gender (male)	0.016	(0.019)	0.016	(0.019)
Education				
Upper, post-secondary	-0.119	(0.028)***	-0.118	(0.028)***
Tertiary	-0.332	(0.032)***	-0.331	(0.032)***
Income situation	-0.065	(0.009)***	-0.066	(0.009)***
Health state	-0.040	(0.013)***	-0.039	(0.013)***
Citizenship (yes)	0.061	(0.053)	0.061	(0.053)
Migration background (yes)	-0.127	(0.032)***	-0.127	(0.032)***
Residential area				
Small town	-0.031	(0.027)	-0.031	(0.027)
Midsize city	-0.043	(0.029)	-0.042	(0.029)
Suburb	-0.002	(0.036)	-0.003	(0.037)
City	-0.073	(0.034)**	-0.071	(0.034)**
Controls (level 2)				
Population density	0.000	(0.000)*	0.000	(0.000)
Old-age dependency ratio	0.005	(0.004)	0.007	(0.004)*
Share of foreigners	-0.002	(0.002)	0.000	(0.002)
Constant	-0.992	(0.246)***	-0.581	(0.152)***
Observations (level 1)	5992		5992	
Observations (level 2)	105		105	
ICC	0.014	(0.005)***	0.016	(0.005)***

Notes: Multilevel linear regression coefficients with robust standard errors in parentheses. For education, the base category is primary & lower secondary; for residential area, it is rural area or village.

In a next step, we use hierarchical path models to uncover whether the emotional states of disgust, anger, and fear mediate the significant relationship between regional exposure to pandemic threat and attitudes towards immigrants. Table 2 shows the results obtained from our first multilevel path model (model 1), which operationalises regional-level pandemic threat with the cumulative number of confirmed Covid-19 cases per 100,000 inhabitants. To further test the validity of our first hypothesis, the direct and, in particular, the total effect of the independent on the dependent

variable is decisive.[19] Both of these effects are highly significant and point in the expected direction. Individuals living in regions with a higher Covid-19 incidence hold systematically more anti-immigrant attitudes than individuals living in areas where this incidence is comparatively lower do. Model 1 thus delivers further empirical support for the classical BIS-hypothesis.[20] Regarding the emotional processes underlying this relationship, we first look to the role played by disgust. As disgust is generally understood as the affective response to an infectious threat, we expected Covid-19 induced threat to trigger disgust, and disgust to foster anti-immigrant sentiment.

[19] The direct effect represents the coefficient for the relationship between the independent and dependent variable adjusted for the mediators in the model. The total effect is the sum of this direct effect and the indirect effects of the mediators in the model, i.e. the effects of the independent variable on the dependent variable running through the mediators (O'Rourke and MacKinnon 2015).

[20] It should be noted that the inclusion of country dummies in our models leads to a reduction in the variance of our main variables, resulting in less substantive results. The shrinking variance may be an indication that national policies were striving for equality of conditions at the regional level even in federal states, but this was accomplished with varying degrees of success across countries. Moreover, including these fixed effects, the number of observations or units at level two (regions) is severely reduced (N= between 12 and 26) to perform a meaningful multilevel analysis which not only focuses on individual-level effects but also on level-2 predictors.

Table 2: Results from Multilevel Path Model 1

	Model 1	
Total effect	**0.082*** **	**(0.028)**
Direct effect (#Covid-19 cases per 100,000 inhabitants → attitudes towards immigrants)	**0.087*** **	**(0.024)**
Mediation via		
- **disgust**:		
Indirect effect	-0.002	(0.002)
#Covid-19 cases per 100,000 inhabitants → disgust	-0.030	(0.028)
disgust → attitudes towards immigrants	0.069***	(0.008)
- **anger**:		
Indirect effect	**0.008*** **	**(0.003)**
#Covid-19 cases per 100,000 inhabitants → anger	0.101***	(0.034)
anger → attitudes towards immigrants	0.087***	(0.011)
- **fear**:		
Indirect effect	**-0.012*** **	**(0.004)**
#Covid-19 cases per 100,000 inhabitants → fear	0.173***	(0.046)
fear → attitudes towards immigrants	-0.070***	(0.011)
Observations (level 1/level 2)	5992/105	

Notes: Multilevel path modeling coefficients with standard errors in parentheses. Coefficients are based on table A3 in the appendix with all control variables but for legibility, we only display the indirect and direct effects of the relevant variables; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

However, while we find empirical evidence for an anti-immigrant effect of this emotion, pandemic threat, measured by the cumulative number of confirmed Covid-19 cases per 100,000 inhabitants, seems not to elicit the emotional response of disgust. The relationship between these two variables appears as non-significant in our first model, and accordingly has the respective indirect effect. Thus, hypothesis 2 cannot be accepted: We do not find empirical evidence for disgust to mediate the relationship between pandemic threat and attitudes towards immigrants. Regarding fear as another potentially crucial emotional reaction to pandemic threat, the existing literature suggests conflicting expectations regarding its impact on attitudes towards immigrants. Results from our first model, displayed in Table 2, show that pandemic threat indeed elicits fear in the public. Moreover, we find that Covid-19 induced fear is actually related to more positive attitudes towards immigrants. The direct effect of fear on our dependent variable as well as its indirect effect are negative and highly statistically significant. Accordingly, we reject hypothesis 3a in favour of hypothesis 3b. Turning to the next emotional reaction of interest, our results reveal the following (see Table 2): The higher the cumulative number of confirmed Covid-19 cases, the angrier individuals in the respective regions feel. This effect is statistically significant, as is the positive effect of this emotional reaction on anti-immigrant attitudes.

Table 1: Results from Multilevel Path Model 2

	Model 2	
Total effect	**0.039****	**(0.016)**
Direct effect (#Covid-19 related deaths per 100,000 inhabitants → attitudes towards immigrants)	**0.042****	**(0.016)**
Mediation via		
- **disgust**:		
Indirect effect	-0.000	(0.001)
#Covid-19 related deaths per 100,000 inhabitants → disgust	-0.007	(0.020)
disgust → attitudes towards immigrants	0.069***	(0.008)
- **anger**:		
Indirect effect	**0.006*****	**(0.002)**
#Covid-19 related deaths per 100,000 inhabitants → anger	0.069***	(0.023)
anger → attitudes towards immigrants	0.087***	(0.011)
- **fear**:		
Indirect effect	**-0.008*****	**(0.002)**
#Covid-19 related deaths per 100,000 inhabitants → fear	0.124***	(0.030)
fear → attitudes towards immigrants	-0.069***	(0.011)
Observations (level 1/level 2)	5992/105	

Notes: Multilevel path modeling coefficients with standard errors in parentheses. Coefficients are based on table A3 in the appendix with all control variables but for legibility, we only display the indirect and direct effects of the relevant variables; * p < 0.10, ** p < 0.05, *** p < 0.01.

Accordingly, what we find is a significant indirect effect of anger, supporting our fourth hypothesis that anger mediates the positive relationship between Covid-19 pandemic threat and negativity towards immigrants.

This notion is now further tested with a second multilevel path model, which operationalises regional pandemic threat imposed by Covid-19 with the cumulative number of Covid-19 related deaths to test our model with an additional indicator for the independent variable. Results are displayed in Table 3 and are very similar to those in our first multilevel path model. To begin with, we still find empirical support for our first hypothesis that pandemic threat imposed by Covid-19 generally leads to more anti-immigrant attitudes. The more Covid-19 related deaths in a region, the more pronounced the outgroup-negativity targeted at immigrants in the respective region. Disgust again shows to be positively related with this negative orientation. However, again, pandemic threat exposure is not systematically related to disgust. We will examine this surprising result in more detail in the conclusion section of the paper. Our analysis of Covid-19 related deaths support hypothesis 4: Pandemic threat activates anger, which in turn leads to more hostile attitudes towards

immigrants. The respective coefficients are all statistically significant.[21] Finally, as was the case in model 1, fear appears as a competitive mediator of our relationship under study, meaning that it proves to be a crucial emotional response to pandemic threat. In contrast to anger, this mitigates negative attitudes towards immigrants (cf. Zhao, Lynch, and Chen 2010). Altogether, our results indicate that the BIS appears as a compelling obstacle to inclusive orientations. However, our findings challenge the notion that every emotion triggered by the BIS translates the pandemic threat into negative attitudes toward immigrants. Regarding the controls, the respective results obtained through the multilevel path models mostly mirror those discussed in relation to our first step of analysis and can be found in the online appendix (A3).

4.5. Conclusion

How does exposure to the Covid-19 pandemic affect attitudes towards members of national outgroups? In this paper, we evaluate whether the pandemic threat experience is related to attitudes towards immigrants in 105 European regions and shed light on the psychological mechanisms underlying this relationship. First, following the BIS-hypothesis, we predicted more hostile attitudes towards immigrants to occur as a reaction to pandemic threat exposure. Combining both original individual-level survey data of around 6,000 European respondents during the second Corona wave in winter 2020/2021 and regional data of pandemic threat in a multilevel design, our empirical analyses support this notion: Regional-level pandemic threat – either measured as the cumulative number of Covid-19 cases or Covid-19 related deaths per 100'000 inhabitants in 105 European regions – significantly increases outgroup-hostility targeted at immigrants.

Second, with respect to the psychological mechanisms underlying this relationship, we provide valuable insights into the psychological black box relating pandemic threat to attitudes towards

[21] As indicated above, the arousal of anger is likely to be triggered not only by the infectious threat posed by Covid-19, but also by the pandemic's social and economic concomitants and consequences. Against this background, we conducted additional analyses on the drivers of anger, considering for example the subjectively perceived health, financial and social threat posed by Covid-19, the assessment of pandemic containment measures and unemployment status and regional unemployment rate to capture ego-tropic and socio-tropic risks linked to the pandemic (cf. Borbáth et al. 2021). Results from these additional analyses show that while financial and social concerns as well as a negative assessment of the enacted containment measures significantly relate to the experience of anger during the pandemic, our objective threat indicators and the subjectively experienced health threat further contribute to the explanation of this emotional reaction (see table A4 in the online appendix). We further re-estimated our models including these same factors as additional controls so as to also consider them in the formation of anti-immigrant attitudes. Controlling for these alternative explanations does not substantially change our main findings (see tables A5 and A6 in the online appendix).

immigrants. We show that not every emotion triggered by the BIS translates the pandemic threat into anti-immigrant attitudes in a similar way and not all types of negative emotions foster exclusive intergroup orientations: While Covid-19-induced anger indeed advances anti-immigrant attitudes, individuals reacting with fear to the pandemic hold more immigrant-friendly orientations.

Finally, we find no indication that disgust is crucial for the relationship under study. While related to outgroup-hostility targeted at immigrants, we do not find any empirical evidence that pandemic threat exposure elicits disgust. Against the background that the BIS literature generally understands this emotion as a key pathogen avoidance-oriented emotion and the affective response associated with a threat of infection (Murray and Schaller 2016, 10; Schaller and Park 2011, 100), this finding might appear rather unexpected. Following Schaller (2014), disgust accompanies reactive responses to perceptual stimuli connoting an immediate risk of infection. However, when an infection threat is not immediately imminent in the form of a perceptual evidence of infectious entities, the BIS manifests in more proactive forms of defense often unaccompanied by the concurrent arousal of disgust. It is quite conceivable that most people are (highly) aware of the current pathogen threat posed by Covid-19, which in the everyday life of the pandemic however poses a latent infectious threat rather than providing specific perceptual cues appraised as pathogenic. Secondly, it should be noted that there exists a conceptual disarray surrounding the meaning and measurement of disgust. Using the pathogen subscale of the three-domain disgust scale (TDDS) (Tybur et al. 2016; Tybur, Lieberman, and Griskevicius 2009), it seems that we rather measured a respondent's individual level of *disgust sensitivity* and probably less so disgust as a current aversive emotional experience referring to the state of aversion like anger (Kam and Estes 2016). Disgust sensitivity is understood to have evolved by natural selection to protect against pathogenic threats and to represent a so-called trait-based disgust (in contrast to a state-based disgust) (Kam and Estes 2016; Kusche and Barker 2019). In the words of Clifford and Wendell (2016, 157): 'disgust sensitivity is not a measure of the experience of disgust, but an individual difference in the tendency to experience disgust in response to potential elicitors'. These trait-based differences result from adaptation histories in different environments or from trade-offs with other competing needs and can lead to outgroup-hostility *independent* of present cues signalling an infection risk (Kusche and Barker 2019). This is exactly what we found in the present study: Disgust (sensitivity) relates to anti-immigrant sentiment but is independent of current pandemic threat exposure.[22] This also

[22] We refrained from including disgust as an aversive emotional experience since disgust is part of the affective appraisal dimension of anger or aversion (Brader and Marcus 2013). Additional analyses not documented here indicate that disgust (as an aversive emotional state) is triggered by regional-level pandemic threat and, like anger, fosters anti-immigrant attitudes. The corresponding results are available upon request.

resonates with findings from the so-called Parasite Stress Theory according to which the historical prevalence of infectious diseases is the more relevant correlate of cross-cultural differences than contemporary disease prevalence (Thornhill and Fincher 2014). In addition, other studies even challenge the notion that individuals living in areas with higher levels of historical pathogen prevalence are more sensitive to disgust (Tybur et al. 2016).

Yet, our approach also has its limitations that require further attention. First, the coefficients in our models indicate quite small effect sizes, which may cast doubt on the substantivity of the reported relationships. However, 'as is the case with virtually any effect size, relatively small effect sizes may be substantively important, whereas relatively large ones may be trivial, depending on the research context' (Preacher and Kelley 2011, 108). Particularly in view of the novelty and originality of our study, which not only uses a more comprehensive theoretical framework than previous studies, but also works with topical real-world data on pathogenic threat rather than experimentally manipulating or abstractly indexing it, even objectively small effect sizes can indicate important and substantial relationships. What is more, in the context of racial attitudes and stereotypes, Greenwald, Banaji, and Nosek (2015, 553) point out that statistically small effects can have societally large effects, i.e. 'large enough to explain discriminatory impacts that are societally significant either because they can affect many people simultaneously or because they can repeatedly affect single persons'. Second, although our observational data at both the individual and regional level gives important, first-hand evidence, we cannot make causal claims. It has to be noted, however, that there exists experimental evidence that supports the causal link of the relationship that we have assumed (Aarøe, Petersen, and Arceneaux 2017; Faulkner et al. 2004; Navarrete and Fessler 2006). Finally, although the use of quota sampling guaranteed high representativeness in terms of the socio-demographic composition of our respondents, we cannot rule out the possibility that our results might be affected by the use of a non-random sample.

Summing up, our results have far-reaching implications for a better understanding of intergroup relations in modern societies. Providing evidence on the validity of the classical BIS notion of increased immigrant hostility in times of heightened threat from pathogens in the context of a novel, yet highly salient, pandemic, we show how exposure to the pandemic relates to attitudes towards immigrants in 105 European regions. As globalisation boosts global disease transmission and accelerates migration, our results indicate serious challenges for (Western European) democracies. In this sense, our findings corroborate the claim that liberal, open societies must combat infectious diseases not only as a matter of public health, but also if they aim to foster the emancipation of people from prejudice and outgroup-intolerance (Thornhill and Fincher 2014, 400). This becomes all the more important considering that the BIS also questions the effectiveness

of proposed strategies to improve intergroup relations such as cooperative intergroup contact (cf. Allport 1954). In times of strong pathogenic threat, it must be feared that the affective mechanisms associated with the BIS exert a negative impact on both the quantity of contact (regarding the avoidance emotions fear and disgust) and the quality of contact (regarding the approach emotion anger). The importance of emotions as shown by the uncovered mediation effects further stresses that distinct affective responses to threat and uncertainty like disgust, anger and fear must not be used interchangeably but instead have to be carefully conceptualised and theorised. This is important regarding their responsiveness to current pandemic threats, but also with regard to the impact on attitudes and behaviours relevant for a large variety of social sciences concepts (Marcus et al. 2019). Correspondingly, political communication and policy design should always consider the emotional reactions invoked among citizens to avoid backfiring and unintended consequences, e.g. on societal integration and cohesion (Albertson and Gadarian 2015). Future research might now look for data to gain an even deeper understanding of the role of (other) emotions and to further investigate the potentially detrimental and counteracting effects of these emotional states. Another promising venue for future research will be to examine the role of the Coronavirus pandemic in shaping within-country outgroup-hostility (e.g. rich vs. poor, ethnic majority vs. ethnic minority) and other relevant sets of attitudes and behaviours, such as nationalism, authoritarianism, or outgroup violence.

4.6. Literature

Aarøe, Lene, Michael Bang Petersen, and Kevin Arceneaux. 2017. "The Behavioral Immune System Shapes Political Intuitions: Why and How Individual Differences in Disgust Sensitivity Underlie Opposition to Immigration." *American Political Science Review* 111 (2): 277–294. doi:10.1017/S0003055416000770.

Ackerman, Joshua M., Sarah E. Hill, and Damian R. Murray. 2018. "The Behavioral Immune System: Current Concerns and Future Directions." *Social and Personality Psychology Compass* 12 (2): 57–70. doi:10.1111/spc3.12371.

Ackerman, Joshua M., Joshua M. Tybur, and Aaron D. Blackwell. 2021. "What Role Does Pathogen-Avoidance Psychology Play in Pandemics?" *Trends in Cognitive Sciences* 25 (3): 177–186. doi:10.1016/j.tics.2020.11.008.

Adam-Troian, Jais, and Sabahat Cigdem Bagci. 2021. "The Pathogen Paradox: Evidence That Perceived COVID-19 Threat Is Associated with Both pro- and Anti-Immigrant Attitudes." *International Review of Social Psychology* 34 (1): 1–15. doi:10.5334/irsp.469.

Albertson, Bethany, and Shana Kushner Gadarian. 2015. *Anxious Politics: Democratic Citizenship in a Threatening World*. New York: Cambridge University Press. doi:10.1017/CBO9781139963107.

Allport, Gordon W. 1954. *The Nature of Prejudice*. Cambridge, MA: Perseus Books.

Bartoš, Vojtěch, Michal Bauer, Jana Cahlíková, and Julie Chytilová. 2021. "Covid-19 Crisis and Hostility against Foreigners." *European Economic Review* 137 (103818): 1–11. doi:10.1016/j.euroecorev.2021.103818.

Birch, Sarah, Nicholas J. Allen, and Katja Sarmiento-Mirwaldt. 2017. "Anger, Anxiety and Corruption Perceptions: Evidence from France." *Political Studies* 65 (4): 893–911. doi:10.1177/0032321717691294.

Books, John, and Charles Prysby. 1988. "Studying Contextual Effects on Political Behavior: A Research Inventory and Agenda." *American Politics Quarterly* 16 (2): 211–238. doi:10.1177/004478088016002005.

Borbáth, Endre, Sophia Hunger, Swen Hutter, and Ioana-Elena Oana. 2021. "Civic and Political Engagement during the Multifaceted COVID-19 Crisis." *Swiss Political Science Review* 27 (2): 311–324. doi:10.1111/spsr.12446.

Brader, Ted, and Erin Cikanek. 2019. "The Emotional Foundations of Democratic Citizenship." In *New Directions in Public Opinion*, edited by Adam J. Berinsky, 202–235. New York: Routledge.

Brader, Ted, and George E. Marcus. 2013. "Emotion and Political Psychology." In *The Oxford Handbook of Political Psychology*, edited by Leonie Huddy, David O. Sears, and Jack S. Levy, 165–204. New York: Oxford University Press. doi:10.1093/oxfordhb/9780199760107.013.0006.

Brewer, Marilynn. 2010. "Intergroup Relations." In *Advanced Social Psychology: The State of the Science*, edited by Roy F. Baumeister, and Eli J. Finkel, 535–571. Oxford: Oxford University Press. doi:10.4135/9781473915350.

Cashdan, Elizabeth, and Matthew Steele. 2013. "Pathogen Prevalence, Group Bias, and Collectivism in the Standard Cross-Cultural Sample." *Human Nature* 24 (1): 59–75. doi:10.1007/s12110-012-9159-3.

Clifford, Scott, and Dane G. Wendell. 2016. "How Disgust Influences Health Purity Attitudes." *Political Behavior* 38 (1): 155–178. doi:10.1007/s11109-015-9310-z.

Drouhot, Lucas G., Sören Petermann, Karen Schönwälder, and Steven Vertovec. 2021. "Has the Covid-19 Pandemic Undermined Public Support for a Diverse Society? Evidence from a Natural Experiment in Germany." *Ethnic and Racial Studie*s 44 (5): 877–892. doi:10.1080/01419870.2020.1832698.

Erisen, Cengiz, Sofia Vasilopoulou, and Cigdem Kentmen-Cin. 2020. "Emotional Reactions to Immigration and Support for EU Cooperation on Immigration and Terrorism." *Journal of European Public Policy* 27 (6): 795–813. doi:10.1080/13501763.2019.1630470.

Faulkner, Jason, Mark Schaller, Justin H. Park, and Lesley A. Duncan. 2004. "Evolved Disease-Avoidance Mechanisms and Contemporary Xenophobic Attitudes." *Group Processes and Intergroup Relations* 7 (4): 333–353. doi:10.1177/1368430204046142.

Filsinger, Maximilian, and Markus Freitag. 2022. "Pandemic threat and authoritarian attitudes in Europe: An empirical analysis of the exposure to COVID-19." *European Union Politics* [accepted for publication].

Gadarian, Shana Kushner, and Bethany Albertson. 2014. "Anxiety, Immigration, and the Search for Information." *Political Psychology* 35 (2): 133–164. doi:10.1111/pops.12034.

Gaertner, Samuel L., and John F. Dovidio. 2000. *Reducing Intergroup Bias: The Common Ingroup Identity Model*. New York: Psychology Press.

Greenwald, Anthony G, Mahzarin R. Banaji, and Brian A Nosek. 2015. "Statistically Small Effects of the Implicit Association Test Can Have Societally Large Effects." *Journal of Personality and Social Psychology* 108 (4): 553–561. doi:10.1037/pspa0000016.

Haidt, Jonathan. 2003. "The Moral Emotions." In *Handbook of Affective Sciences*, edited by Richard J. Davidson, Klaus R. Scherer, and H. Hill Goldsmith, 852–870. Oxford: Oxford University Press.

Hartman, Todd K., Thomas V. Stocks, Ryan McKay, Jilly Gibson-Miller, Liat Levita, Anton P. Martinez, Liam Mason, et al. 2021. "The Authoritarian Dynamic During the COVID-19 Pandemic: Effects on Nationalism and Anti-Immigrant Sentiment." *Social Psychological and Personality Science* 12 (7): 1274–1285. doi:10.1177/1948550620978023.

Hodson, Gordon, and Kimberly Costello. 2007. "Interpersonal Disgust, Ideological Orientations, and Dehumanization as Predictors of Intergroup Attitudes." *Psychological Science* 18 (8): 691–698. doi:10.1111/j.1467-9280.2007.01962.x.

Huddy, Leonie, Stanley Feldman, Charles Taber, and Gallya Lahav. 2005. "Threat, Anxiety, and Support of Antiterrorism Policies." *American Journal of Political Science* 49 (3): 593–608. doi:10.1111/j.1540-5907.2005.00144.x.

Jaccard, James, and Jacob Jacoby. 2009. *Theory Construction and Model-Building Skills: A Practical Guide for Social Scientists*. New York: Guilford Press.

Kachanoff, Frank J., Yochanan E. Bigman, Kyra Kapsaskis, and Kurt Gray. 2021. "Measuring Realistic and Symbolic Threats of COVID-19 and Their Unique Impacts on Well-Being and Adherence to Public Health Behaviors." *Social Psychological and Personality Science* 12 (5): 603–616. doi:10.1177/1948550620931634.

Kam, Cindy D., and Beth A. Estes. 2016. "Disgust Sensitivity and Public Demand for Protection." *Journal of Politics* 78 (2): 481–496. doi:10.1086/684611.

Krings, Franciska, Eva T. Green, Adrian Bangerter, Christian Staerklé, Alain Clémence, Pascal Wagner-Egger, and Thierry Bornand. 2012. "Preventing Contagion With Avian Influenza: Disease Salience, Attitudes Toward Foreigners, and Avoidance Beliefs." *Journal of Applied Social Psychology* 42 (6): 1451–1466.

Kusche, Isabel, and Jessica L. Barker. 2019. "Pathogens and Immigrants: A Critical Appraisal of the Behavioral Immune System as an Explanation of Prejudice against Ethnic Outgroups." *Frontiers in Psychology* 10 (2412): 1–9. doi:10.3389/fpsyg.2019.02412.

Marcus, George E, Michael MacKuen, Jennifer Wolak, and Luke Keele. 2006. "The Measure and Mismeasure of Emotion." In *Feeling Politics: Emotion in Political Information Processing*, edited by David P. Redlawsk, 31–45. New York: Palgrave Macmillan.

Marcus, George E., W. Russell Neuman, and Michael MacKuen. 2000. *Affective Intelligence and Political Judgment*. Chicago, London: University of Chicago Press.

Marcus, George E., Nicholas A. Valentino, Pavlos Vasilopoulos, and Martial Foucault. 2019. "Applying the Theory of Affective Intelligence to Support for Authoritarian Policies and Parties." *Political Psychology* 40 (S1): 109–139. doi:10.1111/pops.12571.

McKee, Martin, Alexi Gugushvili, Jonathan Koltai, and David Stuckler. 2021. "Are Populist Leaders Creating the Conditions for the Spread of Covid-19? Comment on "a Scoping Review of Populist Radical Right Parties' Influence on Welfare Policy and Its Implications for Population Health in Europe"." *International Journal of Health Policy and Management* 10 (8): 511–515. doi:10.34172/ijhpm.2020.124.

Murray, Damian R., and Mark Schaller. 2016. "The Behavioral Immune System: Implications for Social Cognition, Social Interaction, and Social Influence." In *Advances in Experimental Social Psychology*, edited by James M. Olson, and Mark P. Zanna, 53:75–53129. Cambridge, MA: Acdemic Press. doi:10.1016/bs.aesp.2015.09.002.

Murray, Damian R., Mark Schaller, and Peter Suedfeld. 2013. "Pathogens and Politics: Further Evidence That Parasite Prevalence Predicts Authoritarianism." *PLoS ONE* 8 (5): e62275. doi:10.1371/journal.pone.0062275.

Navarrete, Carlos David, and Daniel M.T. Fessler. 2006. "Disease Avoidance and Ethnocentrism: The Effects of Disease Vulnerability and Disgust Sensitivity on Intergroup Attitudes." *Evolution and Human Behavior* 27 (4): 270–282. doi:10.1016/j.evolhumbehav.2005.12.001.

Nossem, Eva. 2020. "The Pandemic of Nationalism and the Nationalism of Pandemics." *UniGRCBS Working Paper* 8: 4–14.

Oesterreich, Detlef. 2005. "Flight into Security: A New Approach and Measure of the Authoritarian Personality." *Political Psychology* 26 (2): 275–298. doi:10.1111/j.1467-9221.2005.00418.x.

O'Rourke, Holly P., and David P. MacKinnon. 2015. "When the Test of Mediation Is More Powerful than the Test of the Total Effect." *Behavior Research Methods* 47: 424–442. doi:10.3758/s13428-014-0481-z.

O'Shea, Brian A., Derrick G. Watson, Gordon D.A. Brown, and Corey L. Fincher. 2020. "Infectious Disease Prevalence, Not Race Exposure, Predicts Both Implicit and Explicit

Racial Prejudice Across the United States." *Social Psychological and Personality Science* 11 (3): 345–355. doi:10.1177/1948550619862319.

Pan, Xuan. 2020. "Exercise Under Death-Anxiety: Investigating Individual Exercise Psychology and Behavior From Perspective of Terror Management and Behavioral Immune System Introduction." *Journal of Applied Sports Sciences* 1: 3–21. doi:10.37393/jass.2020.01.1.

Pellegrini, Valerio, Valeria De Cristofaro, Marco Salvati, Mauro Giacomantonio, and Luigi Leone. 2021. "Social Exclusion and Anti-Immigration Attitudes in Europe: The Mediating Role of Interpersonal Trust." *Social Indicators Research* 155: 697–724. doi:10.1007/s11205-021-02618-6.

Preacher, Kristopher J., and Ken Kelley. 2011. "Effect Size Measures for Mediation Models: Quantitative Strategies for Communicating Indirect Effects." *Psychological Methods* 16 (2): 93–115. doi:10.1037/a0022658.

Rico, Guillem, Marc Guinjoan, and Eva Anduiza. 2017. "The Emotional Underpinnings of Populism: How Anger and Fear Affect Populist Attitudes." *Swiss Political Science Review* 23 (4): 444–461. doi:10.1111/spsr.12261.

Russell, Pascale Sophie, and Roger Giner-Sorolla. 2011. "Moral Anger Is More Flexible than Moral Disgust." *Social Psychological and Personality Science* 2 (4): 360–364. doi:10.1177/1948550610391678.

Saunders-Hastings, Patrick R., and Daniel Krewski. 2016. "Reviewing the History of Pandemic Influenza: Understanding Patterns of Emergence and Transmission." *Pathogens* (Basel, Switzerland) 5 (66): 1–19. doi:10.3390/pathogens5040066.

Schaller, Mark. 2011. "The Behavioural Immune System and the Psychology of Human Sociality." *Philosophical Transactions of the Royal Society B: Biological Sciences* 366 (1583): 3418–3426. doi:10.1098/rstb.2011.0029.

Schaller, Mark. 2014. "When and How Disgust Is and Is Not Implicated in the Behavioral Immune System." *Evolutionary Behavioral Science*s 8 (4): 251–256. doi:10.1037/ebs0000019.

Schaller, Mark, and Steven L. Neuberg. 2012. "Danger, Disease, and the Nature of Prejudice(S)." In *Advances in Experimental Social Psychology*, edited by James M. Olson, and Mark P. Zanna, 46:1–4654. Burlington: Academic Press. doi:10.1016/B978-0-12-394281-4.00001-5.

Schaller, Mark, and Justin H. Park. 2011. "The Behavioral Immune System (and Why It Matters)." *Current Directions in Psychological Science* 20 (2): 99–103. doi:10.1177/0963721411402596.

Smith, Heather J., Tracey Cronin, and Thomas Kessler. 2008. "Anger, Fear, or Sadness: Faculty Members' Emotional Reactions to Collective Pay Disadvantage." *Political Psychology* 29 (2): 221–246. doi:10.1111/j.1467-9221.2008.00624.x.

Sorokowski, Piotr, Agata Groyecka, Marta Kowal, Agnieszka Sorokowska, Michał Białek, Izabela Lebuda, Małgorzata Dobrowolska, Przemysław Zdybek, and Maciej Karwowski. 2020. "Can Information about Pandemics Increase Negative Attitudes toward Foreign Groups? A Case of COVID-19 Outbreak." *Sustainability* 12 (4912): 1–10. doi:10.3390/SU12124912.

Szymkow, Aleksandra, Natalia Frankowska, and Katarzyna Gałasińska. 2021. "Social Distancing from Foreign Individuals as a Disease-Avoidance Mechanism: Testing the Assumptions of the Behavioral Immune System Theory during the COVID-19 Pandemic." *Social Psychological Bulletin* 16 (3): 1–28. doi:10.32872/spb.4389.

Thornhill, Randy, and Corey L. Fincher. 2014. *The Parasite-Stress Theory of Values and Sociality: Infectious Disease, History and Human Values Worldwide*. Cham: Springer.

Troisi, Alfonso. 2020. "Fear of COVID-19: Insights from Evolutionary Behavioral Science." *Clinical Neuropsychiatry* 17 (2): 72–75. doi:10.36131/CN20200207.

Turper, Sedef. 2017. "Fearing What? Vignette Experiments on Anti-Immigrant Sentiments." *Journal of Ethnic and Migration Studies* 43 (11): 1792–1812. doi:10.1080/1369183X.2016.1263554.

Tybur, Joshua M., Yoel Inbar, Lene Aarøe, Pat Barclay, Fiona Kate Barlowe, Mícheál De Barra, D. Vaughn Beckerh, et al. 2016. "Parasite Stress and Pathogen Avoidance Relate to Distinct Dimensions of Political Ideology across 30 Nations." *Proceedings of the National Academy of Sciences of the United States of America* 113 (44): 12408–12413. doi:10.1073/pnas.1607398113.

Tybur, Joshua M., and Debra Lieberman. 2016. "Human Pathogen Avoidance Adaptations." *Current Opinion in Psychology* 7: 6–11. doi:10.1016/j.copsyc.2015.06.005.

Tybur, Joshua M., Debra Lieberman, and Vladas Griskevicius. 2009. "Microbes, Mating, and Morality: Individual Differences in Three Functional Domains of Disgust." *Journal of Personality and Social Psychology* 97 (1): 103–122. doi:10.1037/a0015474.

Van Bavel, J. J., K. Baicker, P. S. Boggio, V. Capraro, A. Cichocka, M. Cikara, M. J. Crockett, et al. 2020. "Using Social and Behavioural Science to Support COVID-19 Pandemic Response." *Nature Human Behaviou*r 4 (5): 460–471. doi:10.1038/s41562-020-0884-z.

van Leeuwen, Florian, and Michael Bang Petersen. 2018. "The Behavioral Immune System Is Designed to Avoid Infected Individuals, Not Outgroups." *Evolution and Human Behavior* 39 (2): 226–234. doi:10.1016/j.evolhumbehav.2017.12.003.

Vasilopoulos, Pavlos, George E. Marcus, Nicholas A. Valentino, and Martial Foucault. 2019. "Fear, Anger, and Voting for the Far Right: Evidence From the November 13, 2015 Paris Terror Attacks." *Political Psychology* 40 (4): 679–704. doi:10.1111/pops.12513.

Vergani, Matteo, and Enrico Maria Tacchi. 2016. "When Catholics Turn Right: The Effects of the Islamic Terrorism Threat on the Fragmented Catholic Italian Voters." *Journal of Ethnic and Migration Studies* 42 (11): 1885–1903. doi:10.1080/1369183X.2015.1112258.

Wagner, Markus. 2014. "Fear and Anger in Great Britain: Blame Assignment and Emotional Reactions to the Financial Crisis." *Political Behavior* 36 (3): 683–703. doi:10.1007/s11109-013-9241-5.

Wagner, Markus, and Davide Morisi. 2019. "Anxiety, Fear, and Political Decision Making." *Oxford Research Encyclopedia of Politics*, doi:10.1093/acrefore/9780190228637.013.915.

Wake, Sean, Jolie Wormwood, and Ajay B. Satpute. 2020. "The Influence of Fear on Risk Taking: A Meta-Analysis." *Cognition and Emotion* 34 (6): 1143–1159. doi:10.1080/02699931.2020.1731428.

Wamsler, Steffen, Markus Freitag, Julian Erhardt, and Maximilian Filsinger. 2022. "The Pandemic and the Question of National Belonging: Covid-19 Threat and Conceptions of Nationhood." *European Journal of Political Research* [accepted for publication].

Wondreys, Jakub, and Cas Mudde. 2020. "Victims of the Pandemic? European Far-Right Parties and COVID-19." *Nationalities Papers*, 1–18. doi:10.1017/nps.2020.93.

Zhao, Xinshu, John G. Lynch, and Qimei Chen. 2010. "Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis." *Journal of Consumer Research* 37 (2): 197–206. doi:10.1086/651257.

4.7. Online Appendix

A15: Description of the Survey

Survey period	November 24, 2020 - January 18, 2021
Target population	Residents aged 18 years or older in Germany, France, Italy, Switzerland, Spain and the United Kingdom
Survey mode	Online
Full sample size	6,210 respondents (target sample size: 1,000 per country)
Quotas	Age, Sex, Education (language for Switzerland)
Sampling	Survey Engine panel(s)
Interview language	German, French, Italian, Spanish, English
Response rate	Overall: 6.210/(99.440-9.336-1.742) = 7.03% (RR5/6)*
Institute	survey carried out by Survey Engine

*The American Association for Public Opinion Research (AAPOR) (2016). *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys.* URL: https://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf [accessed: 15.10.2020].

The data was collected between December 7, 2020 and January 18, 2021 by SurveyEngine through a web-based survey with around 1,000 respondents per country based on quota-sampling for sex, age and education. Our full sample consists of 6,210 respondents, with an average age of 48 years and of which 50 percent are women. Regarding education, all groups are represented with primary and lower secondary education comprising around 25 percent, upper secondary 39 percent and tertiary education around 36 percent of respondents. Moreover, within the countries the demographics match the overall population based on official sources (OECD 2020). The research design was approved by the Research Ethics Committee at the Faculty of Business, Economics and Social Sciences of the University of Bern (approval number 092020).

A16: Descriptive Statistics of the Variables Used

	n	mean	SD	[Min:Max]
Dependent Variable (individual level)				
Attitudes towards immigrants				
Higher criminality	5992	3.237	1.208	[1:5]
Jobs taken away	5992	2.792	1.252	[1:5]
Culture endangered	5992	3.062	1.316	[1:5]
Allow immigrants (same ethnic group)	5992	2.876	0.792	[1:4]
Allow immigrants (different ethnic group)	5992	2.706	0.849	[1:4]
Arithmetic index (with standardized values)	5992	0.001	0.809	[-1.536:1.885]
Independent Variables (regional level)				
Number of Covid-19 cases per 100,000 inhabitants (log)	105	2608.015 (7.703)	1446.283 (0.607)	[323.015-7060.143] ([5.778:8.862])
Number of Covid-19 related deaths per 100,000 inhabitants (log)	105	62.754 (3.801)	50.755 (0.869)	[3.295:231.074] ([1.192:5.443])
Mediators (individual level)				
Disgust				
Stepping on dog poop	5992	5.406	1.606	[1:7]
Sitting next to someone with red sores on arm	5992	3.551	1.725	[1:7]
Shaking hands with a stranger who has sweaty palms	5992	4.671	1.632	[1:7]
Seeing some mold on old leftovers in your refrigerator	5992	4.571	1.847	[1:7]
Standing close to a person who has body odor	5992	5.325	1.476	[1:7]
Seeing a cockroach run across the floor	5992	4.391	1.971	[1:7]
Accidentally touching a person's bloody cut	5992	4.347	1.886	[1:7]
Arithmetic index	5992	4.609	1.185	[1:7]
Anger				
Upset	5992	2.476	1.166	[1:5]
Hostile	5992	1.895	1.036	[1:5]
Arithmetic index	5992	2.185	0.976	[1:5]
Fear				
Anxious	5992	2.621	1.177	[1:5]
Worried	5992	3.158	1.130	[1:5]
Arithmetic index	5992	2.890	1.033	[1:5]
Controls (individual level)				
Political ideology (right)	5992	4.823	2.322	[0:10]
Age	5992	48.027	16.441	[18:91]
Gender (male)	5992	0.502	0.500	[0:1]
Educational attainment				
Upper secondary	5992	0.392	0.488	[0:1]
Tertiary	5992	0.359	0.480	[0:1]
Income situation	5992	2.970	1.086	[1:5]
Health state	5992	3.670	0.903	[1:5]
Citizenship (yes)	5992	0.950	0.218	[0:1]
Migration background (yes)	5992	0.166	0.372	[0:1]

Residential area				
Small town	5992	0.202	0.402	[0:1]
Midsize city	5992	0.203	0.402	[0:1]
Suburb	5992	0.121	0.326	[0:1]
City	5992	0.206	0.405	[0:1]
Health Threat	4180	2.539	0.897	[1:4]
Financial Threat	4180	2.289	1.014	[1:4]
Social Threat	4180	2.263	0.917	[1:4]
Emplyment status: unemployed	4180	0.112	0.316	[0:1]
Containment measures do not go far enough	4180	0.516	0.500	[0:1]
Containment measures go too far	4180	0.145	0.353	[0:1]
Controls (regional level)				
Population density	105	472.053	1109.290	[25.417-7256.333]
Old-age dependency ratio	105	21.781	4.078	[11.090-31.488]
Share of foreigners	105	12.274	7.998	[2.800-40.030]
Unemployment rate	105	7.886	5.367	[0.9:25.22]

A17: Multilevel Path Models

	Model 1		Model 2	
Attitudes towards immigrants				
Disgust	0.069	(0.008)***	0.069	(0.008)***
Anger	0.087	(0.011)***	0.087	(0.011)***
Fear	-0.070	(0.011)***	-0.069	(0.011)***
#Covid-19 cases per 100,000 inhabitants	0.087	(0.024)***		
#Covid-19 related deaths per 100,000 inhabitants			0.042	(0.016)***
Political ideology	0.133	(0.004)***	0.133	(0.004)***
Age	0.002	(0.001)***	0.002	(0.001)***
Gender (male)	0.032	(0.019)*	0.032	(0.019)*
Education				
Upper, post-secondary	-0.117	(0.024)***	-0.116	(0.024)***
Tertiary	-0.324	(0.025)***	-0.322	(0.025)***
Income situation	-0.061	(0.009)***	-0.061	(0.009)***
Health state	-0.040	(0.011)***	-0.040	(0.011)***
Citizenship (yes)	0.049	(0.048)	0.049	(0.048)
Migration background (yes)	-0.140	(0.029)***	-0.140	(0.029)***
Residential area				
Small town	-0.043	(0.027)	-0.043	(0.027)
Midsize city	-0.053	(0.027)**	-0.052	(0.027)*
Suburb	-0.003	(0.032)	-0.004	(0.032)
City	-0.084	(0.028)***	-0.081	(0.028)***
Population density	0.000	(0.000)	0.000	(0.000)
Old-age dependency ratio	0.007	(0.004)*	0.009	(0.004)**
Share of foreigners	-0.002	(0.002)	0.001	(0.002)
Constant	-1.360	(0.223)***	-0.926	(0.165)***
Disgust				
#Covid-19 cases per 100,000 inhabitants	-0.030	(0.028)		
#Covid-19 related deaths per 100,000 inhabitants			-0.007	(0.020)

Political ideology	0.061	(0.006)***	0.059	(0.006)***
Age	0.005	(0.001)***	0.005	(0.001)***
Gender (male)	-0.407	(0.030)***	-0.408	(0.030)***
Education				
Upper, post-secondary	0.007	(0.039)	0.014	(0.039)
Tertiary	-0.061	(0.041)	-0.053	(0.041)
Income situation	-0.018	(0.015)	-0.011	(0.015)
Health state	-0.023	(0.017)	-0.026	(0.017)
Citizenship (yes)	0.204	(0.080)**	0.200	(0.080)**
Migration background (yes)	0.156	(0.048)***	0.157	(0.048)***
Residential area				
Small town	0.171	(0.044)***	0.168	(0.044)***
Midsize city	0.121	(0.044)***	0.109	(0.044)**
Suburb	0.141	(0.052)***	0.144	(0.052)***
City	0.189	(0.045)***	0.189	(0.045)***
Population density	0.000	(0.000)*	0.000	(0.000)*
Old-age dependency ratio	-0.026	(0.005)***	-0.027	(0.005)***
Share of foreigners	-0.019	(0.003)***	-0.020	(0.003)***
Constant	5.123	(0.267)***	4.940	(0.206)***
Anger				
#Covid-19 cases per 100,000 inhabitants	0.101	(0.034)***		
#Covid-19 related deaths per 100,000 inhabitants			0.069	(0.023)***
Political ideology	0.024	(0.005)***	0.024	(0.005)***
Age	-0.009	(0.001)***	-0.009	(0.001)***
Gender (male)	-0.143	(0.024)***	-0.142	(0.024)***
Education				
Upper, post-secondary	0.054	(0.032)*	0.056	(0.032)*
Tertiary	0.078	(0.033)**	0.081	(0.033)**
Income situation	-0.109	(0.012)***	-0.109	(0.012)***

Health state	-0.155	(0.014)***	-0.155	(0.014)***
Citizenship (yes)	-0.003	(0.064)	-0.006	(0.064)
Migration background (yes)	0.030	(0.039)	0.031	(0.039)
Residential area				
Small town	0.004	(0.035)	0.003	(0.035)
Midsize city	0.014	(0.036)	0.012	(0.036)
Suburb	-0.062	(0.042)	-0.065	(0.042)
City	-0.001	(0.037)	-0.003	(0.037)
Population density	-0.000	(0.000)	-0.000	(0.000)
Old-age dependency ratio	-0.000	(0.006)	0.003	(0.006)
Share of foreigners	-0.008	(0.003)**	-0.005	(0.003)
Constant	2.761	(0.314)***	3.164	(0.217)***
Fear				
#Covid-19 cases per 100,000 inhabitants	0.173	(0.046)***		
#Covid-19 related deaths per 100,000 inhabitants			0.124	(0.030)***
Political ideology	-0.002	(0.005)	-0.002	(0.005)
Age	-0.006	(0.001)***	-0.006	(0.001)***
Gender (male)	-0.348	(0.025)***	-0.347	(0.025)***
Education				
Upper, post-secondary	0.121	(0.033)***	0.125	(0.033)***
Tertiary	0.183	(0.034)***	0.187	(0.034)***
Income situation	-0.091	(0.012)***	-0.092	(0.012)***
Health state	-0.225	(0.014)***	-0.226	(0.014)***
Citizenship (yes)	0.018	(0.066)	0.014	(0.066)
Migration background (yes)	0.027	(0.040)	0.028	(0.040)
Residential area				
Small town	0.003	(0.036)	0.002	(0.036)
Midsize city	-0.026	(0.037)	-0.027	(0.037)
Suburb	0.037	(0.044)	0.032	(0.044)
City	0.023	(0.038)	0.019	(0.038)

Population density	0.000	(0.000)	0.000	(0.000)
Old-age dependency ratio	0.002	(0.008)	0.008	(0.008)
Share of foreigners	-0.020	(0.004)***	-0.014	(0.004)***
Constant	3.167	(0.415)***	3.826	(0.275)***
/ var(M1[region])	0.006	(0.002)***	0.008	(0.002)***
var(M2[region])	0.000	(0.000)	0.042	(0.009)***
var(e.attitudes towards immigrants)	0.479	(0.009)***	0.479	(0.009)***
var(e.disgust)	1.321	(0.024)***	1.318	(0.024)***
var(e.anger)	0.850	(0.016)***	0.850	(0.016)***
var(e.fear)	0.891	(0.016)***	0.892	(0.016)***
Observations	5992		5992	

Note: Multilevel path modeling coefficients with standard errors in parentheses. For education, the base category is primary & lower secondary, for residential area, it is rural area or village.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A18: Correlates of Anger

	Model 1		Model 2	
#Covid-19 cases per 100,000 inhabitants	0.114	(0.032)***		
#Covid-19 related deaths per 100,000 inhabitants			0.080	(0.022)***
Health threat	0.126	(0.020)***	0.125	(0.020)***
Financial threat	0.113	(0.017)***	0.110	(0.017)***
Social threat	0.153	(0.018)***	0.154	(0.018)***
Employment status: unemployed	0.055	(0.055)	0.053	(0.055)
Containment measures do not go far enough	0.129	(0.035)***	0.128	(0.035)***
Containment measures go too far	0.383	(0.050)***	0.385	(0.050)***
Political ideology (right)	0.018	(0.006)***	0.018	(0.006)***
Age	-0.006	(0.001)***	-0.006	(0.001)***
Gender (male)	-0.097	(0.030)***	-0.096	(0.030)***
Education				
Upper, post secondary	0.056	(0.038)	0.063	(0.039)
Tertiary	0.039	(0.040)	0.045	(0.040)
Income situation	-0.034	(0.016)**	-0.036	(0.016)**
Health state	-0.096	(0.018)***	-0.096	(0.018)***
Citizenship (yes)	0.024	(0.068)	0.025	(0.068)
Migration background (yes)	0.053	(0.044)	0.054	(0.044)
Residential area				
Small town	-0.030	(0.042)	-0.031	(0.042)
Midsize city	-0.006	(0.051)	-0.008	(0.051)
Suburb	-0.099	(0.047)**	-0.101	(0.047)**
City	-0.004	(0.039)	-0.007	(0.038)
Population density	0.000	(0.000)	-0.000	(0.000)

Old-age dependency ratio	0.001	(0.005)	0.006	(0.005)
Share of foreigners	-0.008	(0.003)***	-0.003	(0.003)
Unemployment rate	0.000	(0.004)	0.003	(0.004)
Constant	0.947	(0.293)***	1.326	(0.218)***
Observations (level 1)		4180		4180
Observations (level 2)		104		104
ICC	0.010	(0.005)***	0.009	(0.005)***

Note: Multi-level linear regression coefficients with robust standard errors in parentheses.
* p < 0.10, ** p < 0.05, *** p < 0.01

A19: Multilevel Linear Regression Models with Additional Controls

	Model 1		Model 2	
#Covid-19 cases per 100,000 inhabitants	0.097	(0.032)***		
#Covid-19 related deaths per 100,000 inhabitants			0.039	(0.021)*
Health threat	-0.010	(0.018)	-0.010	(0.018)
Financial threat	0.009	(0.014)	0.008	(0.014)
Social threat	0.019	(0.013)	0.019	(0.013)
Employment status: unemployed	0.051	(0.037)	0.049	(0.037)
Containment measures do not go far enough	0.034	(0.023)	0.036	(0.023)
Containment measures go too far	0.161	(0.038)***	0.163	(0.038)***
Political ideology (right)	0.141	(0.007)***	0.141	(0.007)***
Age	0.003	(0.001)***	0.003	(0.001)***
Gender (male)	0.003	(0.025)	0.003	(0.026)
Education				
Upper, post secondary	-0.131	(0.033)***	-0.131	(0.032)***
Tertiary	-0.328	(0.037)***	-0.326	(0.037)***
Income situation	-0.059	(0.012)***	-0.059	(0.012)***
Health state	-0.014	(0.015)	-0.014	(0.015)
Citizenship (yes)	0.143	(0.066)**	0.144	(0.066)**
Migration background (yes)	-0.149	(0.040)***	-0.147	(0.040)***
Residential area				
Small town	-0.060	(0.032)*	-0.061	(0.032)*
Midsize city	-0.060	(0.033)*	-0.060	(0.033)*
Suburb	-0.003	(0.039)	-0.003	(0.040)
City	-0.090	(0.038)**	-0.088	(0.039)**
Population density	0.000	(0.000)*	0.000	(0.000)

Old-age dependency ratio	0.002	(0.004)	0.005	(0.005)
Share of foreigners	-0.004	(0.003)	-0.001	(0.003)
Unemployment rate	-0.002	(0.004)	0.000	(0.004)
Constant	-1.305	(0.279)***	-0.815	(0.205)***
Observations (level 1)		4180		4180
Observations (level 2)		104		104
ICC	0.012	(0.005)***	0.017	(0.005)***

Note: Multi-level linear regression coefficients with robust standard errors in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A20: Multilevel Path Models with Additional Controls

	Model 1		Model 2	
Attitudes towards immigrants				
Disgust	0.085	(0.010)***	0.084	(0.010)***
Anger	0.079	(0.014)***	0.080	(0.014)***
Fear	-0.064	(0.014)***	-0.064	(0.014)***
#Covid-19 cases per 100,000 inhabitants	0.100	(0.026)***		
#Covid-19 related deaths per 100,000 inhabitants			0.041	(0.019)**
Health threat	-0.009	(0.015)	-0.010	(0.015)
Financial threat	0.001	(0.014)	-0.000	(0.014)
Social threat	0.008	(0.014)	0.008	(0.014)
Employment status: unemployed	0.046	(0.037)	0.043	(0.037)
Containment measures do not go far enough	0.032	(0.025)	0.034	(0.025)
Containment measures go too far	0.135	(0.036)***	0.137	(0.036)***
Political ideology (right)	0.134	(0.005)***	0.134	(0.005)***
Age	0.002	(0.001)***	0.002	(0.001)***
Gender (male)	0.024	(0.023)	0.024	(0.023)
Education				
Upper, post secondary	-0.132	(0.029)***	-0.133	(0.029)***
Tertiary	-0.318	(0.031)***	-0.316	(0.031)***
Income situation	-0.061	(0.013)***	-0.062	(0.013)***
Health state	-0.017	(0.013)	-0.016	(0.013)
Citizenship (yes)	0.136	(0.063)**	0.137	(0.063)**
Migration background (yes)	-0.164	(0.037)***	-0.162	(0.037)***
Residential area				
Small town	-0.075	(0.032)**	-0.075	(0.033)**
Midsize city	-0.070	(0.033)**	-0.071	(0.033)**
Suburb	-0.005	(0.038)	-0.004	(0.038)

City	-0.103	(0.034)***	-0.101	(0.034)***
Population density	0.000	(0.000)	0.000	(0.000)
Old-age dependency ratio	0.005	(0.005)	0.008	(0.005)
Share of foreigners	-0.003	(0.003)	0.001	(0.003)
Unemployment rate	-0.002	(0.003)	0.000	(0.004)
Constant	-1.665	(0.261)***	-1.164	(0.211)***
Disgust				
#Covid-19 cases per 100,000 inhabitants	-0.015	(0.033)		
#Covid-19 related deaths per 100,000 inhabitants			-0.008	(0.022)
Political ideology (right)	0.058	(0.008)***	0.058	(0.008)***
Health threat	0.212	(0.022)***	0.212	(0.022)***
Financial threat	0.061	(0.022)***	0.062	(0.022)***
Social threat	0.092	(0.022)***	0.092	(0.022)***
Employment status: unemployed	0.005	(0.060)	0.006	(0.060)
Containment measures do not go far enough	-0.040	(0.039)	-0.040	(0.040)
Containment measures go too far	-0.111	(0.057)*	-0.113	(0.057)**
Age	0.005	(0.001)***	0.005	(0.001)***
Gender (male)	-0.360	(0.036)***	-0.360	(0.036)***
Education				
Upper, post secondary	0.024	(0.046)	0.022	(0.046)
Tertiary	-0.074	(0.050)	-0.076	(0.050)
Income situation	0.043	(0.020)**	0.043	(0.020)**
Health state	0.008	(0.021)	0.009	(0.021)
Citizenship (yes)	0.101	(0.101)	0.101	(0.101)
Migration background (yes)	0.129	(0.059)**	0.129	(0.059)**
Residential area				
Small town	0.205	(0.052)***	0.205	(0.052)***
Midsize city	0.163	(0.053)***	0.163	(0.053)***

Suburb	0.170	(0.061)***	0.170	(0.061)***
City	0.182	(0.053)***	0.183	(0.053)***
Population density	0.000	(0.000)**	0.000	(0.000)**
Old-age dependency ratio	-0.024	(0.006)***	-0.025	(0.006)***
Share of foreigners	-0.020	(0.004)***	-0.021	(0.004)***
Unemployment rate	-0.000	(0.004)	-0.001	(0.004)
Constant	3.886	(0.338)***	3.828	(0.271)***
Anger				
#Covid-19 cases per 100,000 inhabitants	0.100	(0.034)***		
#Covid-19 related deaths per 100,000 inhabitants			0.070	(0.022)***
Political ideology (right)	0.016	(0.006)***	0.016	(0.006)***
Health threat	0.123	(0.017)***	0.123	(0.017)***
Financial threat	0.114	(0.017)***	0.112	(0.017)***
Social threat	0.154	(0.017)***	0.155	(0.017)***
Employment status: unemployed	0.049	(0.046)	0.049	(0.046)
Containment measures do not go far enough	0.134	(0.031)***	0.134	(0.031)***
Containment measures go too far	0.390	(0.045)***	0.390	(0.045)***
Age	-0.006	(0.001)***	-0.006	(0.001)***
Gender (male)	-0.097	(0.028)***	-0.096	(0.028)***
Education				
Upper, post secondary	0.056	(0.036)	0.059	(0.036)
Tertiary	0.038	(0.039)	0.041	(0.039)
Income situation	-0.029	(0.016)*	-0.030	(0.016)*
Health state	-0.100	(0.017)***	-0.100	(0.016)***
Citizenship (yes)	0.020	(0.078)	0.020	(0.078)
Migration background (yes)	0.036	(0.046)	0.036	(0.046)
Residential area				
Small town	-0.039	(0.040)	-0.039	(0.040)

Midsize city	-0.016	(0.041)	-0.017	(0.041)
Suburb	-0.108	(0.047)**	-0.108	(0.047)**
City	0.000	(0.041)	-0.001	(0.041)
Population density	-0.000	(0.000)	-0.000	(0.000)
Old-age dependency ratio	0.000	(0.006)	0.004	(0.006)
Share of foreigners	-0.006	(0.004)*	-0.002	(0.004)
Unemployment rate	0.001	(0.004)	0.003	(0.004)
Constant	1.058	(0.333)***	1.415	(0.252)***
Fear				
#Covid-19 cases per 100,000 inhabitants	0.159	(0.042)***		
#Covid-19 related deaths per 100,000 inhabitants			0.105	(0.028)***
Political ideology (right)	-0.007	(0.006)	-0.007	(0.006)
Health threat	0.436	(0.017)***	0.436	(0.017)***
Financial threat	0.088	(0.017)***	0.087	(0.017)***
Social threat	0.134	(0.016)***	0.135	(0.016)***
Employment status: unemployed	-0.011	(0.044)	-0.013	(0.044)
Containment measures do not go far enough	0.092	(0.029)***	0.092	(0.029)***
Containment measures go too far	-0.051	(0.043)	-0.050	(0.043)
Age	-0.005	(0.001)***	-0.005	(0.001)***
Gender (male)	-0.275	(0.027)***	-0.275	(0.027)***
Education				
Upper, post secondary	0.078	(0.035)**	0.081	(0.035)**
Tertiary	0.115	(0.037)***	0.118	(0.037)***
Income situation	-0.020	(0.015)	-0.020	(0.015)
Health state	-0.159	(0.016)***	-0.160	(0.016)***
Citizenship (yes)	0.036	(0.075)	0.036	(0.075)
Migration background (yes)	0.007	(0.045)	0.008	(0.045)
Residential area				

Small town	0.003	(0.039)	0.003	(0.039)
Midsize city	0.025	(0.039)	0.024	(0.039)
Suburb	0.040	(0.046)	0.039	(0.046)
City	-0.001	(0.041)	-0.002	(0.041)
Population density	0.000	(0.000)	0.000	(0.000)
Old-age dependency ratio	0.013	(0.008)*	0.019	(0.008)**
Share of foreigners	-0.013	(0.004)***	-0.006	(0.004)
Unemployment rate	-0.001	(0.005)	0.003	(0.005)
Constant	0.731	(0.396)*	1.333	(0.293)***
/				
var(M1[region])	0.006	(0.003)**	0.009	(0.003)***
var(M2[region])	0.000	(0.001)	0.000	(0.001)
var(e.attitudes towards immigrants)	0.495	(0.011)***	0.494	(0.011)***
var(e.disgust)	1.283	(0.028)***	1.283	(0.028)***
var(e.anger)	0.765	(0.017)***	0.765	(0.017)***
var(e.fear)	0.701	(0.015)***	0.701	(0.015)***
Observations	4180		4180	

Note: Multilevel path modeling coefficients with standard errors in parentheses. For education, the base category is primary & lower secondary, for residential area, it is rural area or village.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5. Article 4: The Emotional Fabric of Populism during a Public Health Crisis: How Anger Shapes the Relationship between Pandemic Threat and Populist Attitudes

Maximilian Filsinger, Nathalie Hofstetter and Markus Freitag

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While conventional wisdom connects crises and external threats to increasing support for populism, several questions remain unanswered. Following insights of affective intelligence theory (AIT), we posit that anger and fear elicited by pandemic threat relate differently to populist attitudes. While such relations have already been explored in the context of other hazards (such as financial turmoil, terrorism, or immigration), our study allows us to evaluate the emotional bedrocks of populism in the context of a threat that is not apparently connected to the classical political grievances underlying populism. Expanding the literature on psychological underpinnings of populism and on the political consequences of the pandemic, our analyses of original survey data support our contentions that pandemic threat-induced anger is positively related to populist attitudes while fear is negatively linked to populist stances. This holds in particular for anti-elitism and the Manichean outlook inherent in populism. Altogether, we provide new comparative evidence to the puzzle about the emotional bedrocks of populism by illuminating a domain that has not been systematically explored before.

Keywords: populist attitudes; affective intelligence theory; pandemic threat; fear; anger

5.1. Introduction

The spread of Coronavirus produced a global health crisis unprecedented in modern history with citizens across the globe experiencing severe consequences of the pandemic in terms of their health as well as financial and social hardship.[1] Furthermore, the political ramifications of this crisis are only starting to be understood in the scholarly literature. Conventional wisdom associates crises and external threats with increasing support for populist positions and parties (Kriesi and Pappas, 2015). This is supported by empirical research, showing that populism, understood 'as a unique set of ideas, one that understands politics as a Manichean struggle between a reified will of the people and a conspiring elite' (Hawkins and Rovira Kaltwasser, 2018: 3) is able to capitalise on the grievances and negative feelings generated by previous crises such as the financial crisis of 2008 or the 'refugee crisis' of 2015.

Yet, in this respect, several questions remain unanswered. First, with regard to the mechanisms that connect threat and crises to populism, public debates and pundits often emphasise fear as the dominant emotion that drives individuals into the arms of populism. However, recent scholarly literature suggests anger to be the dominant emotion that drives populism (e.g., Rico et al., 2017). Second, it remains unclear whether populism, and in particular populist attitudes, flourish in the wake of every threat, or whether there are differences regarding the nature of the threat. In this vein, while previous research has shown that economic crises (Rico et al., 2017; Rhodes-Purdy et al., 2021), terror attacks (Marcus et al., 2019; Vasilopoulos et al., 2019), or immigration (Erisen and Vasilopoulou, 2022) promote different forms of populist support, it remains unclear whether a hazard such as the Covid-19 pandemic threat, which is less connected to the classical political grievances underlying populism, is also related to populist support. Lastly, while populist attitudes are understood as a combination of a Manichean outlook, anti-elitist, and people centrist attitudes, it is so far almost unknown whether threat-triggered emotions are equally associated with all these sub-dimensions.

Against this background, we apply the affective intelligence theory (AIT) (Marcus et al., 2019) to evaluate whether negative emotions elicited by the Covid-19 pandemic, a crisis less connected to traditional populist issues, are related to populist attitudes. We follow previous literature by assuming that anger and fear are the dominant emotions that emerge as a response to a threatening

[1] This article was written as part of a research project on 'The Politics of Public Health Threat' that is financially supported by the Swiss National Science Foundation (SNSF) and the Berne University Research Foundation. In this context, reference should also be made to the contributions by Erhardt et al., 2022, Filsinger and Freitag, 2022, Freitag and Hofstetter, 2022 and Wamsler et al., 2022, who are elaborating theoretically and empirically similar designs in a coherent research program.

event (Marcus et al., 2019). While both emotions are considered as negatively valenced, they initiate different behavioural and attitudinal responses. Given the confrontational and adversarial nature of populism, we expect that pandemic-elicited anger is positively related to populist attitudes. On the contrary, fear, which prompts risk-aversive and compromise-oriented behaviour, is expected to be negatively related to populist attitudes.

We test these notions in the context of the Covid-19 pandemic, using 18 samples from six European countries (France, Germany, Italy, Spain, Switzerland, and the United Kingdom (UK)) at three different time points between November 2020 and March 2022. Our analyses based on repeated cross-sectional data support the contention that anger elicited by pandemic threat is significantly and positively related to populist attitudes in most countries while the relationship between fear and populist attitudes is negative, albeit less consistent. In addition, we show that the link between anger and populist attitudes is driven, in particular, by two sub-dimensions of populism: anti-elitism and Manichean outlook.

Taken together, our study contributes to two different strands of literature in two important respects. First, we add to a growing field of research by exploring the psychological underpinnings of populism. In this vein, we provide new empirical insights into the emotional bedrocks of populism by showing that pandemic threat-elicited anger, rather than fear, positively relates to populist attitudes. By focussing on the Covid-19 pandemic as an understudied threat that is less connected to classical populist grievances, we present evidence that the type of threat does not seem to matter for the relationship between anger and populist attitudes. Rather, it is the nature of anger that prompts populist support.

Second, by honing in on how the pandemic threat and different emotional reactions to it relate to citizens' populist attitudes, we add additional evidence that anger and fear elicited by the pandemic seem to have distinct political consequences and crucially concern different aspects of European politics. Consequently, our study adds another piece of evidence that anger, in the context of the pandemic, fosters exclusionary attitudes and behaviours (e.g., Erhardt et al., 2022; Freitag and Hofstetter, 2022). In this vein, we also complement recent studies on the pandemic and populism (Froio, 2022; Wondreys and Mudde, 2022; Zanotti and Turnbull-Dugarte, 2022) by showing that during the pandemic, populist attitudes only flourished among the angry. As anger was the less dominant response during the pandemic, we might offer a plausible explanation for why populist forces did not perform well during the pandemic.

5.2. Previous Research: Threat, Emotions, and Populism

In recent years, we can observe a growing interest in emotions in the social and political sciences. In particular, scholars increasingly focus on the behavioural and attitudinal consequences of different emotions. In general, emotions can be defined as 'a complex syndrome of reactions to our circumstances that include electrochemical processes in the brain, changes in automatic and motor systems (e.g., breathing, heart rate, muscle tensions, facial expressions), and behavioural impulses' (Brader and Cikanek, 2019: 203). Importantly, emotions have crucial functions by telling us what is going on around us and whether or how we should be concerned with it (Bonansinga, 2020). Put differently, emotions have a diagnostic power and help us explain political behaviour and attitudes (Brader and Cikanek, 2019).

Recent advances in the study of emotions follow a functional neuroscience perspective. In this regard, the AIT argues that three brain systems operate constantly and routinely to sort information people are confronted with. Depending on the information received, different affective appraisals such as enthusiasm, fear, and anger are evoked. The latter two emotional reactions have attracted particular attention in recent years as they are considered as distinct responses to threatening circumstances (Marcus et al., 2019). Both are neural correlates to different regions of the brain, which are triggered by distinct perceptions and aspects of threat (Vasilopoulos et al., 2019).

Anger is activated if the brain detects a noxious threat that is harmful to familiar norms and practices as well as jeopardising the attainment of the individual's goals (Marcus et al., 2019). Conversely, fear is triggered by threats that seem novel and uncertain (Marcus et al., 2019). Importantly, the AIT holds that these different appraisals are executed simultaneously and largely independently, i.e., rather than feeling angry or fearful, respondents experience both, anger and fear, when confronted with a threat (Vasilopoulos et al., 2019). What is more, the adaptation strategy to the threat depends on the extent an individual experiences both emotions at the same time or whether one emotion is experienced more strongly than the other (Marcus et al., 2000; Marcus et al., 2019). Importantly, fear and anger evoked by an external threat crucially differ in their behavioural and attitudinal consequences by initiating different modes of information processing, decision-making, and behaviour (Brader and Cikanek, 2019; Marcus et al., 2019).

Following these insights, recent research has investigated the role that anger and fear play in support for populism (Rico et al., 2017; Vasilopoulos et al., 2019). Focussing on voting for radical (right-wing) populist parties, Vasilopoulos et al. (2019) show that in the wake of terror attacks, anger increases the likelihood of voting for the Front National (FN) in France. Contrary to conventional wisdom but in line with the contentions of AIT, fear is negatively related to voting for this radical right-wing populist party. Moreover, Marcus et al. (2019) find that in the 2014

European parliament elections, anger about the economic situation in France increased the probability of voting for the FN, in particular for those at the right end of the political spectrum. They also observe a significant and positive effect of anger regarding the terror attacks on Paris in November 2015. Again, fear in response to these threatening events did not fuel support for the radical right. Focussing on threats based on immigration, Erisen and Vasilopoulou (2022) show that anger about immigration, rather than fear, is crucial in linking anti-immigration attitudes and support for radical right-wing parties, mainly because angry respondents process information differently and thus tend to overestimate the perceived threat of immigration. For Germany, Nguyen et al. (2022) indicate that generalised anger predicts support for the radical right-wing populist party Alternative für Deutschland (AfD). Thus, while pundits and politicians often argue that populism is based on fear, the contentions of the AIT and previous research imply that fear is not positively related to such a confrontational and exclusionary style of politics.

While previous studies have focussed on (radical right-wing) populist party support, we aim to investigate the influence of emotions on populist attitudes. Studying attitudes instead of vote choice is of crucial importance as 'voters are always recruited on the basis of several issues and concerns', which makes it difficult to extract support for populism from vote choice (Spruyt et al., 2016: 336). Thus, with explaining populist attitudes, we focus on the positions that underlie the support for populist politics, which have been shown to affect a range of different political outcomes including vote choice (van Hauwaert and van Kessel, 2018). Thus far, only a few studies have looked at the emotional underpinnings of populist attitudes. For Spain, Rico et al. (2017) show that anger over the economic crisis fuels populist attitudes. Similarly, Rhodes-Purdy et al. (2021) find that economic distortions evoke anger that, in turn, activates cultural stereotypes which then trigger populist attitudes.

In sum, recent research has shown relatively convincingly that anger rather than fear fuels populist support, although these findings are more established for populist voting than for populist attitudes. More importantly, these previous studies mostly focus on threats that are crucially related to populist grievances or mobilising issues. Immigration, cultural threats, terror attacks, or economic crises, all played important roles in the rise of populism and populist forces in the last decades (Kriesi and Pappas, 2015). In this vein, the question arises whether emotions elicited by threats that are less connected to the classical political grievances underlying populism also fuel populist attitudes. Put differently, by studying the Covid-19 pandemic, we test whether emotional responses, elicited by this different kind of threat, are related to populist attitudes.

5.3. Covid-19 Threat, Emotional Reactions, and Populist Attitudes

The Covid-19 pandemic and its manifold concomitants have sparked considerable interest in its social, economic, and health-related consequences. Given the importance of the pandemic in everyday life, there has been a lot of recent research focussing on the political consequences of the pandemic such as political trust (e.g., Bol et al., 2021), attitudes toward democracy (e.g., Lupu and Zechmeister, 2021), and support for governmental measures (e.g., Vasilopoulos et al., 2022). Yet, the influence of the pandemic on populist attitudes has thus far not been at the centre of scholarly attention. Populism is best understood 'as a unique set of ideas, one that understands politics as a Manichean struggle between a reified will of the people and a conspiring elite' (Hawkins and Rovira Kaltwasser, 2018: 3). Generally, scholars observe three distinct subdimensions of populism: a moral struggle between good and bad (Manichean outlook), anti-elitism, and people centrism (Castanho Silva et al., 2018). In our study, we focus on populist attitudes understood as an individual-level manifestation of populism that has independent causal power by affecting certain tendencies and proclivities such as voting for populist parties (Castanho Silva et al., 2018; van Hauwaert and van Kessel, 2018). Importantly, the three subdimensions mentioned above are jointly necessary conditions for populist attitudes, i.e., 'understanding populist attitudes as an attitudinal syndrome suggests considering citizens as populists only if they exhibit anti-elitist orientations *and* a Manichean outlook *and* support popular sovereignty' (Wuttke et al., 2020: 358; italics in original). Following from the non-compensatory nature of populism, 'populist attitudes are the set of evaluative reactions to these' three subdimensions (van Hauwaert et al., 2020: 3).

The Covid-19 pandemic can be defined as 'a serious threat to the basic structures or the fundamental values and norms of a system, which under time pressure and highly uncertain circumstances necessitates making vital decisions' (Rosenthal et al., 1989: 10). The novelty and severity of the virus, combined with its rapid human-to-human transmission, make it a severe health crisis. In this regard, the pandemic undermines deeply rooted convictions of security, health, and welfare (Taylor, 2019). Yet, next to these health-related issues, the pandemic triggered concerns about an economic recession as well as severe societal disruptions caused by the virus itself and the various countermeasures implemented to curb infections. Thus, the pandemic can be regarded as a societal crisis that has its origins in a health-related crisis. Yet, people may perceive different threats from the pandemic and react with anger and fear as dominant negative reactions to such a threatening situation (Marcus et al., 2019). This assumption is supported by our data with which we show that perceived economic, social, and infectious threats are all positively related to both anger and fear (see Table S18 in the online appendix). Consequently, following AIT, we argue that Covid-19 constitutes a multi-faceted pandemic threat which predominantly induces fear and anger (Marcus et al., 2019).

There are several reasons to expect that a pandemic threat is likely to evoke anger. First, the pandemic potentially prevents individuals from achieving their goals. For example, an infection with the virus has health-related implications in terms of sickness and a potential for Long-Covid, causing not only multi-layered personal restrictions in everyday life but also long-term negative consequences. In this vein, an infection might also have negative social and financial externalities as do many of the various countermeasures introduced by governments. To that end, the pandemic threat posed by Covid-19 presents an obstacle for individuals to achieve their personal goals (Marcus et al., 2019). Second, the pandemic presents a noxious hazard to known norms, in particular those that are considered fundamental to the social, political, and economic order (Marcus et al., 2000; Brader and Marcus, 2013). In the context of the current pandemic, this might include challenges to personal freedom in the form of governmental measures, democratic concerns, but also financial and social threats as well as threats to personal health and security (Erhardt et al., 2022). Third, a principal component of anger is the belief that others cause harm or regulate the sources of a harmful event or threat (Steenbergen and Ellis, 2006). As the responsibility for the health, economic, and social consequences of the pandemic can be easily attributed to fellow citizens or political decision-makers and their inappropriate actions (Bor et al., 2022), anger is likely evoked by pandemic threat.

Regarding their relationship, we argue that anger and populist attitudes are positively associated. First, anger is connected to the search and definition of scapegoats that are (made) responsible for the situation (Rico et al., 2017). Populism offers culprits for the frustrating situation in the form of political elites. In times of the pandemic, populist actors have increasingly presented themselves as 'defender[s] of freedom' (Lehmann and Zehnter, 2022: 1) and blamed governmental actors for the negative externalities of the pandemic and its countermeasures (Froio, 2022; Zanotti and Turnbull-Dugarte, 2022). Recent research has shown that angry individuals tend to put less trust in the government and reject governmental countermeasures (Erhardt et al., 2021; Vasilopoulos et al., 2022). In this vein, anger and populism resonate well as the blame for pandemic threat can be targeted towards the government and political elites.[2] Thus, the polarising positions of populism offer a well-suited home for angry individuals as they present the elites as the responsible agents for the problems and troubles of the people, while at the same time, forming a community that is based on the exclusion of those who are claimed to be responsible.

[2] One example of blaming the elite could be seen in elite double standards exemplified by the Cummings affair in the United Kingdom, which shows how the elite enacts measures for the public but does not live by these rules itself (see https://www.bbc.com/news/uk-52811168 [last access: 01.25.2023]).

In addition, anger typically urges an aggressive and confrontational response, which echoes the inherently adversarial and polarising character of populism. Put differently: 'Anger serves to launch defences against challenges to extant core norms by those who threaten' (Marcus et al., 2019: 119). In this vein, anger has been connected to punitive policy preferences which are in line with the confrontational nature of populism (Lerner et al. 2003; Brader and Cikanek, 2019). Consequently, people who express pandemic threat-elicited anger are particularly likely to find comfort in the confrontational and exclusionary nature of populism. Lastly, Brader and Cikanek (2019) show that angry individuals tend to rely on superficial modes of information seeking and processing, making them more likely to follow heuristics and favour simple solutions. As populism is sometimes characterised by offering simple solutions to complex problems, angry individuals might be more likely to hold populist attitudes. During the pandemic, populist actors often favoured less governmental interventions and disregarded the severity of the virus, making them and populism in general more attractive for angry individuals (Lehmann and Zehnter, 2022). In sum, we formulate hypothesis 1 as follows:

HYPOTHESIS 1: *Pandemic threat-elicited anger is positively related to populist attitudes.*

Next to anger, we assume that the novelty and the perpetual insecurities of the Covid-19 pandemic evoke fear, since fear 'occurs when individuals appraise a situation as being unpleasant, highly threatening and uncertain' (Albertson and Gadarian, 2015: 8). Given that the Covid-19 infectious disease is the first major pandemic that has hit Western European societies since the Spanish flu (1918–1920), Covid-19 is likely to be perceived as a novel threat (Taylor, 2019). Furthermore, since Covid-19 has a relatively quick human-to-human transmission and a potentially lethal course, it is also likely to be regarded as highly threatening. In addition, there are also uncertainties regarding the ever-present threat of further variants of the virus. Similarly, citizens might consider uncertainties regarding the (long-term) social and economic consequences of the pandemic and its countermeasures.

Although pundits and politicians often claim that populism works through fear, we follow recent research and argue that pandemic-elicited fear is unlikely to relate positively to populist attitudes. Fearful people are characterised by risk-averse behaviour (Marcus et al., 2000; MacKuen et al., 2010; Vasilopoulos et al., 2019). During the pandemic, this might imply higher acceptance of civil liberty restrictions that aim to prevent infections (Vasilopoulos et al., 2022) as well as higher levels of trust in the government that enacts these preventive measures (Erhardt et al., 2021).

As populist forces regarded the virus as innocuous and have mostly shown a fundamental opposition against the countermeasures and the political elites enacting them (Lehmann and

Zehnter, 2022; Wondreys and Mudde, 2022), risk-averse behaviour and search for information typical of fearful individuals makes it unlikely that they adopt populist attitudes. Instead, it is more likely that these citizens will conclude that the risk of following such lenient approaches is much higher than supporting the current governmental measures. Thus, the simple and unelaborate solutions to the pandemic by populists are unlikely to resonate with fearful citizens. Additionally, fear is shown to increase individuals' preferences for deliberative decision-making and compromise which is at odds with the confrontational nature of populism (MacKuen et al., 2010). Populist attitudes promote a unilateral decision-making by the one true populace while, at the same time, they regard political compromise as betrayal of the popular will. In this vein, fearful respondents who look for deliberative forms of decision-making that involve compromise, and the balancing of different information and opinions, are unlikely to submit to such a confrontational and exclusionary style of politics. Put differently, 'the populist worldview is at odds with the appraisal and behavioural tendencies that characterize fear' (Rico et al., 2017: 448). Against this backdrop, we formulate hypothesis 2 as follows:

HYPOTHESIS 2: *Pandemic threat-elicited fear is negatively related to populist attitudes.*

5.4. Research Design

To empirically test our hypotheses about the relationships between pandemic threat-elicited emotions and populist attitudes, we rely on original survey data from the six following European countries: France, Germany, Italy, Spain, Switzerland, and the UK. More precisely, we use three webbased surveys fielded at three different points in time during the Covid-19 pandemic (survey wave 1: 24th November 2020–18th January 2021; survey wave 2: 22nd April−21st May 2021; survey wave 3: 25th January−8th March 2022). We obtained around 1,000 respondents per country and wave which results in a total of around 18,000 respondents. Respondents were recruited through SurveyEngine[3] access panels and received a small monetary incentive after completing the survey. To obtain meaningful interpretations of our data, we used quota sampling so that the sample resembles the general population of the respective countries in terms of sex, age, and education (and language for Switzerland). This should allow broader conclusions for the respective populations. The quotas were drawn from the Organisation for Economic Cooperation and Development (2019) and WKO (2020). More information on the surveys as well as descriptive statistics are presented in the online appendix in Tables S1 to S4.

[3] See www.surveyengine.com.

The six countries under study offer a good amount of variation to test our hypotheses in different political, epidemiological, and institutional contexts, which might increase the generalisability of our findings. First, considering that we study pandemic threat-elicited emotions, the epidemiological context is of importance. While all six countries were severely hit by the pandemic during our study, they also display substantial variation. For example, the second Covid-19 wave (late 2020 to early 2021) was particularly hard for the UK and Switzerland, with high case and fatality numbers accompanied by relatively slow countermeasures by the respective governments. France had high case and fatality numbers during the third wave of the pandemic (spring 2021). Furthermore, the countries vary in their general approach to counter the negative effects of the pandemic. Generally, Switzerland and parts of the UK followed a lenient approach with less stringent measures, while France, Germany, Italy, and Spain enacted stringent lockdown measures during parts of the pandemic (Hale et al., 2021) that only recently were reduced after the decline in cases following the omicron wave in March and April 2022. Second, regarding our dependent variable, the six countries also offer useful variation when it comes to the strength, shape, and history of populism in the political system.

To measure populist attitudes empirically, we use seven items that capture the respective dimensions of populism (Akkerman et al., 2014; Castanho Silva et al., 2018; van Hauwaert et al., 2020). While previous research often relied on factor analyses or mean scores to aggregate survey items for measuring populist attitudes, these approaches are at odds with the noncompensatory nature of the concept of populist attitudes (for a thorough and excellent discussion see Wuttke et al., 2020). Given that the "peculiarity of the populist set of ideas lies precisely in the combination of" (Hawkins and Rovira Kaltwasser, 2018: 6) people centrism, anti-elitism, and a Manichean outlook, populist attitudes are a non-compensatory concept (Wuttke et al., 2020: 358). Consequently, we employ a theoretical approach which captures this non-compensatory nature of populism.

The items for the respective subdimensions show positive but relatively small (average) inter-item correlations (people centrism: 0.35; anti-elitism: 0.33; Manichean outlook: 0.46; see Tables S6, S8, and S10 in the online appendix). Scale analyses based on Spearman Brown reliability coefficients and Cronbach's alpha show relatively low values (people centrism: 0.53; anti-elitism: 0.57; Manichean outlook: 0.63; see online appendix S5, S7, and S9). The relatively low internal consistency indicated by these analyses is most likely due to the fact that the respective items intentionally capture different aspects of the respective subdimensions of populism. In order to maximise the extent to which small item batteries can measure complex social science constructs, this is a necessary trade-off. In this regard, we consider our items as appropriate measures for

populist attitudes, especially given that replicating our analyses with the single items as dependent variables does not substantially alter our conclusions (see Figures S14–S20 in the online appendix).

We sum up the items of each subdimension of populism listed in Table 1 and then take the geometric mean of all three dimensions (Mohrenberg et al., 2021). This procedure ensures that people who score 0 on either dimension of populism have an overall 0 on the combined populism scale. For ease of interpretation, we rescale the variable to range from 0 (no populist attitudes) to 1 (high levels of populist attitudes). Figure S1 in the online appendix shows that populist attitudes are fairly widespread in all countries and that the main variation in populism is between countries, with Germany and Switzerland having generally lower levels of populist attitudes compared to Spain and France with the highest levels of populist attitudes.

Table 1: Items for Populist Attitudes

Items	Dimension	Mean W1	Mean W2	Mean W3
"The will of the people should be the highest principle in this country's politics." (POP 1)	People Centrism	3.95	3.91	3.92
"The differences between ordinary people and the ruling elite are much greater than the differences between ordinary people." (POP 2)	People Centrism	3.74	3.74	3.73
"I would rather be represented by a citizen than by a specialized politician." (POP 3)	Anti-Elitism	3.40	3.40	3.41
"Government officials use their power to try to improve people's lives." (POP4)	Anti-Elitism	2.86	2.81	2.79
"The particular interests of the political class negatively affect the welfare of the people." (POP 5)	Anti-Elitism	3.73	3.74	3.70
"You can tell if a person is good or bad if you know their politics." (POP 6)	Manichean Outlook	2.49	2.45	2.45
"The people I disagree with politically are just misinformed." (POP 7)	Manichean Outlook	2.72	2.67	2.68

Notes: Items adjusted from different scales (Akkerman et al., 2014; Castanho Silva et al., 2018; van Hauwaert et al., 2020). Reverse coded statement is POP 4.

In order to uncover citizens' emotional reactions to the Covid-19 pandemic threat, we asked respondents the following question: 'Thinking back to the last weeks and months: How often have you felt the following emotions in relation to a possible infection with the Coronavirus?' The respondents were then presented with a list of emotional states and the following answer options: (1) 'never'; (2) 'seldom'; (3) 'sometimes'; (4) 'often'; (5) 'very often'. This question is an adapted

version of the positive and negative affect schedule questionnaire (PANAS, see Watson et al., 1988).

For fear, we use 'anxious' and 'worried' as indicators. The two items show a Spearman-Brown reliability coefficient of 0.75 (survey wave 1), 0.76 (survey wave 2), and 0.77 (survey wave 3). For anger, we rely on 'angry' and 'hostile' as indicators. The two items show a Spearman-Brown reliability coefficient of 0.73 (survey wave 1), 0.74 (survey wave 2), and 0.74 (survey wave 3). We show the Spearman-Brown reliability coefficients for fear and anger by country and survey in the online appendix (see S12 and S13). For both, anger and fear, we combined the two items in an additive score and rescaled the variables to range from 0 to 1.

As one would expect due to their shared negative valence, fear and anger are positively correlated (survey wave 1: $r = 0.50$; survey wave 2: $r = 0.52$; survey wave 3: $r = 0.55$).[4] Overall, this approach is in line with the way previous research has measured emotional reactions to threatening events (Marcus et al., 2019). Given this correlation and the contentions of AIT that both emotions are elicited simultaneously, we follow previous research and include anger and fear simultaneously in a single model in order to control for the extent that respondents feel the respective other emotion.

A short look at the descriptive statistics of anger and fear reveals some noteworthy observations. Starting with pandemic threat-elicited fear, we see that fear was an important emotional reaction during the pandemic although there is considerable variation across countries. Figure 1 shows that the levels of fear are highest in France and Italy throughout the pandemic, followed by the UK and Spain. German and Swiss citizens display significantly lower levels of fear in all stages of the pandemic. These overall patterns are in line with the pandemic situation in the six countries with Italy, Spain, France, and the UK considered to be hit harder than Germany and Switzerland. Furthermore, we also observe that fear has generally declined over the course of the pandemic. Fear was highest during the second Covid-19 wave (alpha wave) in late 2020 and early 2021 and significantly lower during the omicron wave in early 2022. This holds for all countries.

Concerning anger, the average levels are lower than for fear in all six countries. Higher levels of anger are mostly triggered in Italy, France, and to a lesser extent in Spain. What is interesting is that there is little temporal variation in anger on the aggregate level. The levels of anger remain relatively

[4] We show the correlations by country and survey in the online appendix (see S14). Furthermore, confirmatory factor analyses show that emotional reactions are indeed characterised by a two-dimensional structure with two distinct factors (see Table S11 in the online appendix).

constant with the exception of the UK where anger is significantly lower during the omicron wave in early 2022.

In order to control for a number of factors that are shown to potentially influence populist attitudes but also might affect respondents' emotional responses to pandemic threat, we include a number of control variables. We control for the respondents' age, sex, education (three categories: (1) primary, lower secondary education; (2) upper, post-secondary education; (3) tertiary education), income situation, and self-reported health (on a scale from (1) very bad to (5) very good). Additionally, we also include political attitudes, i.e., an 11-point left-right self-placement measure (squared; to account for extremity) as well as a 5-point measure for political interest. Summary statistics for all variables across all countries and survey waves can be found in Tables S2–S4 in the online appendix.

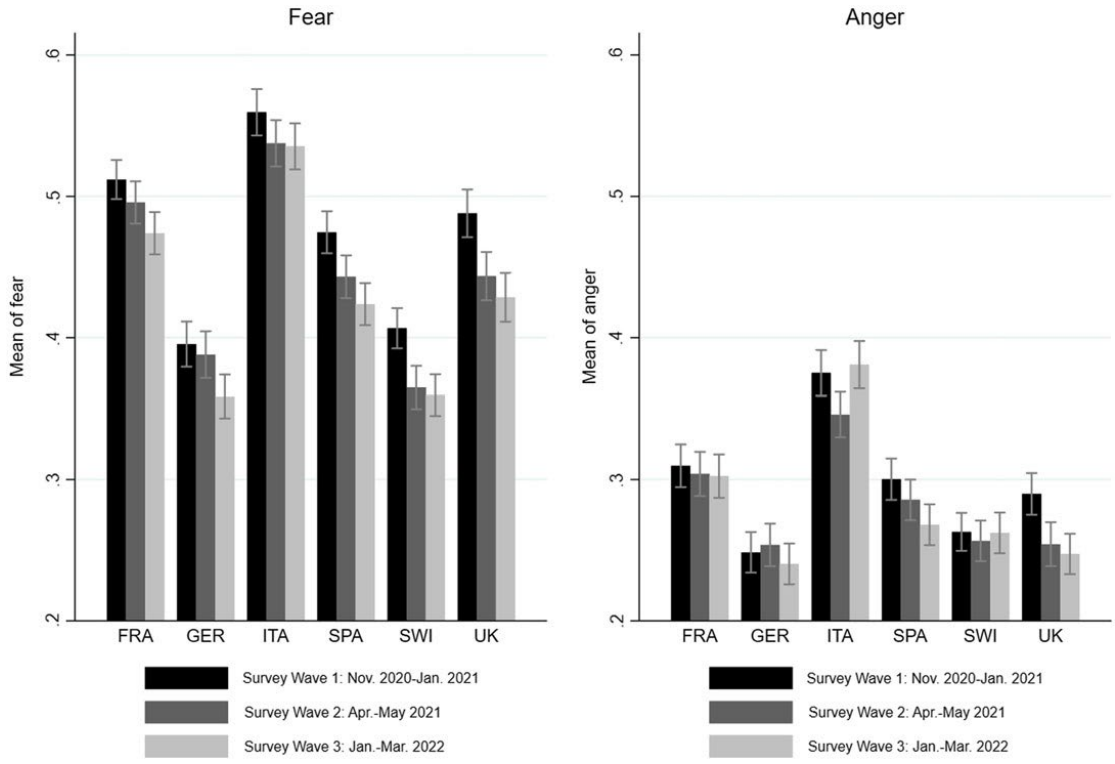


Figure 1: Mean of Anger and Fear with 95% Confidence Intervals per Country and Survey Wave

Notes: Displayed are country and survey-wave mean levels of fear and anger with 95% confidence intervals. Variables range from 0 (no fear/anger) to 1 (high fear/anger).
Source: Original survey data (see Research Design).

To model the relationship between pandemic threat-elicited emotions and populist attitudes, we regress populist attitudes on our measures of anger and fear as well as the described set of control

variables. We use linear regression models with country and survey fixed-effects and subnational region clustered standard errors. Next to the coefficients for the full sample, we also present marginal effects for each country and survey wave using interaction effects.

5.5. Empirical Findings

Table 2 presents the main results of our OLS model regressing populist attitudes on pandemic threat-elicited anger and fear as well as our set of socio-demographic and political control variables. We test anger and fear simultaneously to account for the fact that according to AIT, both emotions are simultaneously experienced rather than situated orthogonally. We maintained that anger is positively related to populist attitudes and our analysis provides clear empirical support for this contention.

Table 2: Linear Regression Models for the Relationship between Pandemic-Elicited Emotions and Populist Attitudes

DV: Populist attitudes	(1)
Anger	0.094***
	(0.009)
Fear	-0.034***
	(0.010)
Age	-0.000
	(0.000)
Sex	
Male	0.013***
	(0.004)
Education	
Upper, post-secondary	-0.004
	(0.005)
Tertiary	-0.016***
	(0.005)
Income situation	-0.018***
	(0.002)
Left-right self-placement	-0.026***
	(0.003)
Left-right self-placement (squared)	0.003***
	(0.000)
Political interest	0.006***
	(0.002)
Self-rated health	-0.003
	(0.002)
Constant	0.630***
	(0.013)
Country fixed-effects	✓
Survey Wave fixed-effects	✓
Observations	18090
R^2	0.081
Adjusted R^2	0.080

Notes: Linear regression coefficients with region-clustered standard errors in parentheses, *P < 0.05, **P < 0.01, ***P < 0.001. Reference Category (RF) for sex: female; RF Education: lower secondary or less.
Source: Original survey data (see Research Design).

Respondents who are angry with regard to a possible infection with the Coronavirus are more populist. Respondents who have never felt angry regarding such an infection have a predicted populist attitudes score of around 0.47, while people who very often felt angry have a predicted populist attitudes score of around 0.57. This relationship amounts to around 50 percent of a standard deviation. Thus, we find support for hypothesis 1 that pandemic threat-elicited anger is significantly and positively related to populist attitudes.

For fear, we expected that this pandemic threat-elicited emotion would be negatively related to populist attitudes. Indeed, our analyses also support this hypothesis. People who very often felt fear score around 0.48 on the populist attitudes scale while people who never felt fear score around 0.52. Thus, the coefficient of fear is considerably smaller than the coefficient of anger. Nevertheless, these analyses seem to support hypothesis 2.

The coefficients of our other covariates are in line with our expectations and previous research. In general, populist attitudes are higher among men, people with lower education, a less secure income situation and higher interest in politics. Ideology displays the expected u-shaped relationship indicating that those on the extreme left and right of the political spectrum have higher levels of populist attitudes. Age and self-rated health do not display any significant coefficients.

Our cross-national data at three different points in time allows us to take a more detailed look at the different countries through the pandemic. To do so, we interact our key independent variables, anger and fear, with country and survey-wave dummies. Figure 2 reports the marginal effects of anger and fear for each country in each survey wave. Overall, the results of our analysis for anger are relatively robust across most of our countries and the three time points. We find a significant and positive relationship between anger and populist attitudes in France and the UK in all survey waves and in Germany, Italy, and Switzerland in two out of three survey waves. Only in Spain, anger shows no relationship with populist attitudes in any survey wave.

With only six countries, it is difficult to explain country differences, but we may speculate on some reasons for these differences. First, our null findings for Spain are contrary to the findings by Rico et al. (2017), which might be due to the fact that in our survey period, the Spanish government includes a populist party (PODEMOS), which potentially alters how pandemic threat and ist emotional responses affect citizens' populist attitudes. Second and similarly, one could argue that in Italy, the presence of populist parties within the government leads to less consistent relationships between anger and populist attitudes in all three waves. Third, for Switzerland, we think that the consensual form of government combined with its direct-democratic traditions certainly limits how anger might shape populist attitudes in general, evident in the non-significant finding in survey

wave 1. Yet, the significant and positive coefficients in survey waves 2 and 3 could be very well based on the respective popular votes on Covid-19 that were held shortly before these two survey periods. The fact that both ended in favour of Covid-19 regulations might have sparked anger that was directed against the elites, even in an otherwise consensual country. Fourth, in Germany, we might explain the insignificant finding for anger in wave 2 with a combination of lower numbers of infections and the reversal of certain countermeasures. Yet, it is important to note that we cannot test any of these explanations, which is a task for future research.

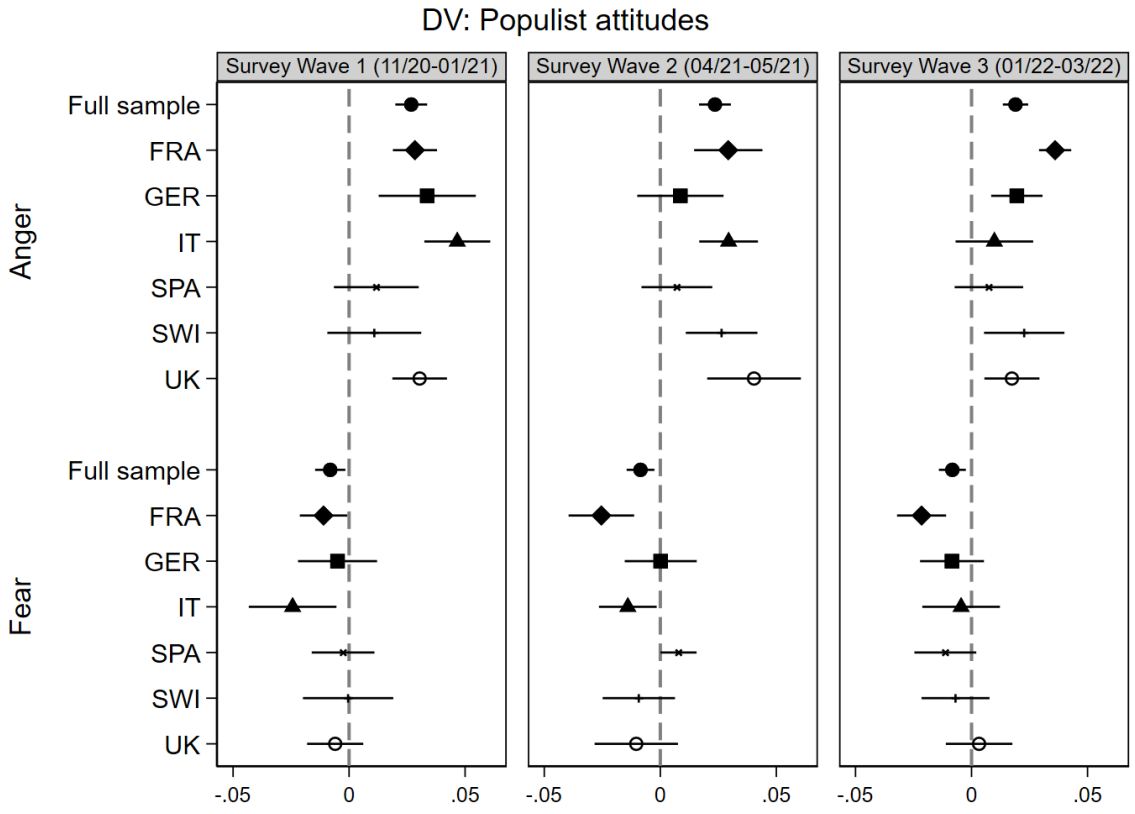


Figure 2: Marginal Effects of Pandemic-Elicited Emotions on Populist Attitudes by Country-Survey Wave

Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Full results in Table S15 in the online appendix.
Source: Original survey data (see Research Design).

For fear, the results are much less robust compared to the full sample analyses. Here, we only find negative and significant coefficients in France and to a lesser extent in Italy. In Germany, Spain, Switzerland, and the UK, the coefficients of fear do not reach conventional levels of statistical significance in any survey wave. This significantly undermines support for hypothesis 2 obtained by the full sample analysis and rather points to an inconsistent relationship between fear and populist attitudes that might be highly context specific. This could also be seen as an indication for

countervailing effects of fear itself. Although there is a lot of literature arguing that fear does not align with populist ideologies and discourses, others argue that anxiety and fear might play an important role (Webster and Albertson, 2022). Future studies might explore this in more detail to see whether fear has heterogeneous relationships with populism depending on the individual's and the societal context.

In sum, our findings suggest that the current pandemic does not uniformly relate positively or negatively to populist attitudes in six European countries. Rather, this relationship depends on whether people predominantly react with anger or fear to the Covid-19 pandemic threat. While anger about a possible infection with the Coronavirus is mainly positively related to populist attitudes, fear is either negatively or not at all related to populist attitudes.

Analyses of the Subdimensions

We now turn to the relationships between fear, anger, and the three subdimensions of populism. While populist attitudes are understood as the combination of people centrism, anti-elitism, and a Manichean outlook, it is still worthwhile to investigate whether pandemic threat and the elicited emotions are related to the respective subdimensions separately. Such an investigation might give an additional perspective on why populism does (not) flourish in times of pandemic threat. Thus, this is an important part of the investigation as it might uncover potentially different relationships between emotional reactions and the different subdimensions.

Figure 3 shows marginal effects of anger and fear by country-survey wave on people centrism. What becomes evident is that the relationship between anger and people centrism is inconsistent across countries and over time. We only find significant and positive coefficients for anger in France, Germany, and Italy in the first wave and in France in the third wave. Interestingly, we even find a negative significant coefficient for anger in Spain in the first and third survey waves. All other coefficients do not reach conventional levels of statistical significance. For fear and people centrism, we find almost no statistically significant relationships except for a negative coefficient in Germany in survey wave 2 and two positive coefficients in Switzerland in waves 1 and 2. Overall, anger and fear do not seem to affect the people centrism component of populism in a systematic and consistent manner.

Turning to the second dimension of populist attitudes, anti-elitism, the picture is clearer (see Figure 4). Here, we find significant and positive coefficients for anger in France, Germany, Switzerland, and the UK in all three survey waves. People who react with anger to pandemic threat exhibit higher levels of anti-elitist attitudes. For Italy and Spain, we cannot corroborate this relationship. Considering the coefficients of fear, we also see relatively consistent relationships. In France,

Germany, and Switzerland, we see a negative and significant relationship with anti-elitist attitudes in all three survey waves (with the exception of France in wave 1). In all other countries, however, fear and anti-elitism are not systematically associated. Lastly, regarding the relation between anger and a Manichean outlook on society, there is a relatively consistent pattern (see Figure 5). Out of the possible 18 coefficients, 14 are significant and positive, implying that those who react with anger to pandemic threat are more likely to see society as divided into good and bad. For fear and this third dimension of populism, we only see that 6 out of 18 coefficients are significant and negative, pointing towards a very inconsistent relationship.

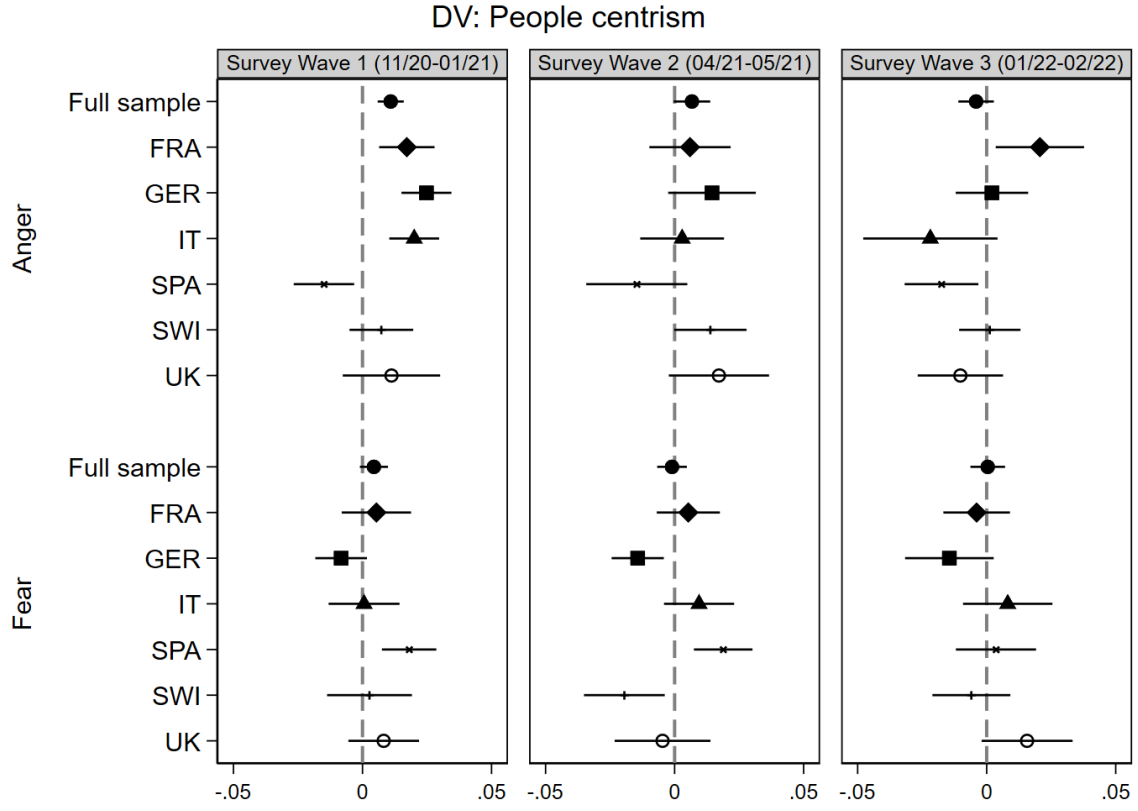


Figure 3: Marginal Effects of Pandemic-Elicited Emotions on People Centrism by Country-Survey Wave

Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Full results in Table S15 in the online appendix.
Source: Original survey data (see Research Design).

Robustness Checks

While our findings are robust, the cross-sectional nature of our data does not allow us to causally identify the effects of emotions on populist attitudes. Thus, one could argue that, rather than emotions preceding populist attitudes, respondents with populist attitudes are more or less inclined to react with certain emotions to threatening stimuli. Following the literature, we think that our

proposed direction is in line with the contentions from previous research. Most studies convincingly show that emotions affect political judgement and attitudes and that decision-making and political attitudes are a function of emotions and cognition (Bonansinga, 2020). Yet, there has been ample debate in the literature on whether there is a so-called 'endogenous affect', implying that pre-existing attitudes induce emotional responses (Ladd and Lenz, 2011). Drawing on neuroscientific insights, Marcus et al. (2011) and Brader (2005) forcefully argue and show that emotions are not endogenous to political attitudes but have independent causal power (Sirin and Villalobos, 2021). In this regard, Vasilopoulos (2021: 7) summarises that 'affective reactions have a causal impact on political behaviour, rather than being mere epiphenomena of political decisions.' Despite these convincing results from the literature, we cannot fully rule out reciprocal effects between emotions and populist attitudes, but the presence of these should not affect the validity of our theoretical arguments (Rico et al., 2017).

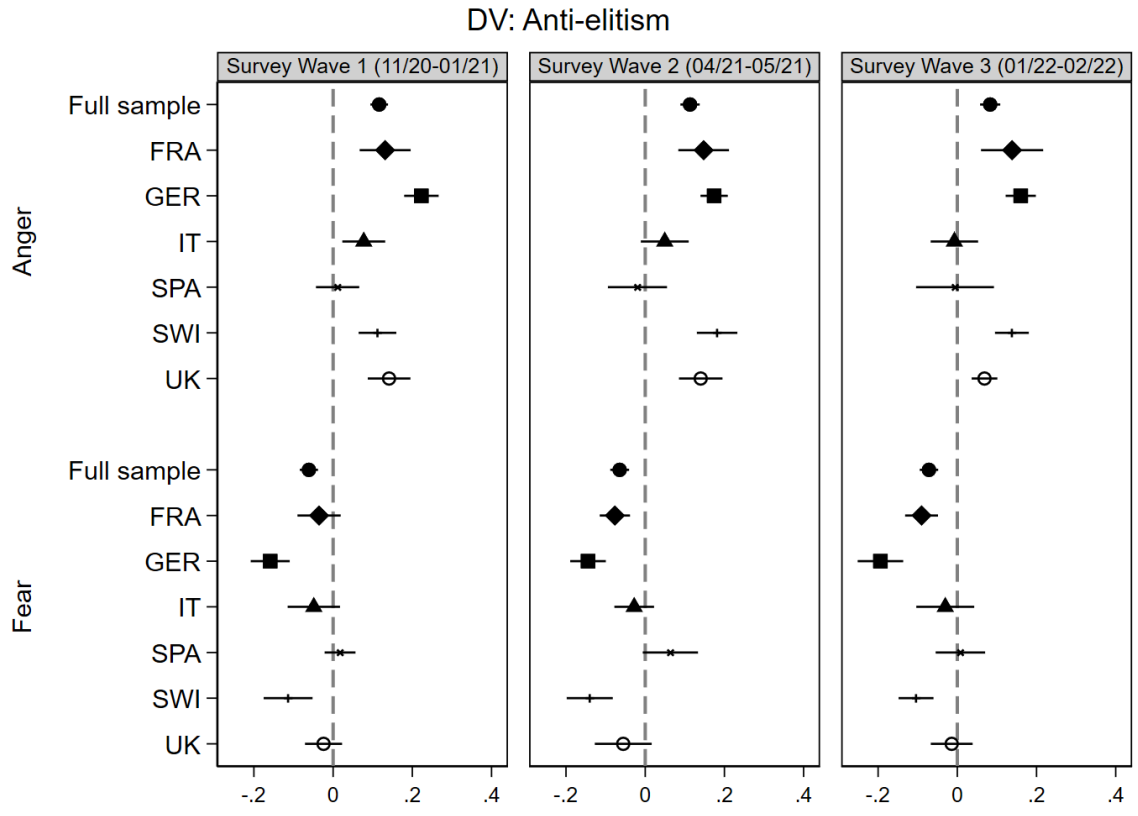
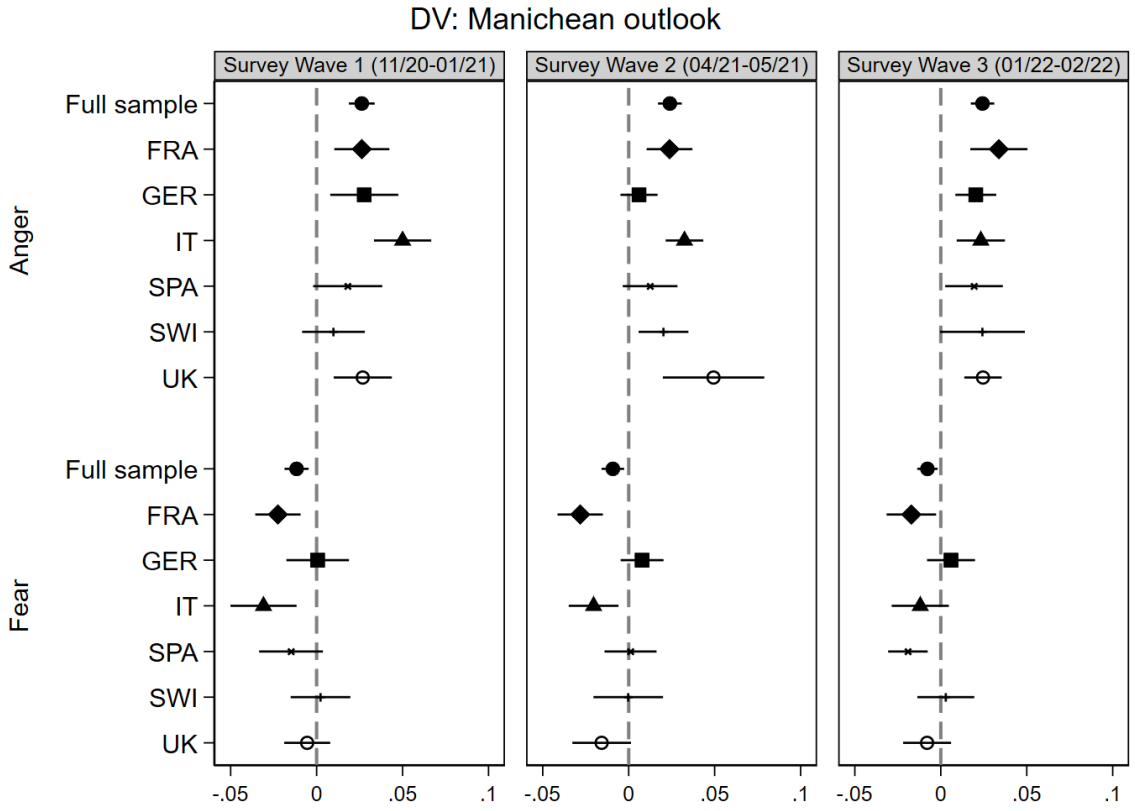


Figure 4: Marginal Effects of Pandemic-Elicited Emotions on Anti-elitism by Country-Survey Wave

Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Full results in Table S15 in the online appendix.
Source: Original survey data (see Research Design).

To solidify our empirical results, we performed a series of robustness checks to see whether our results hold across different specifications and to further strengthen our confidence in the proposed relationships.[5] First, as personality traits might be a source of both emotional responses and populist attitudes, we test whether such deep-rooted dispositional traits distort our results.



5: Marginal Effects of Pandemic-Elicited Emotions on Manichean Outlook by Country-Survey Wave

Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Full results in Table S15 in the online appendix.
Source: Original survey data (see Research Design).

Including the Big Five personality traits does not alter our main conclusions as the coefficients of anger (and fear) remain significant and in the expected directions (see Table S17 and Figures S2, S5, S8, S11 in the online appendix). For the Big Five themselves, we find that conscientious,

[5] We also tested whether anger and fear relate to radical right-wing and radical left-wing populist party support. The findings largely corroborate the argument that anger relates positively to radical right-wing populist party support. For the radical left-wing populist parties, we only find anger to be important in France but not in Germany (weak radical left party "Die Linke") and Spain ("PODEMOS" as part of the government). We thank a reviewer for the suggestion (see online appendix Table S20 and Figures S21–S22).

agreeable, and open respondents tend to have lower levels of populist attitudes while the reverse is true for neurotic individuals. Extraversion is not significantly related to populist attitudes.

Second, we include threat perceptions related to the Covid-19 pandemic into our models to see whether they change how anger and fear are related to populist attitudes. Including perceptions of infectious, social, or financial threat into our models does not alter our main conclusions regarding fear and anger, although social and financial threat perceptions are positively related to populist attitudes (see Table S17 as well as Figures S3, S6, S9, and S12 in the online appendix). Third, we also include the information whether respondents have been infected with the Covid-19 virus to see whether the experience of an infection invokes certain (emotional) reactions that distort the relationships between anger, fear, and populist attitudes. As shown in the online appendix, this is not the case (see Table S17 as well as Figures S4, S7, S10, and S13). Fourth, including a question that taps into respondents' perceptions of the governmental measures to combat the pandemic (on a scale from (1) do not go far enough to (5) go way too far) does not alter the main conclusions as anger (and fear) remain statistically significant and in the expected directions (see Table S16 in the online appendix).

5.6. Conclusion

Our study evaluates how anger and fear elicited by the Covid-19 pandemic threat relate to populist attitudes in six European countries. Following insights of AIT, we argued that the Covid-19 pandemic threat prompts anger and fear, which in turn have distinct relationships with populist attitudes. We tested these contentions using data from three original surveys conducted between November 2021 and March 2022 in France, Germany, Italy, Spain, Switzerland, and the UK. Our results show that citizens experiencing anger are more prone to express populist attitudes, while those that experience fear are less likely to express such exclusionary stances. The relationships are robust across most of our countries and survey waves for anger but less so for fear. As additional analyses show, anger mainly relates to the anti-elitist and Manichean dimensions of populism and less so to people centrism.

Our analyses offer a step towards a better understanding of the threat-induced emotional foundations of populism. Although they point in the right direction, we need more studies that empirically examine the psychological underpinnings of populist stances during hard times. As such, our approach has its limitations that require further attention. Although our study moves beyond previous single case studies in scrutinising the relationship between emotions and populist attitudes across six European countries, our case selection is limited to Western and Southern European countries. Thus, the question of whether our findings travel to different country contexts

arises. Furthermore, our data is strictly cross-sectional, thus preventing us from drawing any causal inferences based on the uncovered relationships. It might very well be that people with populist attitudes are more likely to express anger rather than fear with regard to pandemic threat, compared to those without populist attitudes (Nguyen et al., 2022). Yet, a large segment of the literature is in line with our contention that emotions influence attitudes rather than vice versa. Our study might thus function as a starting point for future studies to focus on experimental manipulation (e.g., Rhodes-Purdy et al., 2021) or a longitudinal design (Rico et al., 2017) in order to offer causally robust conclusions. Such designs might also disentangle the mechanism through which anger affects populist attitudes empirically. Additionally, our study was only able to test anger and fear with regard to a possible Coronavirus infection, and thus, only indirectly touches upon other threats of the pandemic such as financial losses or social isolation. While our findings are robust to the inclusion of different threat perceptions, future research might investigate multi-layered threats in more detail to see whether different aspects of a (pandemic) threat arouse distinct emotions that have different political and social consequences. Experimental studies are particularly suited for this. Lastly, our study followed most of the previous literature by measuring emotions through self-reported survey items. Recently, studies have made progress in using different methods including facial expressions and other techniques, which can be fruitfully applied in experimental designs (Marcus et al., 2017).

Despite these caveats, our findings align with and expand two different strands of literature, thus having crucial implications for future research. First, we add to the literature that investigates the emotional foundations of populism by showing that anger as a response to an external threat that is less connected to traditional populist grievances, is positively related to populist attitudes. By showing that anger elicited by the Covid-19 pandemic fosters populist attitudes, we underscore that anger rather than fear is the emotional bedrock of populism, even in crises that do not fully align with populist grievances.

Second, the empirical insights provided by our analyses are in line with recent findings on the importance of emotions during the pandemic and how they affect crucial aspects of politics. For example, it was found that pandemic threat-elicited anger is related to lower levels of trust in the government (Erhardt et al., 2021) and less to support for the restriction of civil liberties (Vasilopoulos et al., 2022). Even more so, pandemic threat-elicited anger seems to be connected to exclusionary attitudes such as a preference for authoritarian governance (Erhardt et al., 2022), anti-immigrant sentiments (Freitag and Hofstetter, 2022) and ethnic conceptions of nationhood (Wamsler et al., 2022) and, as we show here, populist attitudes. Relatedly, our study complements recent research on how populist parties fared during the pandemic (Froio, 2022; Wondreys and

Mudde, 2022; Zanotti and Turnbull-Dugarte, 2022) by honing in on how the pandemic relates to populist attitudes. By doing so, we offer an explanation why populist forces did not necessarily perform well during the pandemic, although pundits and scholars often connect populist success to different crises and threats. The reasons might lie in the emotional responses to pandemic threat and their distinct consequence for political attitudes.

As additional analyses show (see Table S19 in the online appendix), angry respondents seem to prioritise the economy over public health considerations and regard the measures as too restrictive. Against this background, they might consider populism as an attractive political option in times of the pandemic, given that radical and populist parties stylised themselves as 'defender[s] of freedom' (Lehmann and Zehnter, 2022: 1). Yet, given that fearful respondents react differently to pandemic threat than angry individuals, this strategy is not necessarily successful, especially when considering that fear seems to be the dominant emotion triggered by a pandemic. Overall, our analyses might help to understand why populism has not necessarily flourished during the Covid-19 pandemic as only those citizens reacting with anger to pandemic threat are more inclined to hold populist attitudes.

5.7. Publication Bibliography

Akkerman, Agnes, Cas Mudde and Andrej Zaslove (2014), 'How populist are the people? Measuring populist attitudes in voters', *Comparative Political Studies* **47**(9): 1324–1353. DOI: 10.1177/0010414013512600.

Albertson, Bethany and Shana Kushner Gadarian (2015), *Anxious Politics. Democratic Citizenship in a Threatening World*, Cambridge: Cambridge University Press.

Bol, Damien, Marco Giani, André Blais and Peter John Loewen (2021), 'The effect of COVID-19 lockdowns on political support: Some good news for democracy?', *European Journal of Political Research* **60**(2): 497–505. DOI: 10.1111/1475-6765.12401.

Bonansinga, Donatella (2020), 'Who thinks, feels. The relationship between emotions, politics and populism', Partecipazione e Conflitto The Open Journal of Sociopolitical Studies **13**(1): 83–106. DOI: 10.1285/I20356609V13I1P83.

Bor, Alexander, Frederik Jørgensen, Marie Fly Lindholt and Michael Bang Petersen (2022), 'Moralizing the COVID-19 Pandemic: self-interest predicts moral condemnation of other's compliance, distancing, and vaccination', *Political Psychology*, Article pops.12835. DOI: 10.1111/pops.12835.

Brader, Ted (2005), 'Striking a responsive Chord: how political ads motivate and persuade voters by appealing to emotions', *American Journal of Political Science* **49**(2): 388–405. DOI: 10.1111/j.0092-5853.2005.00130.x.

Brader, Ted and Erin Cikanek (2019), 'The emotional foundations of democratic citizenship', in Adam J. Berinsky (ed.), *New Directions in Public Opinion*, 3rd edn., New York, NY: Taylor & Francis, 2020. Routledge, pp. 202–235.

Brader, Ted and George E. Marcus (2013), *Emotion and Political Psychology – Oxford Handbooks*: Oxford University Press, Retrieved from 10 February 2021.

Castanho Silva, Bruno, Ioannis Andreadis, Eva Anduiza, Nebojsa Blanusa, Yazmin M. Corti, Gisela Delfino, Guillem Rico, Saskia P. Ruth, Bram Spruyt, Marco Steenbergen and Levente Littvay (2018), 'Public opinion surveys: a new measure', in Kirk A. Hawkins, Ryan E. Carlin, Levente Littvay and Crist´obal Rovira Kaltwasser (eds.), *The Ideational Approach to Populism. Concept, Theory, and Analysis*, Milton: Routledge, pp. 150–178.

Erhardt, Julian, Markus Freitag and Maximilian Filsinger (2022), 'Leaving democracy? pandemic threat, emotional accounts and regime support in comparative perspective', *West European Politics*. DOI: 10.1080/01402382.2022.2097409.

Erhardt, Julian, Markus Freitag, Maximilian Filsinger and Steffen Wamsler (2021), 'The emotional foundations of political support: how fear and anger affect trust in the government in times of the Covid-19 pandemic', *Swiss Political Science Review* **27**(2): 339–352. DOI: 10.1111/spsr.12462.

Erisen, Cengiz and Sofia Vasilopoulou (2022), 'The affective model of far-right vote in Europe: anger, political trust, and immigration', *Social Science Quarterly* **103**(3): 635–648. DOI: 10.1111/ssqu.13153.

Filsinger, Maximilian and Markus Freitag (2022), 'Pandemic threat and authoritarian attitudes in Europe: an empirical analysis of the exposure to COVID-19', *European Union Politics* **23**(3): 417–436. DOI: 10.1177/14651165221082517.

Freitag, Markus and Nathalie Hofstetter (2022), 'Pandemic threat and intergroup relations: how negative emotions associated with the threat of Covid-19 shape attitudes towards immigrants', *Journal of Ethnic and Migration Studies*: 1–20. DOI: 10.1080/1369183X.2022.2031925.

Froio, Caterina (2022), 'The Rassemblement national and COVID-19: how nativism, authoritarianism and expert populism did not pay off during the pandemic', *Government and Opposition*: 1–21. DOI: 10.1017/gov.2022.12.

Hale, Thomas, Noam Angrist, Rafael Goldszmidt, Beatriz Kira, Anna Petherick, Toby Phillips, Samuel Webster, Emily Cameron-Blake, Laura Hallas, Saptarshi Majumdar and Helen Tatlow (2021), 'A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker)', *Nature Human Behaviour* **5**(4): 529–538. DOI: 10.1038/s41562-021-01079-8.

Hawkins, Kirk A. and Crist´obal Rovira Kaltwasser (2018), 'Introduction: the ideational approach', in Kirk A. Hawkins, Ryan E. Carlin, Levente Littvay and Crist´obal Rovira Kaltwasser (eds.), *The Ideational Approach to Populism. Concept, Theory, and Analysis*, Milton: Routledge, pp. 1–24.

Kriesi, Hanspeter and Takēs S. Pappas (eds.) (2015), *European Populism in the Shadow of the Great Recession*, Colchester: ECPR Press (Studies in European political science/ECPR).

Ladd, Jonathan McDonald and Gabriel S. Lenz (2011), 'Does anxiety improve voters' decision-making?', *Political Psychology* **32**(2): 347–361. DOI: 10.1111/j.1467-9221.2010.00805.x.

Lehmann, Pola and Lisa Zehnter (2022), 'The self-proclaimed defender of freedom: the AfD and the pandemic', *Government and Opposition*: 1–19. DOI: 10.1017/gov.2022.5.

Lerner, Jennifer S., Roxana M. Gonzalez, Deborah A. Small and Baruch Fischhoff (2003), 'Effects of fear and anger on perceived risks of terrorism: a national field experiment', *Psychological Science* **14**(2): 144–150. DOI: 10.1111/1467-9280.01433.

Lupu, Noam and Elizabeth J. Zechmeister (2021), 'The early COVID-19 pandemic and democratic attitudes', *PloS One* **16**(6). DOI: 10.1371/journal.pone.0253485.

MacKuen, Michael; Wolak, Jennifer; Keele, Luke; Marcus, George E. (2010): 'Civic engagements: resolute partisanship or reflective deliberation', *American Journal of Political Science* **54**(2): 440–458. DOI: 10.1111/j.1540-5907.2010.00440.x.

Marcus, George E., Michael MacKuen and W. Russell Neuman (2011), 'Parsimony and complexity: developing and testing theories of affective intelligence', *Political Psychology* **32**(2): 323–336. DOI: 10.1111/j.1467-9221.2010.00806.x.

Marcus, George E., W. Russell Neuman and Michael MacKuen (2000), *Affective Intelligence and Political Judgment*, Chicago: University of Chicago Press.

Marcus, George E., W. Russell Neuman and Michael B. MacKuen (2017), 'Measuring emotional response: comparing alternative approaches to measurement', *Political Science Research and Methods* **5**(4): 733–754. DOI: 10.1017/psrm.2015.65.

Marcus, George E., Nicholas A. Valentino, Pavlos Vasilopoulos and Martial Foucault (2019), 'Applying the theory of affective intelligence to support for authoritarian policies and parties', *Political Psychology* **40**(S1): 109–139. DOI: 10.1111/pops.12571.

Mohrenberg, Steffen, Robert A. Huber and Tina Freyburg (2021), 'Love at first sight? Populist attitudes and support for direct democracy', *Party Politics* **27**(3): 528–539. DOI: 10.1177/1354068819868908.

Nguyen, Christoph Giang, Mikko Salmela and Christian von Scheve (2022), 'From specific worries to generalized anger: the emotional dynamics of right-wing political populism', in Michael Oswald (ed.), *The Palgrave Handbook of Populism*, Cham, Switzerland: Palgrave Macmillan (Palgrave Handbooks), pp. 145–160, Retrieved from 6 January 2022.

Organisation for Economic Cooperation and Development (2019), Bildung auf einen Blick 2019: OECD-Indikatoren. Wbv Media. Bielefeld, Retrieved from 17 November 2021.

Rhodes-Purdy, Matthew, Rachel Navarre and Stephen M. Utych (2021), 'Populist psychology: economics, culture, and emotions', *The Journal of Politics* **83**(4): 1559–1572. DOI: 10.1086/715168.

Rico, Guillem, Marc Guinjoan and Eva Anduiza (2017), 'The emotional underpinnings of populism. How anger and fear affect populist attitudes', *Swiss Political Science Review* **23**(4): 444–461. DOI: 10.1111/spsr.12261.

Rosenthal, Uriel; Michael T. Charles and Paul 't Hart (eds.) (1989), *Coping with Crises: The Management of Disasters, Riots, and Terrorism*, Springfield: Charles C Thomas Pub Limited.

Sirin, Cigdem V. and José D. Villalobos (2021), 'The study of discrete emotions in politics', in Pavlos Vasilopoulos (ed.), *The Oxford Encyclopedia of Political Decision Making*, New York: Oxford University Press, pp. 1462–1484.

Spruyt, Bram, Gil Keppens and Filip van Droogenbroeck (2016), 'Who supports populism and what attracts people to it?', *Political Research Quarterly* **69**(2): 335–346. DOI: 10.1177/1065912916639138.

Steenbergen, Marco and Chris Ellis (2006), 'Fear and loathing in American elections. Context, traits and negative candidate affect', in David Redlawsk (ed.), *Feeling Politics. Emotion in Political Information Processing*, New York: Palgrave Macmillan, pp. 109–133.

Taylor, Steven (2019), *The Psychology of Pandemics. Preparing for the Next Global Outbreak of Infectious Disease*, Newcastleupon-Tyne: Cambridge Scholars Publisher. Retrieved from https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=5940200

van Hauwaert, Steven M., Christian H. Schimpf and Flavio Azevedo (2020), 'The measurement of populist attitudes: testing cross-national scales using item response theory', *Politics* **40**(1): 3–21. DOI: 10.1177/0263395719859306.

van Hauwaert, Steven M. and Stijn van Kessel (2018), 'Beyond protest and discontent. A cross-national analysis of the effect of populist attitudes and issue positions on populist party support', *European Journal of Political Research* **57**(1): 68–92. DOI: 10.1111/1475-6765.12216.

Vasilopoulos, Pavlos (2021), 'Affective intelligence and emotional dynamics in voters' decision-making processes', in David P. Redlawsk (ed.), *The Oxford Encyclopedia of Political Decision Making*, New York: Oxford University Press, pp. 1–13.

Vasilopoulos, Pavlos, George E. Marcus, Nicholas A. Valentino and Martial Foucault (2019), 'Fear, anger, and voting for the far right: evidence from the November 13, 2015 Paris Terror Attacks', *Political Psychology* **40**(4): 679–704. DOI: 10.1111/pops.12513.

Vasilopoulos, Pavlos, Haley Mcavay, Sylvain Brouard and Martial Foucault (2022), 'Emotions, governmental trust and support for the restriction of civil liberties during the covid-19 pandemic', *European Journal of Political Research*, Article 1475-6765.12513. DOI: 10.1111/1475-6765.12513.

Wamsler, Steffen, Markus Freitag, Julian Erhardt and Maximilian Filsinger (2022), 'The pandemic and the question of national belonging: exposure to covid-19 threat and conceptions of nationhood', *European Journal of Political Research*. DOI: 10.1111/1475-6765.12515.

Watson, David, Lee A. Clark and Auke Tellegen (1988), 'Development and validation of brief measures of positive and negative affect: the PANAS scales', *Journal of Personality and Social Psychology* **54**(6): 1063–1070. DOI: 10.1037//0022-3514.54.6.1063.

Webster, Steven W. and Bethany Albertson (2022), 'Emotion and politics: noncognitive psychological biases in public opinion', *Annual Review of Political Science* **25**(1): 401–418. DOI: 10.1146/annurev-polisci-051120-105353.

WKO (2020), Bevölkerungsstruktur. Retrieved 17 September 2021 from http://wko.at/statistik/eu/europabevoelkerungsstruktur.pdf

Wondreys, Jakub and Cas Mudde (2022), 'Victims of the pandemic? European far-right parties and COVID-19', *Nationalities Papers* **50**(1): 86–103. DOI: 10.1017/nps.2020.93.

Wuttke, Alexander, Christian Schimpf and Harald Schoen (2020), 'When the whole is greater than the sum of its parts. On the conceptualization and measurement of populist attitudes and other multi-dimensional constructs', *American Political Science Review* **114**(1): 356–374. DOI: 10.1017/S0003055419000807.

Zanotti, Lisa and Stuart James Turnbull-Dugarte (2022), 'Surviving but not thriving: VOX and Spain in Times of COVID-19', *Government and Opposition*: 1–20. DOI: 10.1017/gov.2022.7.

5.8. Online Appendix

Table S1: Detailed Description of the Surveys

Survey 1	**November 24, 2020 – January 18, 2021**
Target population	Residents aged 18 years or older in Germany, France, Italy, Switzerland, Spain, and the United Kingdom
Survey mode	Online
Sample size	6,210 respondents (target sample size: 1,000 per country)
Quotas	Age, Sex, Education (language for Switzerland)
Sampling	SurveyEngine access panel
Interview language	German, French, Italian, Spanish, English
Response rate	7.03% (RR5/6)*
Institute	SurveyEngine
Survey 2	April 22, 2021 – May 21, 2021
Target population	Residents aged 18 years or older in Germany, France, Italy, Switzerland, Spain, and the United Kingdom
Survey mode	Online
Sample size	6,069 respondents (target sample size: 1,000 per country)
Quotas	Age, Sex, Education (language for Switzerland)
Sampling	SurveyEngine access panel
Interview language	German, French, Italian, Spanish, English
Response rate	17.86% (RR5/6)*
Institute	SurveyEngine
Survey 3	January 25, 2022 – March 08, 2022
Target population	Residents aged 18 years or older in Germany, France, Italy, Switzerland, Spain, and the United Kingdom
Survey mode	Online
Sample size	6,379 respondents (target sample size: 1,000 per country)
Quotas	Age, Sex, Education (language for Switzerland)
Sampling	SurveyEngine access panel
Interview language	German, French, Italian, Spanish, English
Response rate	19.16% (RR5/6)*
Institute	SurveyEngine

Table S2: Summary Statistics Survey Wave 1

	N	Mean	SD	Min	Max
Populist attitudes	6136	.51	.20	0	1
POP 1	6136	2.96	.92	0	4
POP 2	6136	2.77	.95	0	4
POP 3	6136	2.4	1.05	0	4
POP 4	6136	2.14	1.06	0	4
POP 5	6136	2.73	.96	0	4
POP 6	6136	1.49	1.08	0	4
POP 7	6136	1.72	1.01	0	4
Anger	6136	.3	.25	0	1
Fear	6136	.47	.26	0	1
Age	6136	47.93	16.45	18	91
Sex	6136	.50	.50	0	1
Education	6136	2.11	.77	1	3
Primary & lower secondary	1535				
Upper, post-secondary	2391				
Tertiary	2210				
Income situation	6136	2.97	1.08	1	5
Subjective social status	6136	4.82	2.32	0	10
Left-right self-placement	6136	3.26	1.15	1	5
Political interest	6136	3.67	.90	1	5
Extraversion	6136	2.86	.85	1	5
Agreeableness	6136	3.63	.74	1	5
Conscientiousness	6136	3.93	.79	1	5
Neuroticism	6136	2.55	.88	1	5
Openness	6136	3.43	.77	1	5
Perceived infectious threat	4315	2.54	.9	1	4
Perceived financial threat	6136	2.30	1.0	1	4
Perceived social threat	6136	2.30	.91	1	4
Infection with Covid-19	6201	2.11	.77	1	3
No	4309				
Infection friends/family	1366				
Own infection	455				
Observations	6136				

Source: Original survey data collected from November 24, 2020 to January 18, 2021 by SurveyEngine.

Table S3: Summary Statistics Survey Wave 2

	N	Mean	SD	Min	Max
Populist attitudes	5923	.50	.21	0	1
POP 1	5923	2.92	0.95	0	4
POP 2	5923	2.75	0.97	0	4
POP 3	5923	2.41	1.05	0	4
POP 4	5923	2.19	1.07	0	4
POP 5	5923	2.74	0.98	0	4
POP 6	5923	1.45	1.10	0	4
POP 7	5923	1.67	0.99	0	4
Anger	5923	.28	.25	0	1
Fear	5923	.45	.26	0	1
Age	5923	48.02	16.15	18	90
Sex	5923	.50	.50	0	1
Education	5923	2.17	.75	1	3
Primary & lower secondary	1262				
Upper, post-secondary	2414				
Tertiary	2247				
Income situation	5923	3.06	1.06	1	5
Subjective social status	5923	4.93	2.38	0	10
Left-right self-placement	5923	3.29	1.19	1	5
Political interest	5923	3.71	.95	1	5
Extraversion	5923	2.87	0.86	1	5
Agreeableness	5923	3.66	0.76	1	5
Conscientiousness	5923	3.96	0.80	1	5
Neuroticism	5923	2.51	0.89	1	5
Openness	5923	3.44	0.78	1	5
Perceived infectious threat	3750	2.33	0.90	1	4
Perceived financial threat	5923	2.21	0.97	1	4
Perceived social threat	5923	2.25	0.90	1	4
Infection with Covid-19	5895	1.47	0.68	1	3
No	3722				
Infection friends/family	1554				
Own infection	619				
Observations	5923				

Source: Original survey data collected from April 22, 2021 to May 21, 2021 by SurveyEngine.

Table S4: Summary Statistics Survey Wave 3

	N	Mean	SD	Min	Max
Populist attitudes	6208	.50	.21	0	1
POP 1	6208	2.92	0.94	0	4
POP 2	6208	2.73	0.98	0	4
POP 3	6208	2.41	1.05	0	4
POP 4	6208	2.21	1.08	0	4
POP 5	6208	2.70	1.00	0	4
POP 6	6208	1.45	1.09	0	4
POP 7	6208	1.68	0.98	0	4
Anger	6208	.28	.25	0	1
Fear	6208	.43	.27	0	1
Age	6208	48.27	15.79	18	91
Sex	6208	.51	.50	0	1
Education	6208	2.10	.77	1	3
Primary & lower secondary	1575				
Upper, post-secondary	2447				
Tertiary	2186				
Income situation	6208	3.00	1.05	1	5
Subjective social status	6208	4.95	2.33	0	10
Left-right self-placement	6208	3.27	1.19	1	5
Political interest	6208	3.67	.94	1	5
Extraversion	6208	2.83	0.84	1	5
Agreeableness	6208	3.64	0.76	1	5
Conscientiousness	6208	3.94	0.82	1	5
Neuroticism	6208	2.54	0.88	1	5
Openness	6208	3.41	0.77	1	5
Perceived infectious threat	2663	2.30	0.89	1	4
Perceived financial threat	6208	2.17	0.93	1	4
Perceived social threat	6208	2.22	0.90	1	4
Infection with Covid-19	6156	1.79	0.77	1	3
No	2611				
Infection friends/family	2220				
Own infection	1325				
Observations	6208				

Source: Original survey data collected from January 25, 2022 to March 08, 2022 by SurveyEngine.

Table S5: Spearman Brown for People Centrism

Model	Pooled Sample	FRA	GER	ITA	SPA	CH	UK
Survey Wave 1	.50	.58	.51	.61	.49	.38	.50
Survey Wave 2	.52	.49	.55	.58	.62	.43	.47
Survey Wave 3	.56	.58	.59	.64	.59	.51	.54

Notes: Shows Spearman Brown reliability coefficients between POP 1 ""The will of the people should be the highest principle in this country's politics" and POP2 "The differences between ordinary people and the ruling elite are much greater than the differences between ordinary people". Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S6: Inter-item Correlations between Items for People Centrism

Model	Pooled Sample	FRA	GER	ITA	SPA	CH	UK
Survey Wave 1	.33	.41	.34	.44	.32	.23	.34
Survey Wave 2	.35	.33	.38	.41	.45	.27	.31
Survey Wave 3	.38	.41	.42	.47	.42	.34	.37

Notes: Shows correlations between POP 1 "The will of the people should be the highest principle in this country's politics" and POP2 "The differences between ordinary people and the ruling elite are much greater than the differences between ordinary people". Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S7: Cronbach's Alpha for Anti-elitism

Model	Pooled Sample	FRA	GER	ITA	SPA	CH	UK
Survey Wave 1	.56	.61	.67	.37	.51	.49	.52
Survey Wave 2	.57	.61	.65	.4	.57	.50	.5
Survey Wave 3	.58	.63	.70	.46	.58	.49	.5

Notes: Shows Cronbach's alpha for POP 3 "I would rather be represented by a citizen than by a specialized politician", POP4 "Government officials use their power to try to improve people's lives" and POP5 "The particular interests of the political class negatively affect the welfare of the people". Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S8: Average Inter-item Correlations for Items of Anti-elitism

Model	Pooled Sample	FRA	GER	ITA	SPA	CH	UK
Survey Wave 1	.32	.34	.43	.18	.26	.23	.25
Survey Wave 2	.33	.33	.42	.2	.3	.24	.25
Survey Wave 3	.35	.37	.49	.26	.31	.24	.25

Notes: Shows average inter-item correlations between POP 3 "I would rather be represented by a citizen than by a specialized politician", POP4 "Government officials use their power to try to improve people's lives" and POP5 "The particular interests of the political class negatively affect the welfare of the people" Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S9: Spearman Brown for Manichean Outlook

Model	Pooled Sample	FRA	GER	ITA	SPA	CH	UK
Survey Wave 1	.61	.5	.58	.7	.57	.65	.62
Survey Wave 2	.62	.53	.66	.7	.54	.64	.66
Survey Wave 3	.65	.68	.63	.74	.58	.69	.55

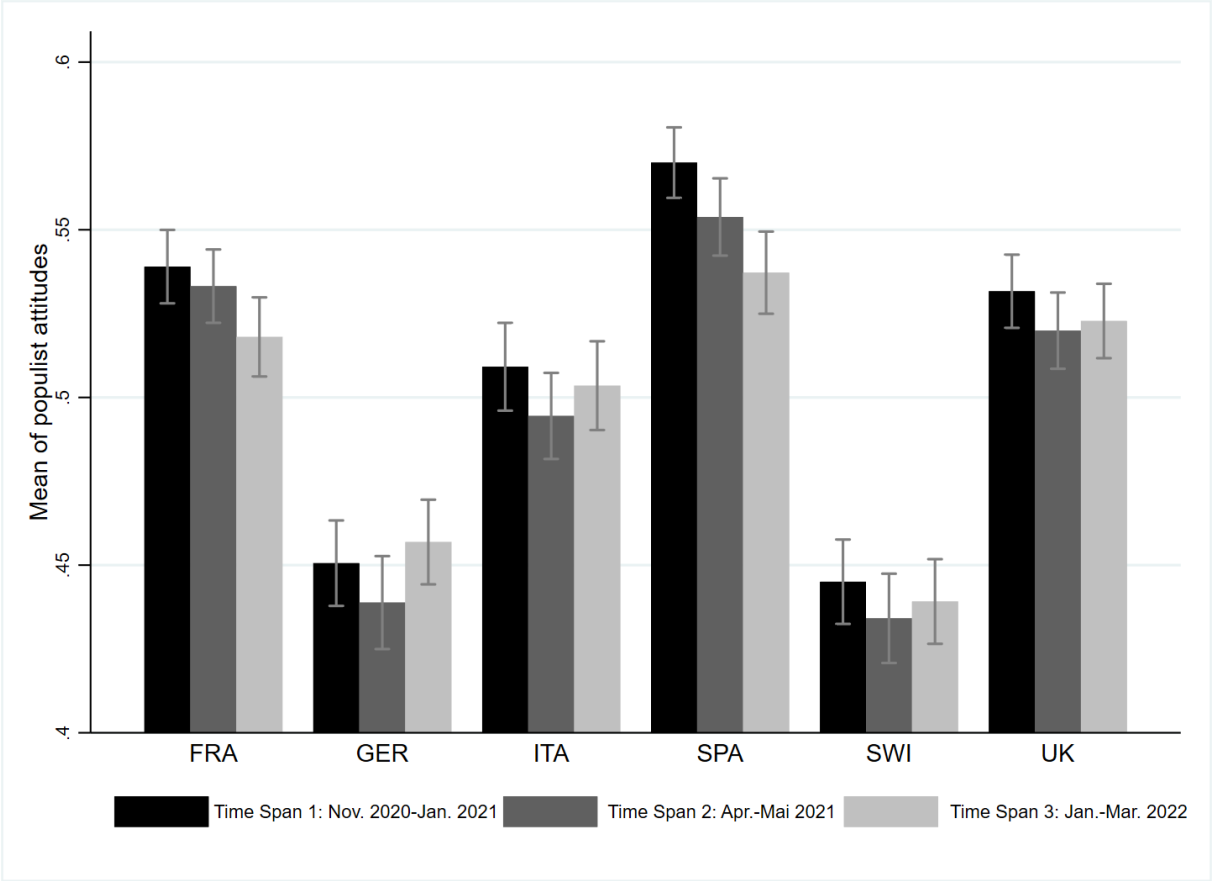
Notes: Shows Spearman Brown reliability coefficients between POP 6 "You can tell if a person is good or bad if you know their politics." and POP7 "The people I disagree with politically are just misinformed.". Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S10: Inter-item Correlations between Items for Manichean Outlook

Model	Pooled Sample	FRA	GER	ITA	SPA	CH	UK
Survey Wave 1	.44	.33	.41	.54	.40	.48	.45
Survey Wave 2	.45	.36	.49	.54	.37	.48	.49
Survey Wave 3	.48	.52	.46	.59	.41	.53	.38

Notes: Shows correlations between POP 6 "You can tell if a person is good or bad if you know their politics." and POP7 "The people I disagree with politically are just misinformed.". Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S1: Mean Level of Populist Attitudes with 95% Confidence Intervals per Country and Survey Wave



Note: Displayed are country and survey-wave mean levels of populist attitudes with 95% confidence intervals. Variable ranges from 0 (no populist attitudes) to 1 (high populist attitudes). Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S11: Dimensionality of Emotions: Model Fit Comparison of Confirmatory Factor Analysis

Model	AIC	ΔAIC	RMSEA	Δ RMSEA	CFI	Δ CFI	TLI	Δ TLI
One Dimension	206756	-	.285	-	.870	-	.610	-
Two dimensions	203928	2828	.088	-.197	.994	.124	.963	.353

Notes: N = 18,257; RMSEA = root mean square error of approximation; CFI = comparative fit index; TLI = Tucker-Lewis index; CFI = comparative fit index. Source: Original survey data collected by SurveyEngine from (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022). Estimations are done with the SEM command implemented in Stata 17.

Table S12: Spearman Brown for Fear ("anxious" and "worried")

Model	Pooled Sample	FRA	GER	ITA	SPA	CH	UK
Survey Wave 1	.75	.52	.81	.79	.67	.75	.87
Survey Wave 2	.76	.55	.83	.8	.69	.77	.87
Survey Wave 3	.77	.61	.82	.80	.71	.74	.88

Notes: Shows Spearman Brown reliability coefficients between "anxious" and "worried". Source: Original survey data collected by SurveyEngine from (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S13: Spearman Brown for Anger ("angry" and "hostile")

Model	Pooled Sample	FRA	GER	ITA	SPA	CH	UK
Survey Wave 1	.73	.74	.68	.75	.77	.7	.73
Survey Wave 2	.74	.74	.69	.77	.75	.7	.78
Survey Wave 3	.74	.74	.74	.78	.78	.75	.72

Notes: Shows Spearman Brown reliability coefficients between "angry" and "hostile". Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S14: Correlation between Anger and Fear

Model	Pooled Sample	FRA	GER	ITA	SPA	CH	UK
Survey Wave 1	.5	.4	.37	.55	.62	.43	.52
Survey Wave 2	.52	.45	.44	.52	.62	.47	.57
Survey Wave 3	.55	.43	.47	.62	.6	.52	.56

Notes: Shows correlations between anger and fear. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S15: Linear Regression Model for the Relationship between Pandemic Elicited Emotions and Populist Attitudes Including Survey-Wave and Country Interactions

	DV: Populist attitudes	DV: People centrism	DV: Anti elitism	DV: Manichean outlook
Anger	0.114***	0.069**	0.130***	0.105**
	(0.019)	(0.022)	(0.033)	(0.032)
Fear	-0.044*	0.022	-0.023	-0.090**
	(0.021)	(0.027)	(0.029)	(0.027)
GER # anger	0.021	0.030	0.082*	0.006
	(0.046)	(0.029)	(0.040)	(0.052)
ITA # anger	0.073*	0.011	-0.052	0.095*
	(0.035)	(0.030)	(0.042)	(0.047)
SPA # anger	-0.067	-0.128***	-0.122**	-0.033
	(0.042)	(0.032)	(0.043)	(0.052)
SWI # anger	-0.070	-0.039	-0.026	-0.066
	(0.045)	(0.033)	(0.041)	(0.049)
UK # anger	0.008	-0.024	0.006	0.002
	(0.031)	(0.044)	(0.044)	(0.047)
GER # fear	0.024	-0.055	-0.126**	0.093*
	(0.039)	(0.033)	(0.037)	(0.045)
ITA # fear	-0.053	-0.019	-0.020	-0.033
	(0.043)	(0.038)	(0.043)	(0.047)
SPA # fear	0.034	0.051	0.050	0.030
	(0.034)	(0.034)	(0.035)	(0.046)
SWI # fear	0.042	-0.011	-0.082	0.099*
	(0.044)	(0.043)	(0.042)	(0.044)
UK # fear	0.020	0.011	0.003	0.068
	(0.032)	(0.039)	(0.038)	(0.038)
Survey Wave 2 # anger	0.004	-0.045	0.011	-0.010
	(0.035)	(0.027)	(0.038)	(0.039)
Survey Wave 3 # anger	0.031	0.014	0.004	0.030
	(0.021)	(0.032)	(0.028)	(0.034)
Survey Wave 2 # fear	-0.058*	-0.000	-0.039	-0.023
	(0.028)	(0.032)	(0.032)	(0.032)
Survey Wave 3 # fear	-0.042	-0.037	-0.055	0.022
	(0.031)	(0.034)	(0.035)	(0.034)
GER # Survey Wave 2	-0.017	0.007	0.010	-0.003
	(0.030)	(0.021)	(0.014)	(0.034)
GER # Survey Wave 3	0.039	0.017	0.020	0.053
	(0.024)	(0.017)	(0.020)	(0.028)
ITA # Survey Wave 2	-0.030	-0.019	-0.028	-0.015
	(0.028)	(0.024)	(0.022)	(0.038)
ITA # Survey Wave 3	0.018	0.020	-0.004	0.027
	(0.026)	(0.017)	(0.018)	(0.035)
SPA # Survey Wave 2	-0.054**	-0.007	-0.031*	-0.047
	(0.020)	(0.020)	(0.015)	(0.032)
SPA # Survey Wave 3	-0.002	0.009	-0.016	0.018
	(0.024)	(0.019)	(0.017)	(0.027)
SWI # Survey Wave 2	-0.036	0.001	-0.048**	-0.009
	(0.024)	(0.022)	(0.017)	(0.032)
SWI # Survey Wave 3	0.003	-0.003	-0.037*	0.020
	(0.021)	(0.020)	(0.018)	(0.027)
UK # Survey Wave 2	-0.033	-0.015	-0.031	0.001
	(0.025)	(0.025)	(0.018)	(0.035)
UK # Survey Wave 3	0.005	-0.021	0.004	0.044
	(0.023)	(0.021)	(0.021)	(0.029)

GER # Survey Wave 2	-0.104	0.004	-0.054	-0.077
# anger	(0.075)	(0.044)	(0.047)	(0.063)
GER # Survey Wave 3	-0.087	-0.105*	-0.066	-0.059
# anger	(0.055)	(0.045)	(0.046)	(0.061)
ITA # Survey Wave 2	-0.072	-0.024	-0.040	-0.060
# anger	(0.053)	(0.046)	(0.051)	(0.058)
ITA # Survey Wave 3	-0.178***	-0.181**	-0.096	-0.137*
# anger	(0.049)	(0.061)	(0.050)	(0.053)
SPA # Survey Wave 2	-0.022	0.046	-0.047	-0.012
# anger	(0.056)	(0.048)	(0.054)	(0.064)
SPA # Survey Wave 3	-0.048	-0.024	-0.035	-0.025
# anger	(0.037)	(0.045)	(0.060)	(0.048)
SWI # Survey Wave 2	0.059	0.071	0.061	0.052
# anger	(0.051)	(0.046)	(0.049)	(0.051)
SWI # Survey Wave 3	0.017	-0.038	0.021	0.028
# anger	(0.055)	(0.048)	(0.039)	(0.061)
UK # Survey Wave 2	0.036	0.069	-0.020	0.100
# anger	(0.058)	(0.062)	(0.055)	(0.079)
UK # Survey Wave 3	-0.083*	-0.099	-0.080	-0.039
# anger	(0.038)	(0.057)	(0.043)	(0.055)
GER # Survey Wave 2	0.078	-0.024	0.052	0.051
# fear	(0.050)	(0.038)	(0.042)	(0.055)
GER # Survey Wave 3	0.028	0.012	0.017	-0.000
# fear	(0.057)	(0.046)	(0.058)	(0.062)
ITA # Survey Wave 2	0.099*	0.036	0.063	0.065
# fear	(0.048)	(0.053)	(0.058)	(0.053)
ITA # Survey Wave 3	0.121*	0.067	0.077	0.054
# fear	(0.054)	(0.042)	(0.047)	(0.062)
SPA # Survey Wave 2	0.099*	0.003	0.083	0.087
# fear	(0.039)	(0.041)	(0.045)	(0.056)
SPA # Survey Wave 3	0.007	-0.021	0.048	-0.038
# fear	(0.050)	(0.053)	(0.050)	(0.048)
SWI # Survey Wave 2	0.022	-0.088*	0.014	0.013
# fear	(0.057)	(0.042)	(0.048)	(0.061)
SWI # Survey Wave 3	0.016	0.003	0.061	-0.019
# fear	(0.051)	(0.046)	(0.050)	(0.053)
UK # Survey Wave 2	0.040	-0.051	0.014	-0.018
# fear	(0.041)	(0.058)	(0.045)	(0.044)
UK # Survey Wave 3	0.079	0.067	0.073	-0.032
# fear	(0.050)	(0.049)	(0.055)	(0.056)
Age	-0.000	0.002***	0.001***	-0.002***
	(0.000)	(0.000)	(0.000)	(0.000)
Sex				
Male	0.013***	0.009*	0.002	0.021***
	(0.004)	(0.004)	(0.004)	(0.004)
Education				
Upper, post-secondary	-0.005	0.010*	0.015***	-0.015**
	(0.005)	(0.005)	(0.004)	(0.005)
Tertiary	-0.016**	-0.015**	-0.001	-0.016**
	(0.005)	(0.005)	(0.005)	(0.006)
Income situation	-0.017***	-0.014***	-0.022***	-0.014***
	(0.002)	(0.002)	(0.002)	(0.002)
Left-right self-placement	-0.026***	-0.017***	-0.017***	-0.030***
	(0.003)	(0.003)	(0.003)	(0.003)
Left-right self-placement (squared)	0.003***	0.002***	0.002***	0.003***
	(0.000)	(0.000)	(0.000)	(0.000)
Political interest	0.006**	0.009***	-0.010***	0.014***

	(0.002)	(0.002)	(0.002)	(0.002)
Self-rated health	-0.003	0.007**	-0.001	-0.004
	(0.002)	(0.002)	(0.002)	(0.002)
Constant	0.631***	0.588***	0.694***	0.590***
	(0.018)	(0.020)	(0.023)	(0.022)
Observations	18090	18090	18090	18090
R^2	0.085	0.060	0.120	0.084
Adjusted R^2	0.082	0.057	0.117	0.081

Notes: Linear regression coefficients with region-clustered standard errors in parentheses, * p < 0.05, ** p < 0.01, *** p < 0.001. Reference Category (RF) for sex: female; RF Education: lower secondary or less; RF Position on countermeasures: Don't go nearly far enough. Source: Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S16: Linear Regression Models for the Relationship between Pandemic-Elicited Emotions and Populist Attitudes (Robustness Checks)

DV: Populist attitudes	Robustness
Anger	0.083***
	(0.009)
Fear	-0.027***
	(0.010)
Age	-0.000
	(0.000)
Sex	
Male	0.014***
	(0.004)
Education	
Upper, post-secondary	-0.005
	(0.005)
Tertiary	-0.016***
	(0.005)
Income situation	-0.016***
	(0.002)
Left-right self-placement	-0.026***
	(0.003)
Left-right self-placement (squared)	0.002***
	(0.000)
Political interest	0.006***
	(0.002)
Self-rated health	-0.003
	(0.002)
Position on countermeasures	
Don't go far enough	-0.013**
	(0.005)
Appropriate	-0.032***
	(0.006)
Go too far	-0.008
	(0.006)
Go much too far	0.012
	(0.010)
Constant	0.637***
	(0.014)
Country fixed-effects	✓
Survey Wave fixed-effects	✓
Observations	18090
R^2	0.086
Adjusted R^2	0.084

Notes: Linear regression coefficients with region-clustered standard errors in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Reference Category (RF) for sex: female; RF Education: lower secondary or less; RF Position on countermeasures: Don't go nearly far enough. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

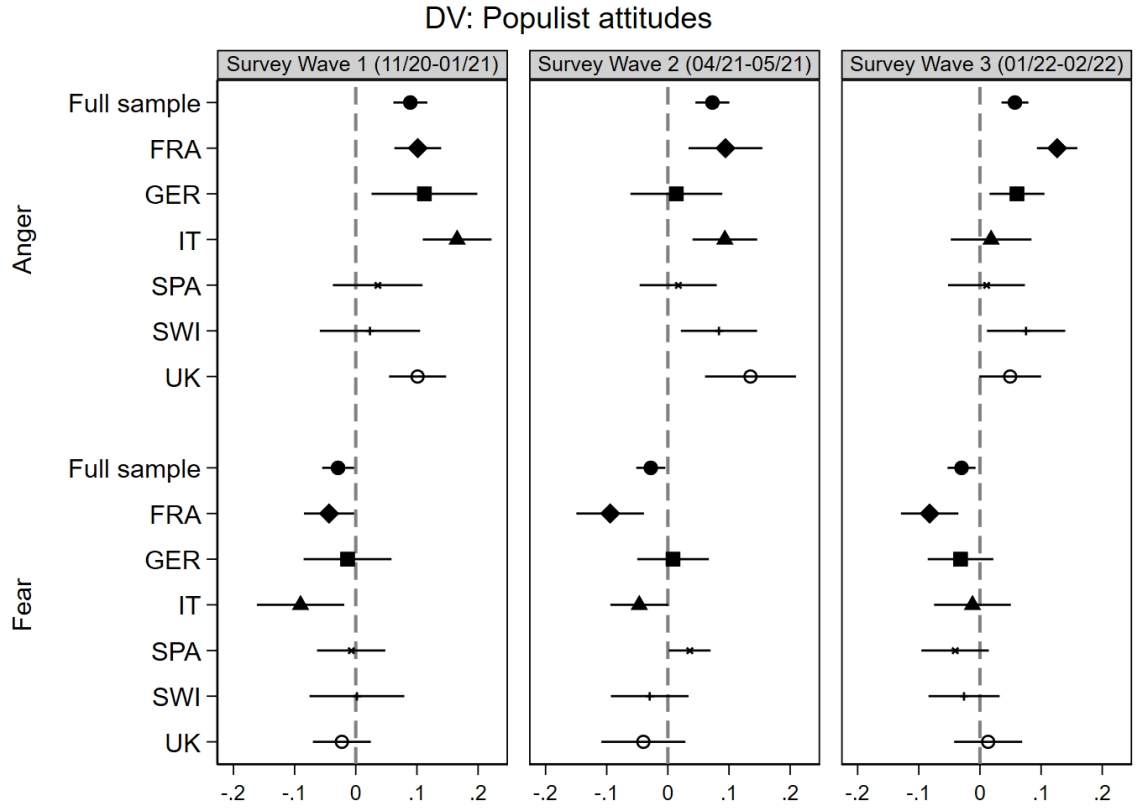
Table S17: Linear Regression Model for the Relationship between Pandemic-elicited Emotions and Populist Attitudes (Robustness checks)

	Robustness 1	Robustness 2	Robustness 3
DV: Populist attitudes			
Anger	0.075***	0.088***	0.093***
	(0.009)	(0.010)	(0.009)
Fear	-0.030**	-0.040**	-0.034***
	(0.010)	(0.013)	(0.010)
Age	0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)
Sex			
Male	0.008*	0.014**	0.013***
	(0.004)	(0.005)	(0.004)
Education			
Upper, post-secondary	-0.002	-0.007	-0.004
	(0.005)	(0.007)	(0.005)
Tertiary	-0.013*	-0.022**	-0.016**
	(0.005)	(0.007)	(0.005)
Income situation	-0.016***	-0.017***	-0.018***
	(0.002)	(0.003)	(0.002)
Left-right self-placement	-0.026***	-0.025***	-0.027***
	(0.003)	(0.003)	(0.003)
Left-right self-placement	0.003***	0.002***	0.003***
(squared)	(0.000)	(0.000)	(0.000)
Political interest	0.007**	0.007*	0.006**
	(0.002)	(0.003)	(0.002)
Self-rated health	0.000	-0.003	-0.003
	(0.002)	(0.003)	(0.002)
Big-5 Personality Traits			
Extraversion	0.001	-	-
	(0.002)		
Agreeableness	-0.016***	-	-
	(0.003)		
Conscientiousness	-0.013***	-	-
	(0.003)		
Neuroticism	0.006**	-	-
	(0.002)		
Openness	-0.005*	-	-
	(0.002)		
Threat Perceptions			
Perceived infectious threat	-	-0.005	-
		(0.003)	
Perceived financial threat	-	0.005*	-
		(0.003)	
Perceived social threat	-	0.006*	-
		(0.003)	
Infection with Covid-19			
Infection friends/family	-	-	-0.004
			(0.004)
Own infection	-	-	0.012*
			(0.005)
Constant	0.710***	0.608***	0.630***
	(0.022)	(0.024)	(0.016)
Observations	18090	10610	18008
Country fixed-effects	✓	✓	✓
Survey Wave fixed-effects	✓	✓	✓

R^2	0.091	0.080	0.082
Adjusted R^2	0.090	0.078	0.081

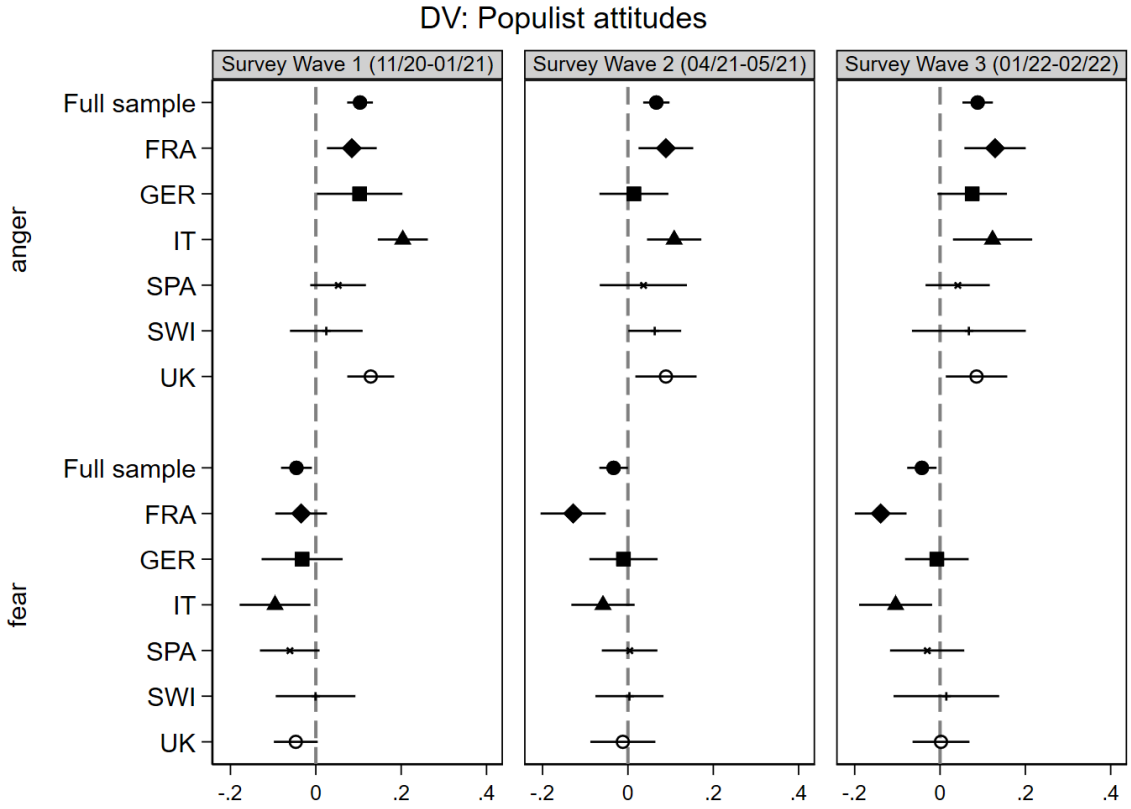
Notes: Linear regression coefficients with region-clustered standard errors in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Reference Category (RF) for sex: female; RF Education: lower secondary or less; RF Infection with Covid-19: No infection. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S2: Marginal Effects of Pandemic-elicited Emotions on Populist Attitudes by Country-Survey Wave Including Personality Traits as Additional Control Variables



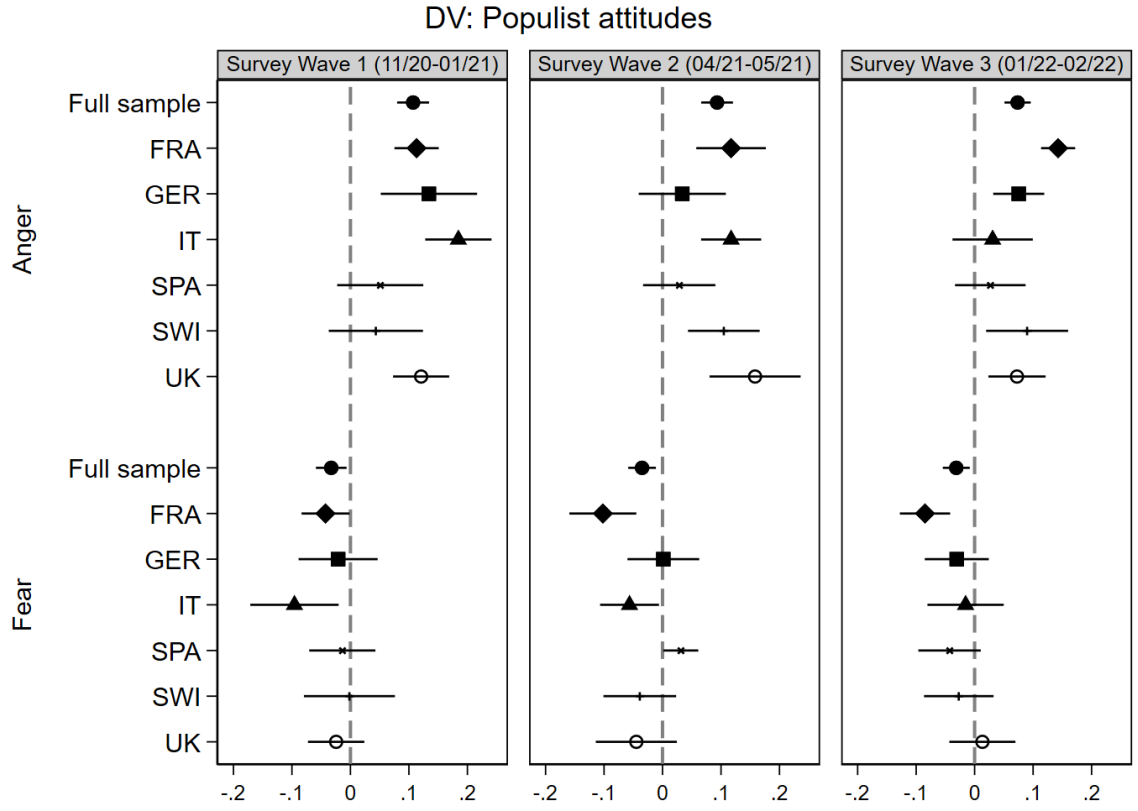
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S3: Marginal Effects of Pandemic-elicited Emotions on Populist Attitudes by Country-survey Wave Including Threat Perceptions as Additional Control Variables



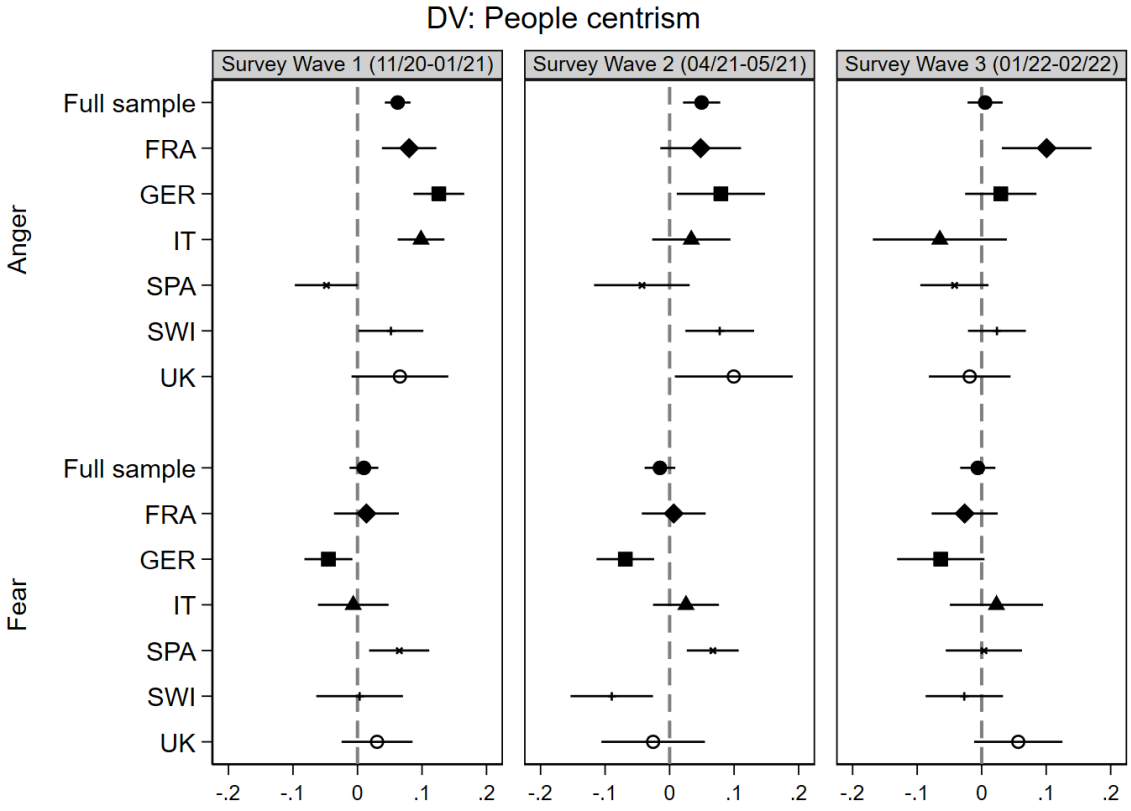
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S4: Marginal Effects of Pandemic-elicited Emotions on Populist Attitudes by Country-survey Wave Including Covid-19 Infection as Additional Control Variable



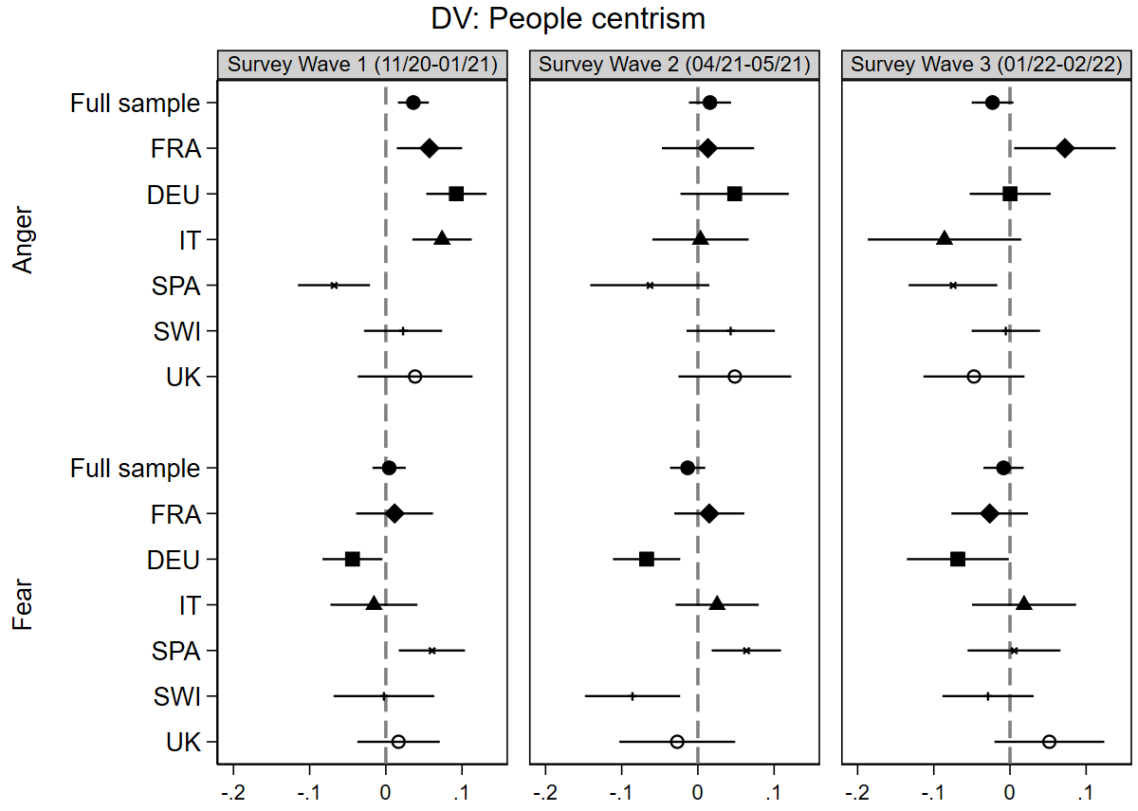
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S5: Marginal Effects of Pandemic-elicited Emotions on People Centrism by Country-survey Wave Including Personality Traits as Additional Control Variables



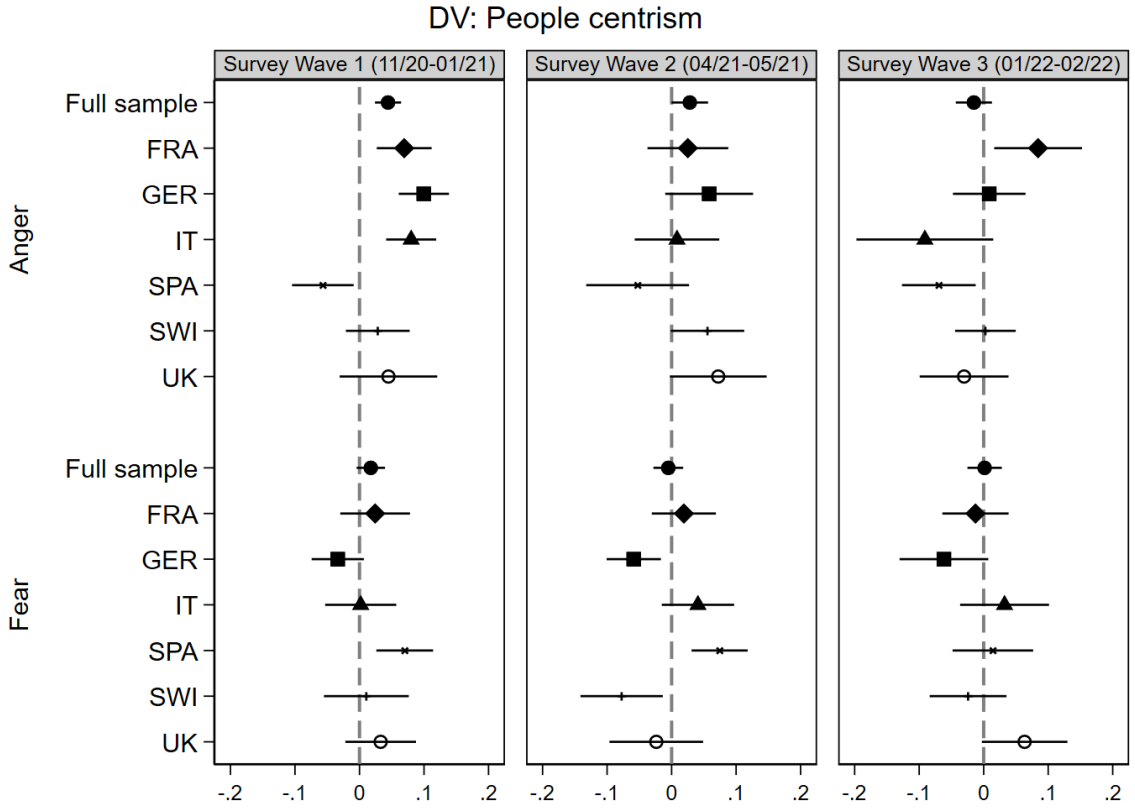
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S6: Marginal Effects of Pandemic-elicited Emotions on People Centrism by Country-survey Wave Including Threat Perceptions as Additional Control Variables



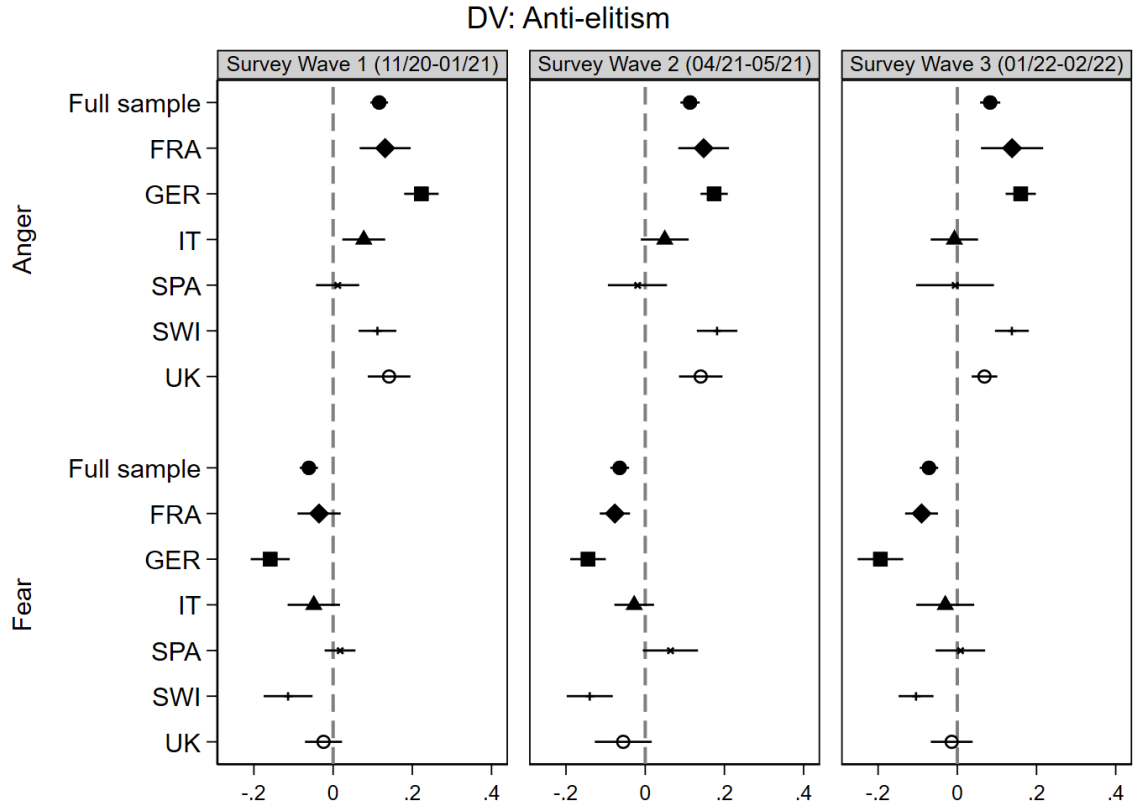
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S7: Marginal Effects of Pandemic-elicited Emotions on People Centrism by Country-survey Wave Including Covid-19 Infection as Additional Control Variable



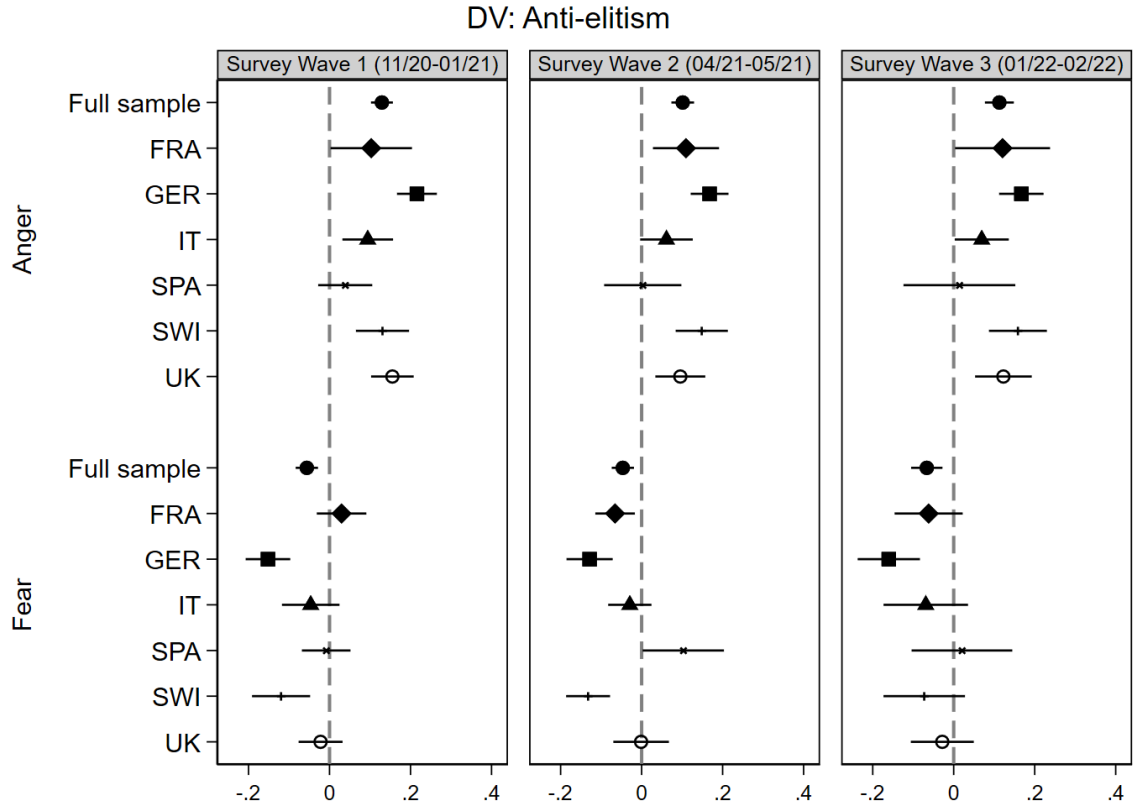
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S8: Marginal Effects of Pandemic-elicited Emotions on Anti-elitism by Country-survey Wave Including Personality Traits as Additional Control Variables



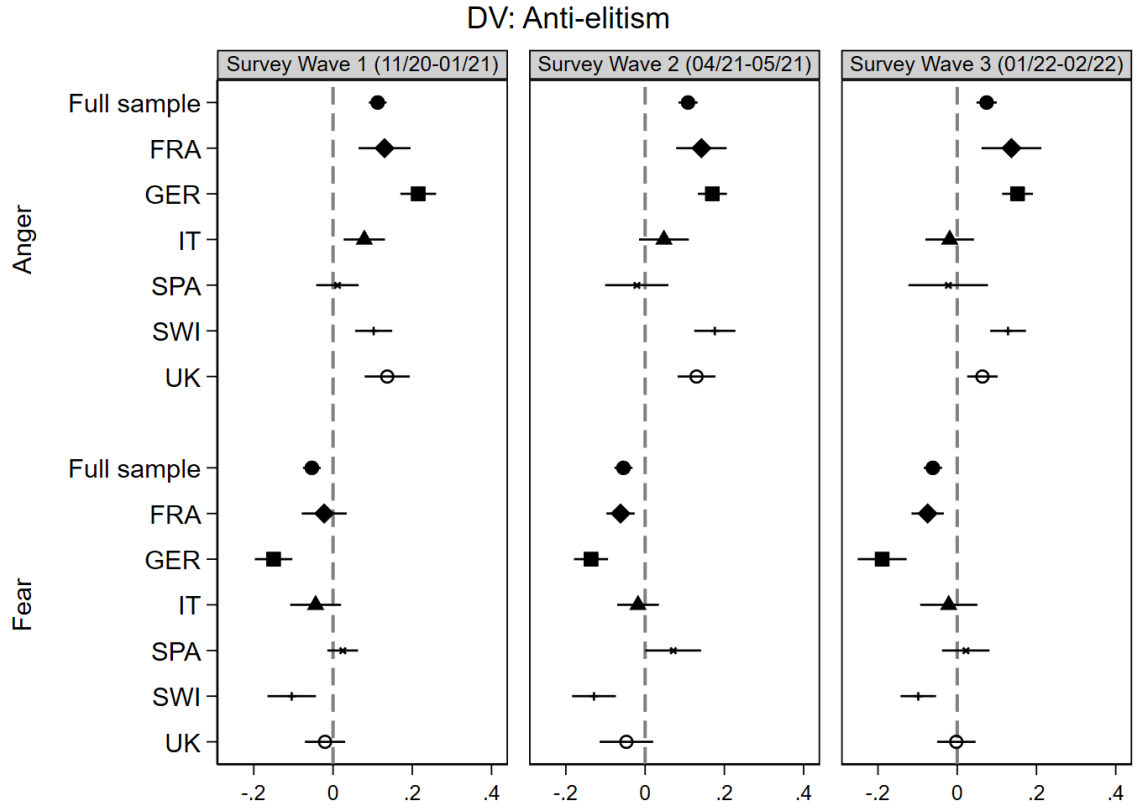
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S9: Marginal Effects of Pandemic-elicited Emotions on Anti-elitism by Country-survey Wave Including Threat Perceptions as Additional Control Variables



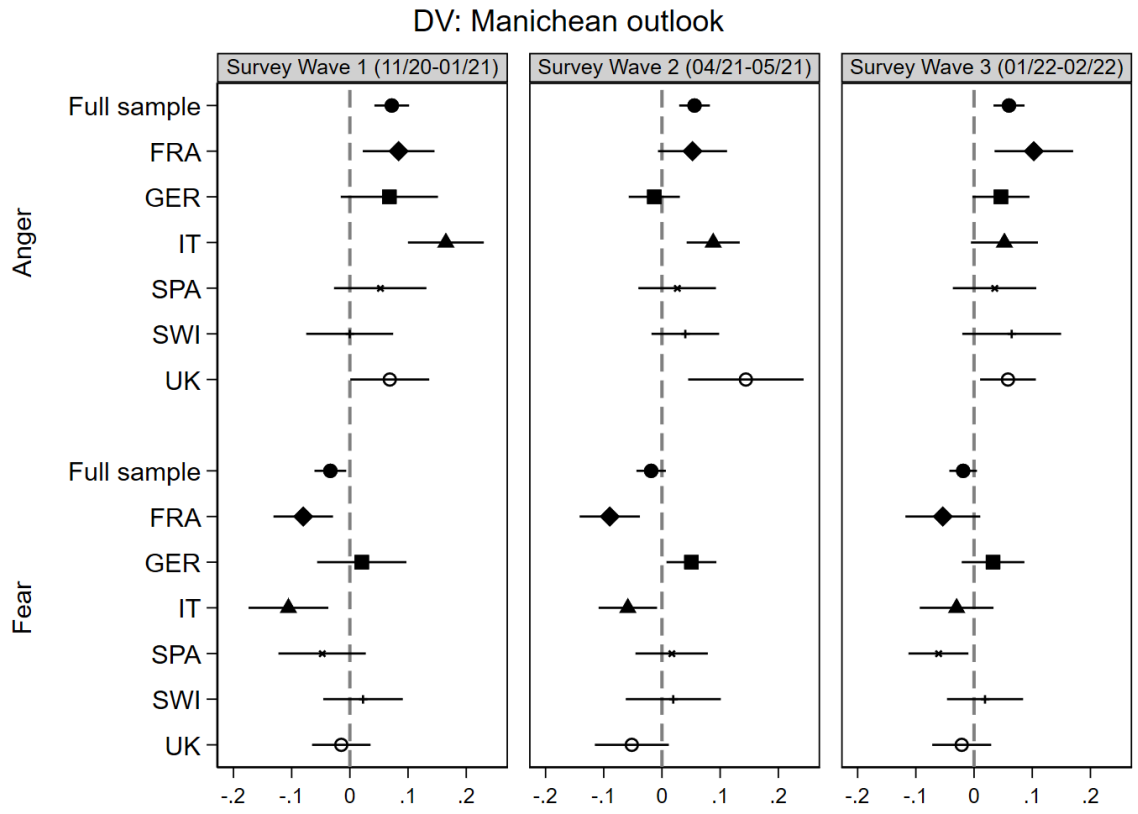
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S10: Marginal Effects of Pandemic-elicited Emotions on Anti-elitism by Country-survey Wave Including Covid-19 Infection as Additional Control Variable



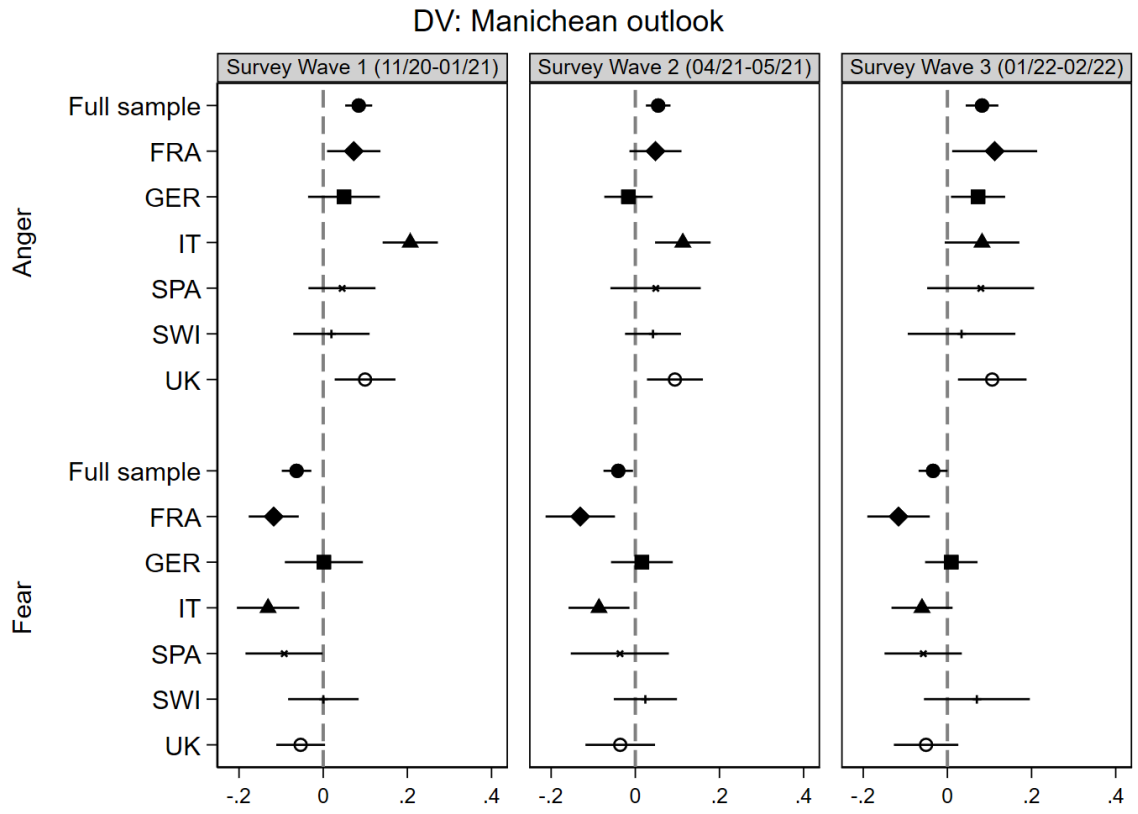
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S11: Marginal Effects of Pandemic-elicited Emotions on Manichean Outlook by Country-survey Wave Including Personality Traits as Additional Control Variables



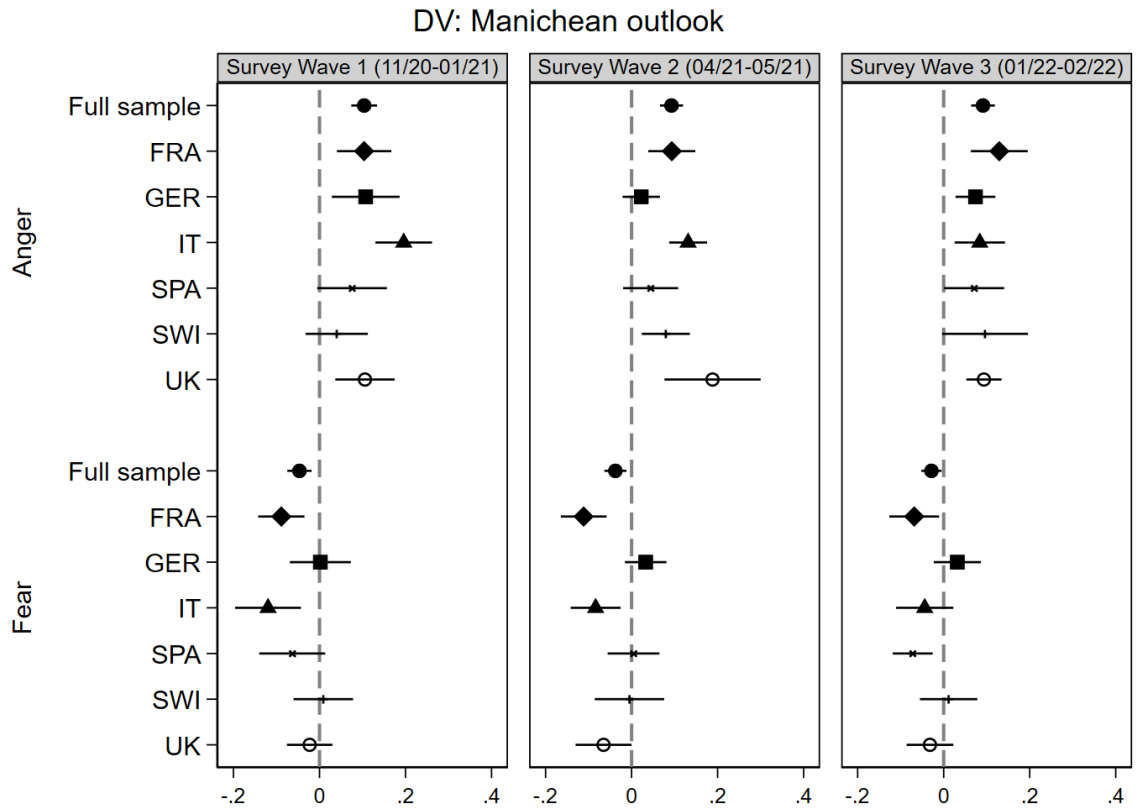
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S12: Marginal Effects of Pandemic-elicited Emotions on Manichean Outlook by Country-survey Wave Including Threat Perceptions as Additional Control Variables



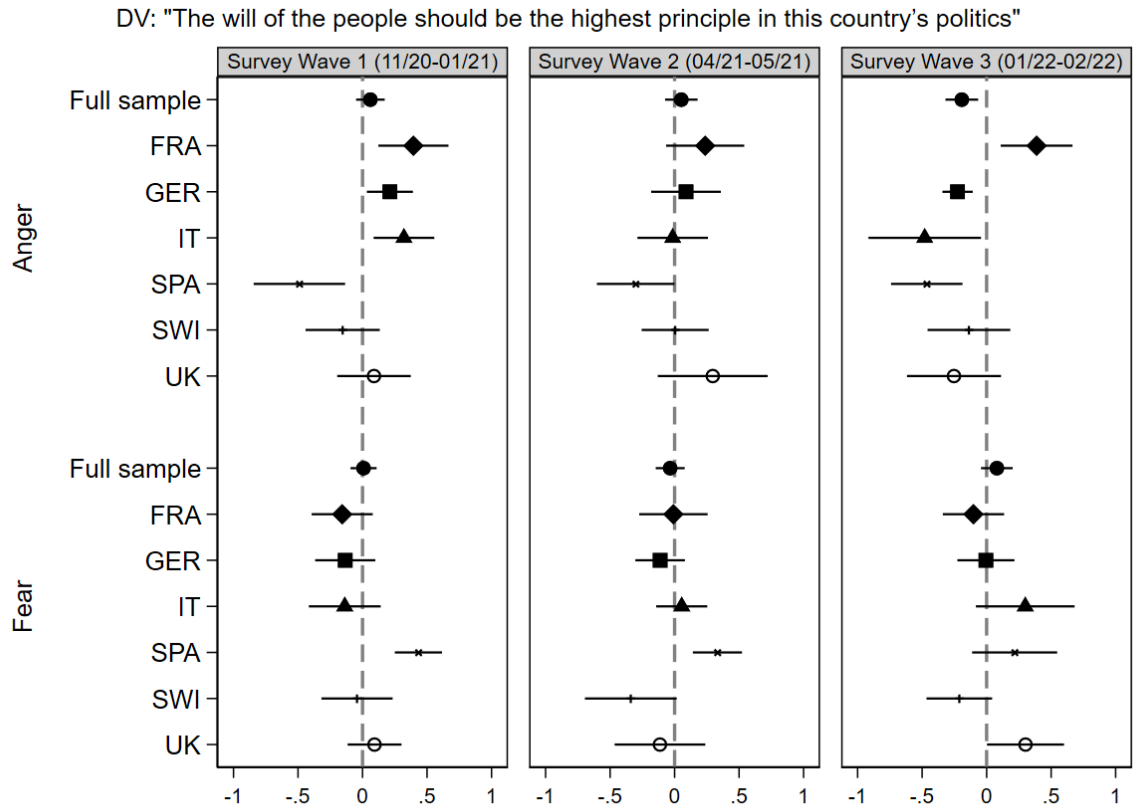
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S13: Marginal Effects of Pandemic-elicited Emotions on Manichean Outlook by Country-survey Wave Including Covid-19 Infection as Additional Control Variable



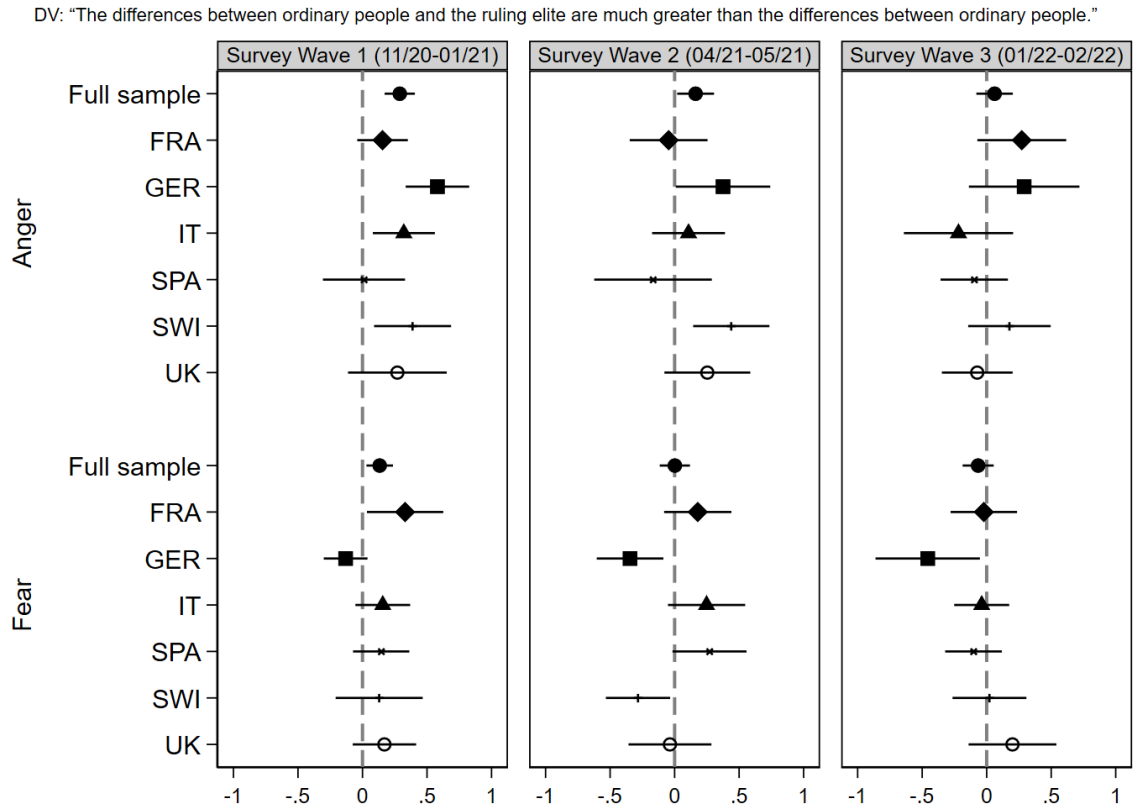
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S14: Marginal Effects of Pandemic-elicited Emotions on POP1 by Country-survey Wave



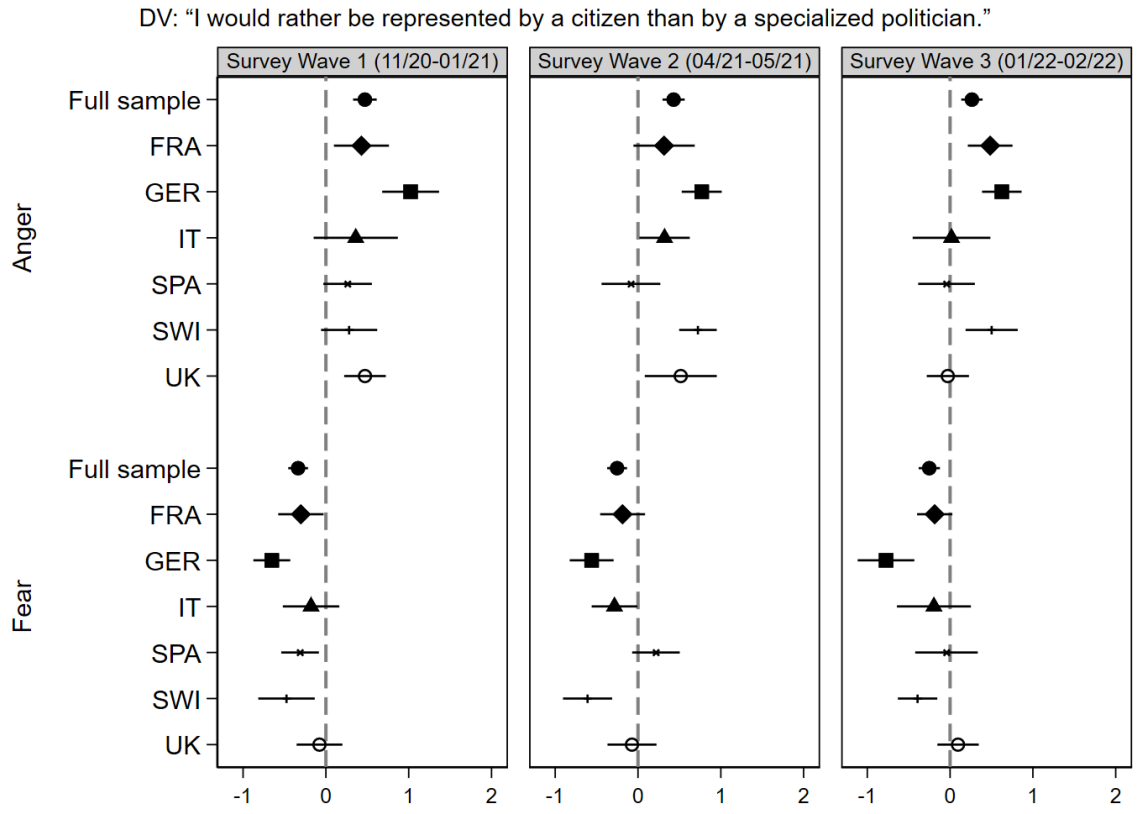
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S15: Marginal Effects of Pandemic-elicited Emotions on POP2 by Country-survey Wave



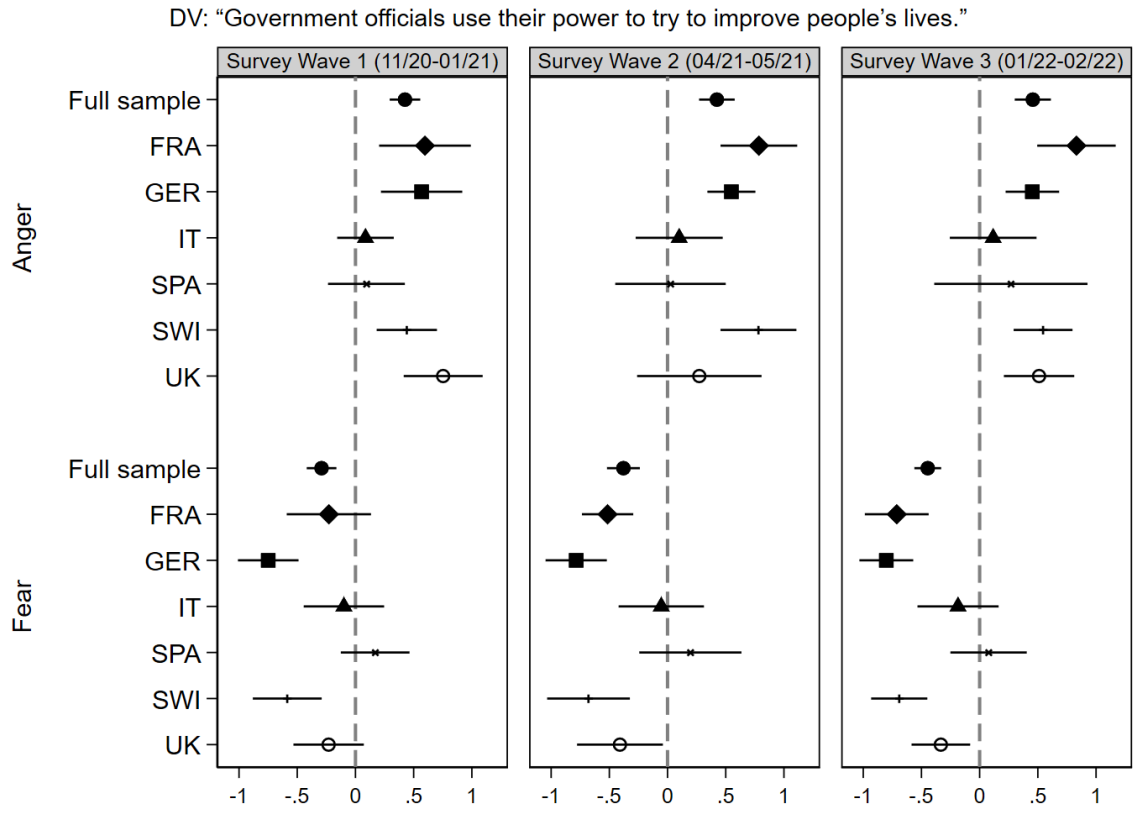
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S16: Marginal Effects of Pandemic-elicited Emotions on POP3 by Country-survey Wave



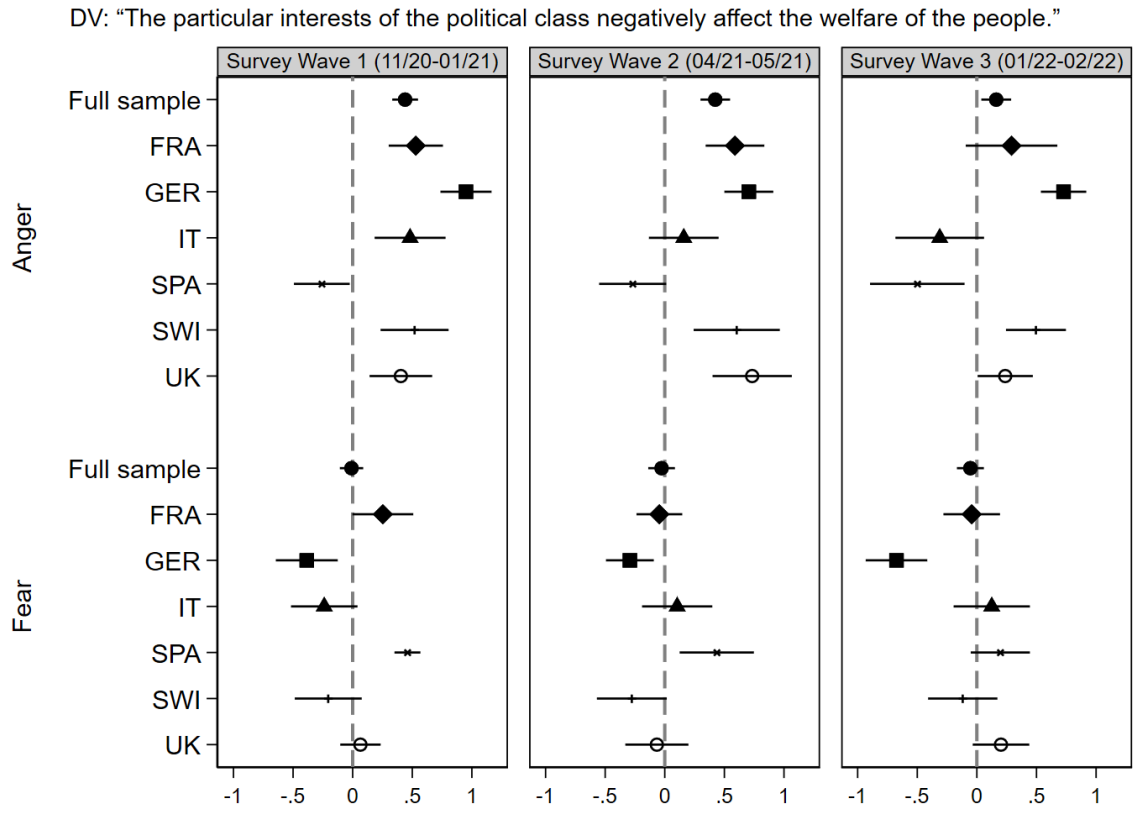
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S17: Marginal Effects of Pandemic-elicited Emotions on POP4 by Country-survey Wave



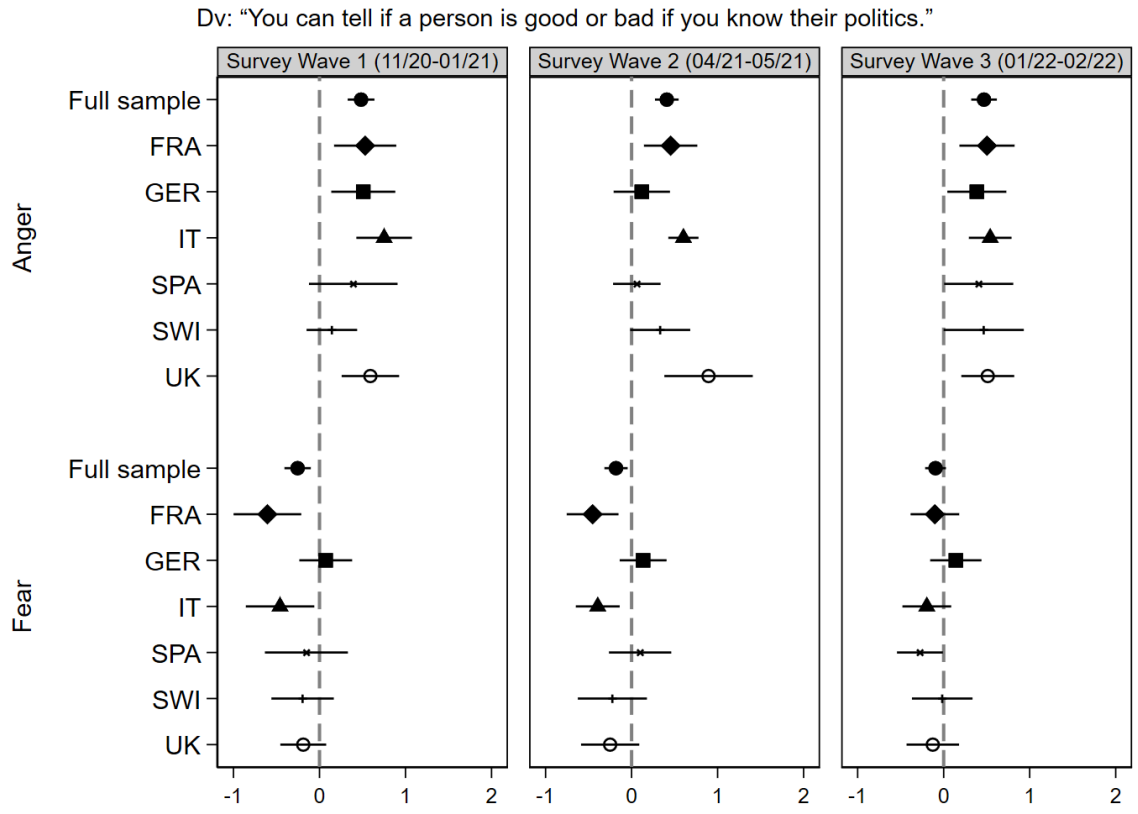
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S18: Marginal Effects of Pandemic-elicited Emotions on POP5 by Country-survey Wave



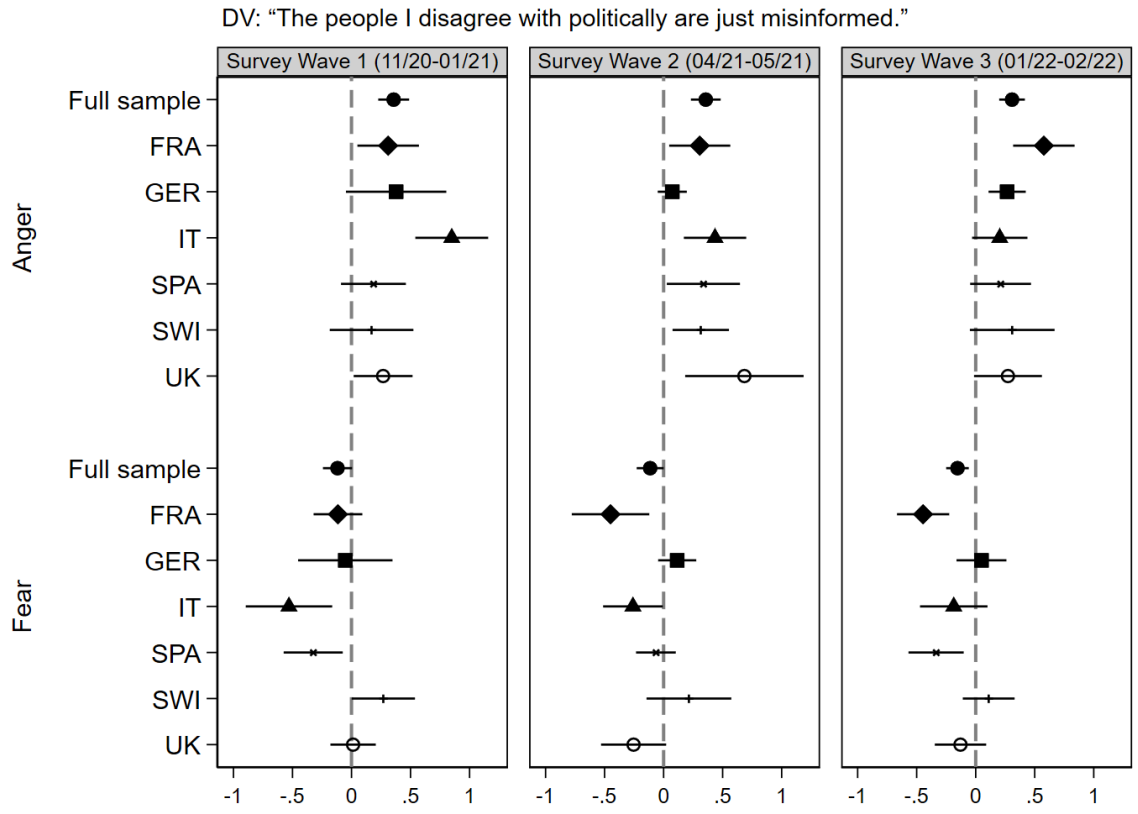
Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S19: Marginal Effects of Pandemic-elicited Emotions on POP6 by Country-survey Wave



Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S20: Marginal Effects of Pandemic-elicited Emotions on POP7 by Country-survey Wave



Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals, N = 18,090. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S18: Linear Regression Models for the Relationship between Threat Perceptions and Pandemic-elicited Emotions

	DV: Anger	DV: Fear	DV: Anger	DV: Fear
Perceived financial threat	0.029***	0.016***	0.033***	0.038***
	(0.003)	(0.003)	(0.003)	(0.003)
Perceived infection threat	0.026***	0.116***	-	-
	(0.003)	(0.005)		
Perceived social threat	0.040***	0.035***	0.047***	0.054***
	(0.003)	(0.003)	(0.003)	(0.003)
Covid-19 infection				
Infection friends/family	-	-	0.022***	0.044***
			(0.004)	(0.005)
Own infection	-	-	0.056***	0.044***
			(0.007)	(0.006)
Age	-0.002***	-0.001**	-0.002***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
Sex				
Male	-0.025***	-0.064***	-0.018***	-0.068***
	(0.005)	(0.006)	(0.004)	(0.005)
Education				
Upper, post-secondary	0.018*	0.020**	0.004	0.012*
	(0.007)	(0.006)	(0.006)	(0.005)
Tertiary	0.016*	0.029***	0.008	0.026***
	(0.007)	(0.007)	(0.005)	(0.007)
Income situation	-0.006*	-0.005	-0.007**	-0.000
	(0.003)	(0.003)	(0.002)	(0.003)
Left-right self-placement	0.004**	-0.002*	0.007***	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Self-rated health	-0.029***	-0.043***	-0.037***	-0.054***
	(0.003)	(0.003)	(0.003)	(0.003)
Constant	0.263***	0.324***	0.348***	0.556***
	(0.023)	(0.029)	(0.022)	(0.022)
Observations	10610	10610	18008	18008
Country fixed-effects	✓	✓	✓	✓
Survey Wave fixed-effects	✓	✓	✓	✓
R^2	0.157	0.349	0.167	0.217
Adjusted R^2	0.156	0.348	0.166	0.217

Notes: Linear regression coefficients with region-clustered standard errors in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Reference Category (RF) for sex: female; RF Education: lower secondary or less; RF Covid-19 infection: No infection. Number of observations varies as the question about perceived infection threat was only presented to those that did not have a Covid-19 infection at the time of the survey. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S19: Linear Regression Models for the Relationship between Pandemic Elicited Emotions and Positions on Countermeasures

	DV: Measures go too far	DV: Priority on economy over public health
Anger	0.302***	1.080***
	(0.023)	(0.072)
Fear	-0.354***	-1.244***
	(0.026)	(0.089)
Age	-0.001***	-0.014***
	(0.000)	(0.001)
Sex		
Male	-0.029***	0.026
	(0.008)	(0.038)
Education		
Upper, post-secondary	0.010	-0.041
	(0.008)	(0.036)
Tertiary	0.017	-0.002
	(0.009)	(0.040)
Income situation	-0.018***	-0.032*
	(0.003)	(0.015)
Left-right self-placement	-0.013**	0.215***
	(0.005)	(0.023)
Left-right self-placement (squared)	0.003***	-0.005*
	(0.000)	(0.002)
Political interest	0.000	0.057***
	(0.003)	(0.015)
Self-rated health	0.017***	0.050**
	(0.004)	(0.019)
Constant	0.329***	2.990***
	(0.032)	(0.160)
Country fixed-effects	✓	✓
Survey Wave fixed-effects	✓	✓
Observations	18090	18090
R^2	0.106	0.119
Adjusted R^2	0.105	0.118

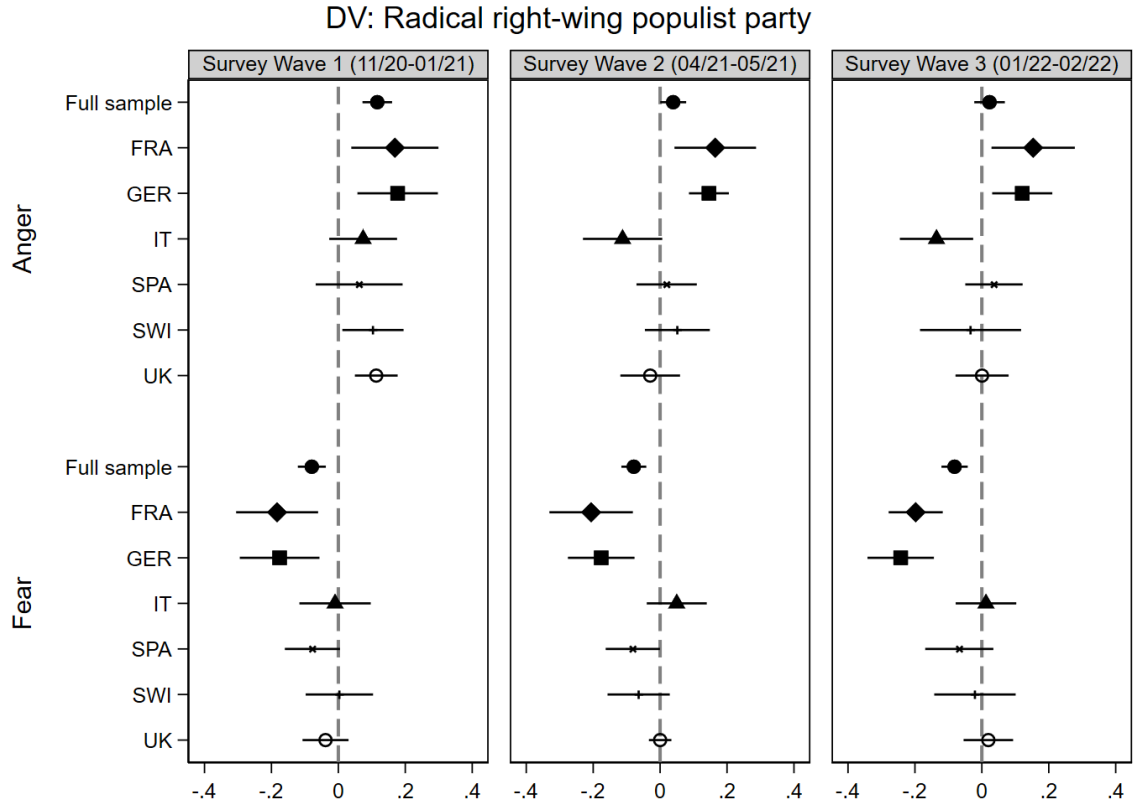
Notes: Linear regression coefficients with region-clustered standard errors in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Reference Category (RF) for sex: female; RF Education: lower secondary or less. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Table S20: Linear Regression Model for the Relationship between Populist Attitudes and Populist Party Support

	DV: RRWP Party	DV: RLWP Party
Populist attitudes	0.114***	0.074**
	(0.017)	(0.026)
Age	0.001**	-0.000
	(0.000)	(0.000)
Sex		
Male	-0.000	0.004
	(0.010)	(0.008)
Education		
Upper, post-secondary	0.033**	0.019
	(0.010)	(0.010)
Tertiary	-0.025*	0.030**
	(0.011)	(0.010)
Income situation	-0.015***	-0.007
	(0.003)	(0.005)
Left-right self-placement	-0.021***	-0.105***
	(0.006)	(0.012)
Left-right self-placement (squared)	0.008***	0.007***
	(0.001)	(0.001)
Political interest	0.003	0.015***
	(0.003)	(0.004)
Constant	-0.033	0.298***
	(0.039)	(0.039)
Observations	15553	7683
Country fixed-effects	✓	✓
Survey Wave fixed-effects	✓	✓
R^2	0.272	0.158
Adjusted R^2	0.271	0.157

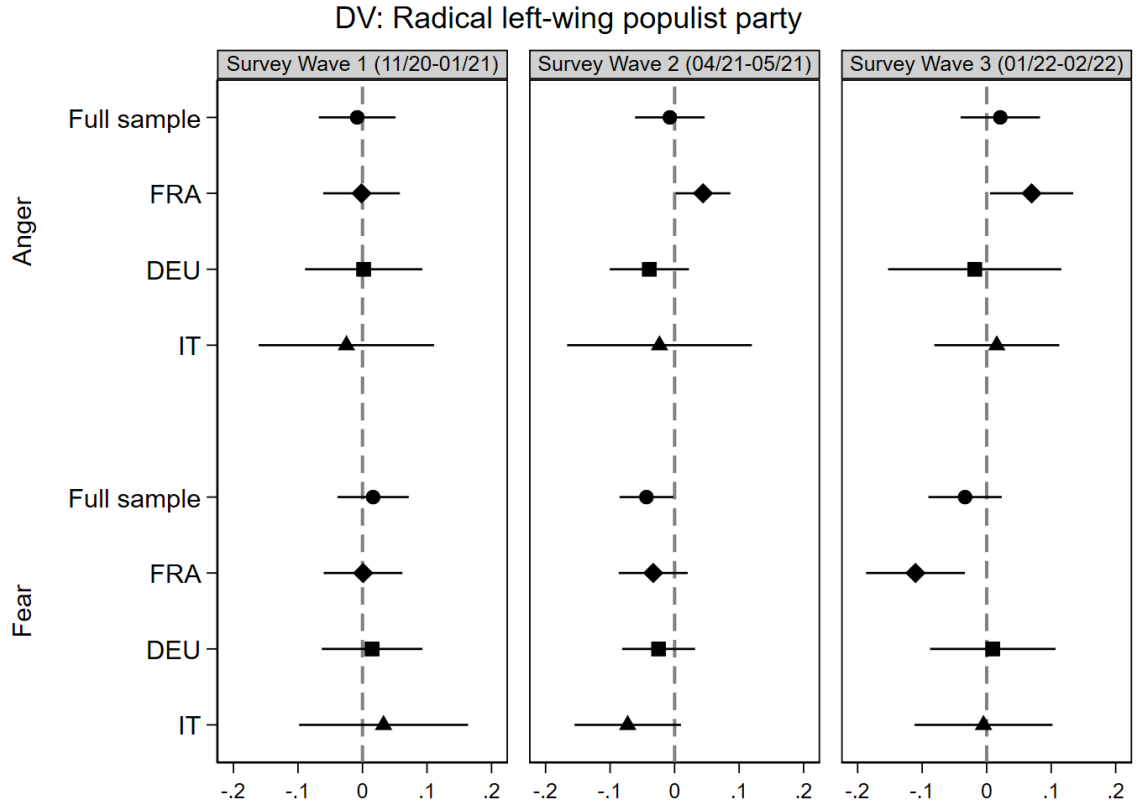
Notes: Linear regression coefficients with region-clustered standard errors in parentheses, * p < 0.05, ** p < 0.01, *** p < 0.001. RRWP Party: Radical right-wing populist party; RLWP: Radical left-wing populist party; Reference Category (RF) for sex: female; RF Education: lower secondary or less. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S21: Marginal Effects of Pandemic-elicited Emotions on Radical Right-wing Populist Party Support by Country-survey Wave



Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022).

Figure S22: Marginal Effects of Pandemic-elicited Emotions on Radical Left-wing Populist Party Support by Country-survey Wave



Notes: Marginal effects calculated from a linear regression model with region-clustered standard errors, 95% confidence intervals. Source: Original survey data collected by SurveyEngine (survey wave 1: 24th November 2020 - 18th January 2021; survey wave 2: 22nd April and 21st May 2021; survey wave 3: 25th January and 8th March 2022)

6. Conclusion

Intergroup relations are at the heart of many challenges and crises facing the international community in recent years. For example, immense migration and refugee flows, the outbreak of a global pandemic and new or newly escalated conflicts such as in the Sahel, the Ukraine or the Middle East all bring to the foreground some form of an "us vs. them" distinction. Such distinctions are also central in the context of increasingly established authoritarian and populist forces that pose a growing threat to Western, liberal democracies and their values (e.g. Adler et al. 2023; Galston 2018; Goetz and Martinsen 2021; Lührmann et al. 2019; Roberts 2019). Against this background, the present dissertation aims to add new and topical insights into the political psychology of intergroup relations. It does so by scrutinising how personality traits and emotions relate to different forms of intergroup attitudes. With anti-immigration attitudes and attitudes towards national belonging, two perennials of intergroup research are in focus. Besides, I also look at the psychological bases of populist attitudes that have only recently gained relevance and are characterised by a vertical in- vs. outgroup differentiation. In their entirety, the four articles that make up this dissertation show that intergroup attitudes reflect inter-individual differences in both personality traits as deep-anchored and stable psychological dispositions and in emotions as situationally reactive, intrapsychic processes inherently related to the broader social and political environment.

In this concluding chapter of the dissertation, in section 6.1, I first summarise the four empirical articles in terms of their background, their main theoretical argument, the empirical strategy applied as well as their main findings and implications. I recollect both the articles' main contributions as self-contained research studies and as a composite of articles on the political psychology of intergroup relations. This is followed by a discussion of the main limitations of this cumulative dissertation, pointing out its shortcomings and what lies beyond its scope (section 6.2). Finally, in section 6.3, I elaborate on the dissertation's implications, both regarding avenues for future research and societal and political learnings.

6.1. Summary and Contribution

Article 1 "Personality and National Identity: How the Big Five Relate to Civic and Ethnic Conceptions of Nationhood" adds to recent investigations on the personality foundations of national identity (see Curtis and Miller 2021; Duckitt and Sibley 2016; Sagiv, Roccas, and Hazan 2012; Zmigrod et al. 2021; Zmigrod, Rentfrow, and Robbins 2018) by examining how the Big Five personality traits relate to different conceptions of nationhood that capture individuals' notions of national belonging or the criteria they apply to draw the boundaries between national in- and outsiders, respectively (Helbling, Reeskens, and Wright 2016; Wright, Citrin, and Wand 2012).

Based on a thorough conceptual examination of the Big Five and existing empirical evidence on the role they play for individual-level political phenomena related to national identity, I theorise about the so far unstudied link between those basic psychological dispositions and the two ideal types of national identity content: ethnic and civic national identity. While an ethnic national identity is very exclusionary in nature, for example by reserving (in-)group membership for those with national descent, and has been shown to encourage outgroup hostility, in a civic conception of nationhood, national belonging is a matter of choosing to assign to a nation's political culture, principles, values and duties (Erhardt, Wamsler, and Freitag 2021; Hadler and Flesken 2018; Reeskens and Hooghe 2010; Reeskens and Wright 2013). Since individuals scoring high on openness to experience are known to appreciate cultural diversity and intergroup contact (e.g. Dinesen, Klemmensen, and Nørgaard 2016; Freitag and Rapp 2015), I expect this trait to prevent an ethnic conception of nationhood. Similar to openness, I assume a negative relationship between agreeableness and the ethnic ideal type of national identity, because agreeable individuals are generally tolerant, conflict-aversive and immigrant-friendly (e.g. J. T. Crawford and Brandt 2019). Research by Freitag and Rapp (2015) and Gallego and Pardos-Prado (2014) indicates the opposite for people scoring high on extraversion, a trait that further relates to power and dominance motives and the endorsement of social hierarchies (Caprara and Vecchione 2013). This suggests a positive relationship with ethnic notions of nationhood. Finally, while I consider neuroticism to be of less relevance due to the political detachment typically associated with emotional instability, I expect conscientiousness to associate positively to both ideal types of national identity. This is because individuals who themselves are strongly committed to social norms and rules are likely to also expect social conformity from national fellows – both in political and ethno-cultural terms (Mondak et al. 2011; Mondak and Halperin 2008).

These expectations are tested with linear regression analyses across six Western European countries (Germany, France, Italy, Switzerland, Spain, United Kingdom) and three points in time between 2020 and 2021. The findings of the main models as well as of additional analyses empirically support the expectation of a negative relationship between openness to experience and an ethnic national identity and a positive one between conscientiousness and a civic national identity. The expected positive link of extraversion to ethnic notions of nationhood is indicated, but less consistent across the samples.

Overall, article 1 offers three important contributions. First, it is the first study to systematically scrutinise the link between the Big Five personality traits and different conceptions of nationhood. Thereby, it not only addresses a yawning research gap, but also provides guidance on what kind of people need special attention when it comes to the promotion of a national self-understanding as

a modern liberal, diverse, tolerant and cohesive democracy. Second, the article and its findings prove that looking at national identity content – a concept traditionally studied on the country level (cf. Brubaker 1992; Greenfeld 1992; Kohn 1939; Meinecke 1908; Smith 1991) – from an individual-level, psychological perspective has a valid point and contributes to the explanation of varying conceptions of nationhood. Third, with a total of 18 samples collected in six European countries at three different points in time, the study contributes to the identification of robust and generalisable evidence of the role played by personality in the political sphere (cf. Weinschenk 2017; Zettler et al. 2022).

Article 2, titled "A Justified Bad Reputation After All? Dark Personality Traits and Populist Attitudes in Comparative Perspective", taps into a comparatively understudied line of research that scrutinises the personality underpinnings of populist attitudes. While previous research has focused on the role played by general personality traits, we focus on darker nuances of personality captured by the Dark Triad of Machiavellianism, narcissism and psychopathy (Paulhus and Williams 2002). The Dark Triad is important to consider in the personality profile of populist citizens for several reasons. First, the Dark Triad traits are argued to be of particular relevance in the political domain and have been shown to contribute to the psychological explanation of various political outcomes beyond the more general Big Five traits (Chen, Pruysers, and Blais 2021, 580; Hart, Richardson, and Tortoriello 2018, 59). Second, the commonly rather negative depiction of the populist phenomenon as well as research on the personality of populist leaders seems to indicate something "intrinsically dark" in populism (Katsambekis 2017, 202). However, it is unclear whether this also applies to populist citizens. Finally, the very few empirical studies on the dark personality correlates of populist attitudes fail to fully capture the multi-dimensionality and non-compensatory nature of populist attitudes, are confined to particular country contexts and produced highly inconclusive results. Against this background, we apply a rather exploratory approach and present different and sometimes conflicting theoretical and empirical arguments on the relationship between the Dark Triad traits, populist attitudes in general and their three subdimensions people centrism, anti-elitism and Manicheanism.

Aiming to add another piece to the puzzle and potentially advance theory-building, we put these arguments to an empirical test by using our spring 2020 survey wave, again including respondents from France, Germany, Italy, Switzerland, Spain and the United Kingdom. Noteworthy, we thereby take seriously both the multi-dimensional and non-compensatory nature of populist attitudes by using a geometric index for general populist attitudes and performing subdimension-specific analyses. A series of linear regression models reveals that most relationships between both general

and dark personality traits and populist attitudes and their subdimensions are context-dependent rather than universal. Still, our findings indicate that psychopathy and Machiavellianism are darker aspects of personality conducive to the attitudinal syndrome of populism, though not for all its subdimensions individually.

By investigating the dark personality attributes of citizens holding populist attitudes, article 2 contributes to the relatively new line of research devoted to the psychological bases of populism on the demand side, i.e. in the broad public. It extends the few existing empirical studies on the subject by taking into account the three subdimensions of populist attitudes, their non-compensatory interrelation and by providing first cross-country evidence on their dark personality correlates. Moreover, by revealing and discussing the contextuality of the relationships studied, our study provides a stepping-stone for a more rigorous testing of the contingent effects of personality traits on populist attitudes.

Article 3 is called "Pandemic Threat and Intergroup Relations: How Negative Emotions Associated with the Threat of Covid-19 Shape Attitudes towards Immigrants". It takes the event of the global Covid-19 outbreak as an opportunity to test the behavioural immune system (BIS) hypothesis of increased outgroup hostility in times of heightened threat by pathogens in the context of a naturally occurred pandemic (cf. Aarøe, Petersen, and Arceneaux 2017; O'Shea et al. 2020; Thornhill and Fincher 2014). Drawing on evolutionary biology and psychology accounts of the BIS as a prophylactic and hypervigilant psycho-motivational system, we argue that Covid-19 pandemic threat triggers aversive emotional responses that in turn foster anti-immigrant attitudes. Regarding the psychological mechanisms connecting pandemic threat and immigrant hostility, we extend previous accounts that centre around disgust and deduce from affective intelligence theory (AIT) that fear and anger are two other likely mediators. Since anger is related to aggressive and hostile action tendencies and the reliance on superficial information processing including stereotypes (Brader and Marcus 2013; Marcus 2012), we expect this emotion to promote anti-immigrant sentiments. For fear, we formulate two competing hypotheses. Adopting a BIS-perspective, immigrants are at risk of getting (erroneously) appraised as posing an infection risk (Murray and Schaller 2016). Because fear stimulates risk-aversive behaviour, immigrant-avoidance and negativity could be plausible consequences. On the other hand, insights from AIT rather indicate the opposite, since fear is argued to promote careful information processing, compromise and coalition building to best address threatening circumstances (Marcus et al. 2019).

To test these theoretical arguments, we rely on our original six-country survey conducted during the second Covid-19 wave in winter 2020/2021. This individual-level data set is combined with regional data of pandemic threat (cumulative numbers of confirmed Covid-19 cases and deaths) in a hierarchical design including multilevel linear regression models with random intercepts and multilevel path models. Supporting the general BIS-hypothesis, we show that regional Covid-19 pandemic threat is indeed positively associated with negative attitudes towards immigrants. Regarding the emotional mechanism underlying this relationship, we find increased levels of fear and anger in regions stronger affected by the pandemic, whereby fear significantly relates to more immigrant-friendly attitudes and anger to higher immigrant-hostility. The latter is also true for our measure of disgust, which is, surprisingly at first, unrelated to regional pandemic threat. We classify this finding by discussing the conceptual disarray surrounding the meaning and measurement of disgust, pointing to the emotional trait of disgust sensitivity.

Article 3 makes a threefold contribution to extant literature: First, we analyse the impact of pandemic threat exposure on immigrant-hostility in a real-world situation, substantiating the claim that combating infectious diseases is not only a matter of public health, but also of protecting liberal and open societies from backlash in terms of ethnic prejudice and societal (in-)tolerance. Second, we provide valuable insights into the psychological blackbox connecting pandemic threat and outgroup hostility by going beyond the emotion of disgust. Finally, our multilevel design including around 6,000 respondents from over 100 regions in Germany, France, Italy, Switzerland, Spain and the United Kingdom significantly expands existing evidence on the intergroup consequences of the Covid-19 pandemic, so far hardly derived from multi-country studies (cf. Bartoš et al. 2021; Drouhot et al. 2021; Hartman et al. 2021; Sorokowski et al. 2020).

Finally, the current "age of populism" (Oswald, Schäfer, and Broda 2022) and the outbreak of the first global pandemic of the 21st century set the background for article 4, "The Emotional Fabric of Populism during a Public Health Crisis: How Anger Shapes the Relationship between Pandemic Threat and Populist Attitudes". Previous research shows that populism flourishes in the wake of threat-inducing external crises, a phenomenon for which the emotional reaction of fear is often made responsible in public debates and by pundits. With our study, we aim to find out whether the Covid-19 pandemic – a crisis less obviously connected to traditional populist issues than, for example, economic crises, terror attacks or immigration distress – has similar consequences. Driven by recent research on the psychological underpinnings of populism, we are especially interested in the emotional mechanisms that connect threat and crises with populism. Moreover, we examine whether these threat-induced emotions equally associate with all subdimensions that, in their combination, make up populist attitudes (these are people centrism, anti-elitism and

Manicheanism). Applying AIT, we argue that fear and anger emerge as dominant emotional responses to the multifaceted threat posed by Covid-19, but with distinct consequences for populist attitudes. In contrast to conventional wisdom, we expect fear to relate negatively to populist attitudes. According to the relevant literature, fearful individuals are inclined to think and behave in manners that are at odds with the confrontational and often simplistic nature of populism, while anger should instead resonate well with aggressive, elite-blaming and -distrusting populist positions that offer simple solutions to complex problems (Rico, Guinjoan, and Anduiza 2017).

Empirically, we rely on the same original six-country study as the other articles and use the data of three of the cross-sectional survey waves during the Covid-19 pandemic (winter 2020/2021, spring 2021, winter 2022). Our hypotheses are tested with linear regression models with country- and survey-fixed effects as well as across countries and survey waves using interaction terms. Our analyses substantiate the assumption that Covid-19-induced anger is positively related to populist attitudes, a relationship which is relatively robust across most countries and survey waves. Our hypothesis regarding the contrasting role played by fear finds empirical support in the full sample analysis, but cannot be maintained in countries other than France and Italy. Looking at the subdimensions of populist attitudes, we find that anti-elitism and Manicheanism in particular correlate positively with anger or negatively with fear respectively.

Overall, article 4 contributes to two different areas of research. First, we provide new empirical evidence for research on the psychological underpinnings of populism that the emotion of anger, and not fear, is dominant in driving populism. By focussing on the Covid-19 crisis as a new threat, we further show that this also holds in the context of an external threat that does not fully align with populist grievances. Second, the article is a notable contribution to the literature on the political consequences of the pandemic as it supports recent findings on the importance of emotional reactions to the pandemic for crucial aspects of politics (Erhardt et al. 2021; Freitag and Hofstetter 2022; Vasilopoulos et al. 2023; Wamsler et al. 2023). Given our analyses indicate that fear, compared to anger, was the more pronounced emotional reaction to Covid-19, we add to the understanding of populist forces performing fairly badly during the pandemic.

Beyond the contributions that the articles make as individual and independent empirical studies, their embedment in an overarching theoretical framework offers important contributions to the relevant literature, as do the articles in their combination. Regarding the guiding theoretical framework presented in chapter 1 of this dissertation, the extensive literature on intergroup relations is advanced by showing how the social identity approach (SIA) can serve as an organising

and integrating theoretical tool in the study of different, individual-level political phenomena. The importance of the SIA in psychologically understanding intergroup relations is widely acknowledged (Hodson and Earle 2017; Hogg 2018, 115; Hornsey 2008, 217), but this insight has, in my opinion, not been fully exploited beyond "horizontal intergroup research". By this, I refer to research surrounding relations and conflicts between different groups within society, including gender, religion, social status, and (traditionally) racial and ethnic groups in particular (Dovidio, Newheiser, and Leyens 2012; Ryan, Hunger, and Major 2017, 479; Soliz and Rittenour 2012, 333). In this area, newer theoretical accounts also seem to build and capitalise on the SIA, the concept of affective polarisation (between ideological or party groups) being a prime example thereof (cf. Iyengar and Westwood 2015; Mason 2018, 2023; West and Iyengar 2022). But groups are also differentiated vertically, for example along the elites-people distinction that is so central in populism. The argument that "social identity forms a key component of populism" (Hameleers and de Vreese 2020, 257) and that populism research is basically intergroup research (e.g. Fatke 2019) is not entirely new, but it is relatively rarely taken up and theoretically elaborated in the burgeoning populism literature. In this dissertation, I demonstrate how populist attitudes can be explicitly approached through the theoretical lens of the SIA and, based thereon, conceptualised as intergroup attitudes in the same way as attitudes towards immigrants and national belonging. Populism is a comparatively young field of scholarly interest and a lot can still be added to the existing body of scientific knowledge – also with recourse to the manifold insights generated through the SIA and under the head of "intergroup research".

Another important contribution of the theoretical framework presented in this dissertation relates to its explanatory approach. In general, I provide a political psychological explanation of intergroup attitudes based on Cottam and colleagues' (2022) concept of the political being embedded in a broader social and political context (see figure 1 in chapter 1). Therein, I integrate two different approaches (see figure 2 in chapter 1): a more traditional dispositional approach emphasising the person (the political being) and a contextualised person-centred approach, which is more strongly situationally oriented by focusing on psychological attributes that are inherently connected to the context the political being finds itself (Furr and Funder 2021). In this vein, I argue that the intergroup phenomena studied are driven by inter-individual, psychological differences both in personality traits as deep-seated, stable dispositions and in emotions as contextually reactive, intrapersonal processes. The latter approach more directly addresses the basic premise of political psychology that political attitudes and behaviours are driven not only by internal, psychological factors, but also by their interaction with the broader social and political context (Cottam et al. 2022, 9/12). Still, the data used in this dissertation, drawn from an original, multi-wave, six-country

study, allows for the role of context to be considered to some extent in all articles, including those following the dispositional approach. Presenting empirical evidence that both deep-rooted, situationally relatively stable as well as reactive, situationally bound intrapsychic attributes of the political being add to the explanation of different intergroup attitudes underscores the relevance of political psychology research in gaining a better understanding of our ever-changing environment.

A third main contribution of this dissertation is that it offers new and topical insights into the political psychology of different sorts of intergroup relations. The four empirical articles all refine and expand theoretical arguments from the relevant literatures, address important research gaps therein and add new empirical evidence to it. By providing the first in-depth analysis of the so-far unstudied link between personality traits and conceptions of nationhood, article 1 closes a substantial research gap in the psychological enlightenment of national identity. Article 2 crucially extends a relatively new line of research that investigates the role personality traits play in shaping populist attitudes by bringing dark personality traits into focus. Importantly, it measures populist attitudes in a theoretically sound and comprehensive way and provides first cross-country evidence on the Dark Triad personality correlates of populist attitudes and their subdimensions. The highly interdisciplinary nature of political psychology is exemplified by article 3, where arguments from evolutionary biology and psychology on the BIS are expanded by insights from AIT, a standard political science model of emotional processing based on neuroscience. We not only test the BIS-hypothesis of increased outgroup hostility in times of heightened pathogenic threat in a real-word situation, but also provide new insights into the emotional mechanism underlying this relationship. Finally, article 4 addresses yet unanswered questions about the emotional bedrocks of populist attitudes in the context of a novel threat not intuitively related to traditional populist issues. As in article 2, populist attitudes are studied more comprehensively and conceptually sound than in most previous research by taking seriously their non-compensatory subdimensions.

Fourth, all articles are based on data from an original, cross-sectional but multi-wave survey project in six Western European countries: Germany, France, Italy, Switzerland, Spain and the United Kingdom. As detailed in section 1.4, these countries offer useful variation in terms of contextual factors relevant to the research questions pursued in each article. While the articles rely on different survey waves, each is based on a rich data set including respondents from all six countries at either one crucial point in time (articles 2 and 3) or three time points (articles 1 and 4). In terms of the contextualisation and generalisability of the empirical findings, this represents a great advantage, especially in view of the very few cross-country analyses in the study of both personality and politics (Curtis and Nielsen 2020, 6; for notable exceptions, see for example Fatke 2017; Lee et al. 2018;

Weinschenk 2017) and emotions and politics (for notable exceptions, see for example Ahn et al. 2021; Filsinger and Freitag 2022; Vasilopoulos et al. 2023; Wamsler et al. 2023).

6.2. Limitations

Despite the important contributions the four individual articles and this dissertation as a whole offer, there are some limitations and shortcomings to be mentioned and taken into account when interpreting the findings. Regarding to the theoretical and conceptual framework of the dissertation, a first important limitation is the pronounced emphasis on individual-level, psychological explanations inherent in most political psychology research. The interactionist view according to which attributes of the individual interplay with attributes of the individual's context in shaping political attitudes is an explicit guiding principle for the theoretical framework of this dissertation (see section 1.3.5). Empirically, the contextuality of psychological explanations is considered by studying emotions as "contextualised person variables" inherently connected to environmental cues and stimuli (Furr and Funder 2021) and/or by testing the relationships of interest across six European countries. However, the context part (E for "environment") of the Lewinian formula (behaviour (B)=f(P,E), Feldman and Zmerli 2022; Lewin 1936) is clearly weighted lower than its person part (P). While all studies but study 3 explicitly show that the relationships studied are not universal but – to a lesser or greater extent – vary across countries, it was beyond their scope to fathom this contextual variation. At best, subsequent research should not only identify context dependency, but also manages to theoretically and empirically explain it. Second, in studying attitudes towards immigrants, national membership and populism, the focus is on a political psychological explanation of explicit (intergroup) attitudes. Early theorists such as Allport (1935) defined attitudes rather broadly, including cognitive as well as affective aspects and as being closely related to behaviour. Today, the presumption that attitudes directly cause behaviour is still – implicitly or explicitly – contained in many definitions of attitudes (e.g. Briñol, Petty, and Stavraki 2019; Cottam et al. 2022, 76; Olufemi 2012, 61). However, Brauer (2023), for example, emphatically points out that there is a lack of consistency between attitudes and behaviours in the intergroup domain since attitudes are only one of multiple predictors of behaviour and thus have a limited effect on it. Therefore, the insights gained here into the psychology of anti-immigrant attitudes, attitudes towards national membership and populist attitudes should not be directly transferred to behavioural phenomena such as exclusionary or discriminatory acts towards immigrants or non-nationals or populist voting.

A bundle of other important limitations revolves around the nature of the data the analyses of the four articles are based on. This data stems from a (repeated) cross-sectional survey project in six

Western European countries. A major shortcoming thus lies in the fact that the use of this observational, non-panel data does not allow for causal inference. Theoretically, I assume personality traits and emotions to influence intergroup attitudes. However, even if the articles do their best to approach causal inference using regression-based statistical control (see Chao and Yu 2023), the statistical models and estimates cannot identify causal effects, but show correlational relationships only. Regarding personality traits, previous research showing that they are genetically anchored and reveal comparatively high stability across situations and the course of life (Bratko, Butković, and Hlupić 2017; Kandler, Richter, and Zapko-Willmes 2017; McCrae and Costa 2008; Mondak 2010; Sanchez-Roige et al. 2018) does not yet proof the assumed causal link. It is also conceivable that personality traits and political attitudes have a common genetic basis which explains (part of) their covariance (Osborne, Satherley, and Sibley 2018). Here, methodological approaches applied in genopolitics such as twin studies present potential remedies (cf. Settle and Detert 2023, 282–85). Regarding emotions, Vasilopoulos (2019, 7) states that "affective reactions have a causal impact on political behaviour, rather than being mere epiphenomena of political decisions", but it cannot be ruled out that pre-existing political attitudes may induce emotional reactions, resulting in reciprocal effects between emotions and political attitudes (Rico, Guinjoan, and Anduiza 2017). To that end, longitudinal and experimental studies would be promising.

Furthermore, (web-based) survey research carries some well-known risks and potential biases (cf. Groves et al. 2009; Speklé and Widener 2018). For example, given our surveys were administered online, issues of coverage arise. And while we aimed to ensure high representativeness in terms of the socio-demographic composition of our respondents through quota sampling, such non-random samples may nevertheless unduly affect the results. Regarding the quality of the data collected, even with a well thought-out survey design, response tendencies including social desirability, acquiescence, moderacy or extremity bias, are difficult to control and might negatively affect measurement validity. Regarding measurement properties, one can also criticise that with the "Ten-Item Personality Inventory" (TIPI, Gosling, Rentfrow, and Swann 2003), a shortened version of the "Short Dark Triad" (SD3, Jones and Paulhus 2014) and an adapted version of the "Positive and Negative Affect Schedule" (PANAS, Watson, Clark, and Tellegen 1988), we use very short measures for our explanatory variables. However, these or very similar instruments have also been used by previous research and there is psychometric evidence for their appropriateness (J. R. Crawford and Henry 2004; Galais and Rico 2021; Jones and Paulhus 2014; Marcus, Neuman, and MacKuen 2017; Nunes et al. 2018; Persson, Kajonius, and Garcia 2019). Being aware that the comprehensiveness of measures in representative multi-subject surveys is often naturally limited, I still encourage the use of more encompassing and differentiated scales to capture psychological

constructs. One last main limitation I would like to mention in relation to the data used in this dissertation is that of generalisability. In our project, respondents from Germany, France, Italy, Switzerland, Spain and the United Kingdom were surveyed. As detailed in section 1.4 on the research design, these countries offer useful variation in terms of contextual factors relevant to the relationships studied. Still, all of them are European and so-called "WEIRD", i.e. Western, educated, industrialized, rich and democratic countries. Consequently, while this six-country perspective is an important complementation of evidence gained in single-country studies, it is unclear whether and how our findings travel to markedly different geographical, cultural, socio-economic and political contexts. In this vein, I fully agree with Osborne and Sibley (2022, 3) that political psychology should extend its focus beyond the US and (Western) Europe.

6.3. Implications

Notwithstanding the above limitations and shortcomings, this dissertation has important implications for the research field of political psychology as such as well as for different strands of specialised literature, including personality and politics, emotions and politics, intergroup relations and ethnic prejudice as well as populism. Regarding the thesis' theoretical embedding, I approach anti-immigrant attitudes, conceptions of nationhood and populist attitudes from a social identity perspective. Thereby, I show how this classical theoretical account continues to be useful in the study of different political phenomena, both long known and recently relevant and both more or less obviously connected to an in- vs. outgroup distinction. In this sense, the dissertation should also serve as a reminder of the omnipresence of the very diverse "us vs. them"-differentiations humans make and point to the value of an integrative framework which both capitalises and expands on established theoretical knowledge. Next to questions around national belonging, immigration and populism, many other current challenges facing the international community – affective polarisation, political extremism, inequality, climate change, hate speech, conspiracies, terrorism, to name a few – exhibit a notable, but partly still little recognised intergroup dimension. This offers the potential for other fruitful applications of the social identity approach.

Regarding the psychological imprint of individual-level but still group-related political phenomena, the findings presented in this dissertation imply that they reflect inter-individual differences in both deep-seated, stable dispositions such as personality traits and in situationally reactive, intrapsychic processes such as emotions. What is more, the cross-country variation in the relationships between these differences and the intergroup attitudes studied illustrate that even if general psychological processes, functions and interrelationships are considered inherently human, they do not occur in a vacuum and may play out differently in different contexts (Huddy, Sears, and Levy 2023, 3). This

is why the embedment of the political being in a broader social and political environment illustrated in figure 1 in the introduction chapter is crucial. There still lies a lot of untapped potential for future research in this complex interplay. Alike, the perhaps even more complicated interactions between different inner attributes of the political being – including personality traits and emotions, but also cognitive processes, (social) identities or values – represent another promising pathway for future research. Such an endeavour might also help to empirically illuminate the exact psychological mechanisms behind the relationships identified.

Other important avenues for future research were already hinted at in the preceding section and mainly revolve around methodological issues. Regarding the empirical establishment of causal, generalisable relationships, the use of more encompassing and sophisticated research designs, including, for example, panel data, (quasi-)experiments and survey experiments, larger and more diverse (country) samples and cross-level interactions, would be highly desirable and insightful. Methodological pluralism could be further strengthened by qualitative and ethnographic work, text-based analyses, as well as by methods and measures successfully used in related areas such as behavioural economics, neuroscience, geno- and biopolitics (e.g. game theory experiments, physiological measurements of psychological constructs, twin studies) (cf. Monroe et al. 2009, see, for example, also Brader and Marcus 2013: 187f.; Jost et al. 2014).

The present dissertation also has important implications that go beyond the scientific debate and affect society and politics more broadly. On the most general level, it is important to understand that many of today's biggest challenges to liberal, democratic societies – including ethnic prejudice and conceptions of nationhood just as much as pandemics or populism – have a notable intergroup dimension. Recognising that, as "social animals", we constantly differentiate between "us" and "them", and being aware of the potential consequences of this basic psychological process can help us gain a deeper understanding of a wide variety of phenomena we not only encounter in politics, but also in our daily lives. Such an understanding can then also give important leads for dealing with (democratically) undesirable phenomena, for example regarding intergroup contact, group de- or recategorisation or institutional support (e.g. Schellhaas and Dovidio 2016; Tropp and Dehrone 2023; Tropp and Molina 2018, 627–36).

The central insight of this political psychological dissertation – that inter-individual, psychological differences in both deep-seated, stable dispositions such as personality traits and in situationally reactive, intrapsychic processes such as emotions shape intergroup attitudes – has further meaningful implications. On the one hand, it means that these attitudes (partly) reflect individuals' psychological attributes. This is not to say that liberal democracies should just accept that some members of their societies are seemingly naturally driven to hold, for example, exclusionary notions

of national belonging, anti-immigrant or populist attitudes. Quite the opposite: Being aware that such psychological inclinations exist and what they are is crucial to get these individuals on board for the endeavour of a functioning coexistence in diverse, but inclusive and tolerant societies. Only when we know what they are, think and feel like, interventions to this end can succeed as this allows us to identify the relevant target groups and to reach and convince them with information, proposals and campaigns that are sensitively and vigilantly framed against the background of their psychological attributes. On the other hand, acknowledging that intergroup attitudes are also shaped by psychological variables which are "inherently connected to situations" (Furr and Funder 2021, 673) means they are not fixed and unmoved, but also respond to the broader context in which they are expressed. The same is true regarding the cross-country variability of the findings discussed in this dissertation. It is vital to understand that the social and political environment does not only directly affect individual-level, political phenomena, but also through its influence on and interaction with psychological characteristics and processes. As shown in this dissertation, contextual circumstances such as the Covid-19 crisis can trigger (different) emotional reactions in individuals which associate with specific attitudinal tendencies. As indicated by our findings, the emotional experience of anger may act as an obstacle to healthy and prospering intergroup relations. The emotional reactions likely to be invoked by incidents relevant to large parts of society, political communication, policy design and mass media coverage should therefore always be considered to avoid backfiring and unintended consequences on intergroup relations.

6.4. Literature

Aarøe, Lene, Michael Bang Petersen, and Kevin Arceneaux. 2017. "The Behavioral Immune System Shapes Political Intuitions: Why and How Individual Differences in Disgust Sensitivity Underlie Opposition to Immigration." *American Political Science Review* 111(2): 277–94.

Adler, Paul S. et al. 2023. "Authoritarianism, Populism, and the Global Retreat of Democracy: A Curated Discussion." *Journal of Management Inquiry* 32(1): 3–20.

Ahn, Jisoo et al. 2021. "The Impact of Emotion and Government Trust on Individuals' Risk Information Seeking and Avoidance during the COVID-19 Pandemic: A Cross-Country Comparison." *Journal of Health Communication* 26(10): 728–41.

Allport, Gordon W. 1935. "Attitudes." In *Handbook of Social Psychology*, ed. Carl Murchison. Worcester: Clark University Press, 798–844.

Bartoš, Vojtěch, Michal Bauer, Jana Cahlíková, and Julie Chytilová. 2021. "Covid-19 Crisis and Hostility against Foreigners." *European Economic Review* 137(103818): 1–11.

Brader, Ted, and George E. Marcus. 2013. "Emotion and Political Psychology." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, and Jack S. Levy. New York: Oxford University Press, 165–204.

Bratko, Denis, Ana Butković, and Tena Vukasović Hlupić. 2017. "Heritability of Personality." *Psychological Topics* 26(1): 1–24.

Brauer, Markus. 2023. "Stuck on Intergroup Attitudes: The Need to Shift Gears to Change Intergroup Behaviors." *Perspectives on Psychological Science* 0(00): 1–15.

Briñol, Pablo, Richard E. Petty, and Maria Stavraki. 2019. "Structure and Function of Attitudes." In *Oxford Research Encyclopedia of Psychology*, ed. Ingrid Johnsrude. New York: Oxford University Press, https://doi.org/10.1093/acrefore/9780190236557.013.

Brubaker, Rogers. 1992. *Citizenship and Nationhood in France and Germany*. Cambridge, MA: Harvard University Press.

Caprara, Gian V., and Michele Vecchione. 2013. "Personality Approaches to Political Behavior." In *Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, and Jack S. Levy. Oxford: Oxford University Press, 23–35.

Chao, Fan, and Guang Yu. 2023. "Causal Inference Using Regression-Based Statistical Control: Confusion in Econometrics." *Journal of Data and Information Science* 8(1): 21–28.

Chen, Philip, Scott Pruysers, and Julie Blais. 2021. "The Dark Side of Politics: Participation and the Dark Triad." *Political Studies* 69(3): 577–601.

Cottam, Martha L., Elena Mastors, Thomas Preston, and Beth Dietz, eds. 2022. *Introduction to Political Psychology*. 4th ed. New York & Oxon: Routledge, Taylor & Francis Group.

Crawford, Jarret T., and Mark J. Brandt. 2019. "Who Is Prejudiced, and Toward Whom? The Big Five Traits and Generalized Prejudice." *Personality and Social Psychology Bulletin* 45(10): 1455–67.

Crawford, John R., and Julie D. Henry. 2004. "The Positive and Negative Affect Schedule (PANAS): Construct Validity, Measurement Properties and Normative Data in a Large Non-Clinical Sample." *British Journal of Clinical Psychology* 43(3): 245–65.

Curtis, K. Amber, and Steven V. Miller. 2021. "A (Supra)Nationalist Personality? The Big Five's Effects on Political-Territorial Identification." *European Union Politics* 22(2): 202–26.

Curtis, K. Amber, and Julie Hassing Nielsen. 2020. "Personality's Cross-National Impact across EU Attitude Dimensions." *Research and Politics* 7(4): 1–8.

Dinesen, Peter Thisted, Robert Klemmensen, and Asbjørn Sonne Nørgaard. 2016. "Attitudes Toward Immigration: The Role of Personal Predispositions." *Political Psychology* 37(1): 55–72.

Dovidio, John F., Anna Kaisa Newheiser, and Jacques Philippe Leyens. 2012. "A History of Intergroup Relations Research." In *Handbook of the History of Social Psychology*, eds. Arie W. Kruglanski and Woldgang Stroebe. Clifton: Psychology Press, 407–29.

Drouhot, Lucas G., Sören Petermann, Karen Schönwälder, and Steven Vertovec. 2021. "Has the Covid-19 Pandemic Undermined Public Support for a Diverse Society? Evidence from a Natural Experiment in Germany." *Ethnic and Racial Studies* 44(5): 877–92.

Duckitt, John, and Chris G. Sibley. 2016. "Personality, Ideological Attitudes, and Group Identity as Predictors of Political Behavior in Majority and Minority Ethnic Groups." *Political Psychology* 37(1): 109–24.

Erhardt, Julian, Markus Freitag, Maximilian Filsinger, and Steffen Wamsler. 2021. "The Emotional Foundations of Political Support: How Fear and Anger Affect Trust in the Government in Times of the Covid-19 Pandemic." *Swiss Political Science Review* 27(2): 339–52.

Erhardt, Julian, Steffen Wamsler, and Markus Freitag. 2021. "National Identity between Democracy and Autocracy: A Comparative Analysis of 24 Countries." *European Political Science Review* 13(1): 59–76.

Fatke, Matthias. 2017. "Personality Traits and Political Ideology: A First Global Assessment." *Political Psychology* 38(5): 881–99.

———. 2019. "The Personality of Populists: How the Big Five Traits Relate to Populist Attitudes." *Personality and Individual Differences* 139: 138–51.

Feldman, Ofer, and Sonja Zmerli. 2022. "Politische Psychologie: Eine Einführung." In *Politische Psychologie: Handbuch Für Wissenschaft Und Studium*, eds. Sonja Zmerli and Ofer Feldman. Baden-Baden: Nomos, 13–22.

Filsinger, Maximilian, and Markus Freitag. 2022. "Pandemic Threat and Authoritarian Attitudes in Europe: An Empirical Analysis of the Exposure to COVID-19." *European Union Politics* 23(3): 417–36.

Freitag, Markus, and Nathalie Hofstetter. 2022. "Pandemic Threat and Intergroup Relations: How Negative Emotions Associated with the Threat of Covid-19 Shape Attitudes towards Immigrants." *Journal of Ethnic and Migration Studies* 48(13): 2985–3004.

Freitag, Markus, and Carolin Rapp. 2015. "The Personal Foundations of Political Tolerance towards Immigrants." *Journal of Ethnic and Migration Studies* 41(3): 351–73.

Furr, R Michael, and David C. Funder. 2021. "Persons , Situations , and Person – Situation Interactions." In *Handbook of Personality: Theory and Research*, eds. Oliver P. John and Richard W. Robins. New York: Guilford Publications, 667–85.

Galais, Carol, and Guillem Rico. 2021. "An Unjustified Bad Reputation? The Dark Triad and Support for Populism." *Electoral Studies* 72(102357): 1–6.

Gallego, Aina, and Sergi Pardos-Prado. 2014. "The Big Five Personality Traits and Attitudes towards Immigrants." *Journal of Ethnic and Migration Studies* 40(1): 79–99.

Galston, William A. 2018. "The Populist Challenge to Liberal Democracy." *Journal of Democracy* 29(2): 5–19.

Goetz, Klaus H., and Dorte Sindbjerg Martinsen. 2021. "COVID-19: A Dual Challenge to European Liberal Democracy." *West European Politics* 44(5–6): 1003–24.

Gosling, Samuel D., Peter J. Rentfrow, and William B. Swann. 2003. "A Very Brief Measure of the Big-Five Personality Domains." *Journal of Research in Personality* 37(6): 504–28.

Greenfeld, Liah. 1992. *Nationalism: Five Roads to Modernity*. Cambridge, MA: Harvard University Press.

Groves, Robert M. et al. 2009. *Survey Methodology*. 2nd ed. Hoboken: Wiley.

Hadler, Markus, and Anaïd Flesken. 2018. "Political Rhetoric and Attitudes toward Nationhood: A Time-Comparative and Cross-National Analysis of 39 Countries." *International Journal of Comparative Sociology* 59(5–6): 362–82.

Hameleers, Michael, and Claes H. de Vreese. 2020. "To Whom Are 'the People' Opposed? Conceptualizing and Measuring Citizens' Populist Attitudes as a Multidimensional Construct." *Journal of Elections, Public Opinion and Parties* 30(2): 255–74.

Hart, William, Kyle Richardson, and Gregory K. Tortoriello. 2018. "Dark Personality Voters Find Dark Politicians More Relatable and Fit for Office." *Journal of Research in Personality* 75: 59–68.

Hartman, Todd K. et al. 2021. "The Authoritarian Dynamic During the COVID-19 Pandemic: Effects on Nationalism and Anti-Immigrant Sentiment." *Social Psychological and Personality Science* 12(7): 1274–85.

Helbling, Marc, Tim Reeskens, and Matthew Wright. 2016. "The Mobilisation of Identities: A Study on the Relationship between Elite Rhetoric and Public Opinion on National Identity in Developed Democracies." *Nations and Nationalism* 22(4): 744–67.

Hodson, Gordon, and Megan Earle. 2017. "Social Identity Theory (SIT)." In *Encyclopedia of Personality and Individual Differences*, eds. Virgil Zeigler-Hill and Todd K. Shackelford. Cham: Springer, https://doi.org/10.1007/978-3-319-28099-8_1185-1. 10.1007/978-3-319-28099-8_1185-1.

Hofstetter, Nathalie. 2023. "Personality and National Identity: How the Big Five Relate to Civic and Ethnic Conceptions of Nationhood." *Nations and Nationalism* 29(2): 562–78.

Hogg, Michael A. 2018. "Social Identity Theory." In *Contemporary Social Psychological Theories*, ed. Peter J. Burke. Stanford: Standford University Press, 112–38.

Hornsey, Matthew J. 2008. "Social Identity Theory and Self-Categorization Theory: A Historical Review." *Social and Personality Psychology Compass* 2(1): 204–22.

Huddy, Leonie, David O. Sears, and Jack S. Levy. 2023. "Introduction: Theoretical Foundations of Political Psychology." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 1–18.

Iyengar, Shanto, and Sean J. Westwood. 2015. "Fear and Loathing across Party Lines: New Evidence on Group Polarization." *American Journal of Political Science* 59(3): 690–707.

Jones, Daniel N., and Delroy L. Paulhus. 2014. "Introducing the Short Dark Triad (SD3): A Brief Measure of Dark Personality Traits." *Assessment* 21(1): 28–41.

Jost, John T., H. Hannah Nam, David M. Amodio, and Jay J. Van Bavel. 2014. "Political Neuroscience: The Beginning of a Beautiful Friendship." *Political Psychology* 35(Suppl. 1): 3–42.

Kandler, Christian, Julia Richter, and Alexandra Zapko-Willmes. 2017. "Genetic Basis of Traits." In *Encyclopedia of Personality and Individual Differences*, eds. Virgil Zeigler-Hill and Todd K. Shackelford. Cham: Springer, 1–13.

Katsambekis, Giorgos. 2017. "The Populist Surge in Post-Democratic Times: Theoretical and Political Challenges." *Political Quarterly* 88(2): 202–10.

Kohn, Hans. 1939. "The Nature of Nationalism." *The American Political Science Review* 33(6): 1001–21.

Lee, Kibeom, Michael C. Ashton, Yannick Griep, and Michael Edmonds. 2018. "Personality, Religion, and Politics: An Investigation in 33 Countries." *European Journal of Personality* 32(2): 100–115.

Lewin, Kurt. 1936. *Principles of Topological Psychology*. New York: McGraw-Hill.

Lührmann, Anna et al. 2019. "State of the World 2018: Democracy Facing Global Challenges." *Democratization* 26(6): 895–915.

Marcus, George E. 2012. "Reason, Passion, and Democratic Politics: Old Conceptions - New Understandings - New Possibilities." In *Passions and Emotions*, ed. James E. Fleming. New York & London: New York University Press, 127–88.

Marcus, George E., W. Russell Neuman, and Michael B. MacKuen. 2017. "Measuring Emotional Response: Comparing Alternative Approaches to Measurement." *Political Science Research and Methods* 5(4): 733–54.

Marcus, George E., Nicholas A. Valentino, Pavlos Vasilopoulos, and Martial Foucault. 2019. "Applying the Theory of Affective Intelligence to Support for Authoritarian Policies and Parties." *Political Psychology* 40(S1): 109–39.

Mason, Lilliana. 2018. "Ideologues without Issues: The Polarizing Consequences of Ideological Identities." *Public Opinion Quarterly* 82(S1): 280–301.

———. 2023. "Political Identities." In *Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 886–

917.

McCrae, Robert R, and Paul T Costa. 2008. "The Five-Factor Theory of Personality." In *Handbook of Personality: Theory and Research*, eds. Oliver P. John, Richard W. Robins, and Lawrence A. Pervin. New York: Guilford, 159–81.

Meinecke, Friedrich. 1908. *Weltbürgertum Und Nationalstaat. Studien Zur Genesis Des Deutschen Nationalstaates*. München/Berlin: Oldenbourg.

Mondak, Jeffery J. 2010. *Personality and the Foundations of Political Behavior*. Cambridge: CUP.

Mondak, Jeffery J., Damarys Canache, Mitchell A. Seligson, and Matthew V. Hibbing. 2011. "The Participatory Personality: Evidence from Latin America." *British Journal of Political Science* 41(1): 211–21.

Mondak, Jeffery J., and Karen D. Halperin. 2008. "A Framework for the Study of Personality and Political Behaviour." *British Journal of Political Science* 38(2): 335–62.

Monroe, Kristen Renwick, William Chiu, Adam Martin, and Bridgette Portman. 2009. "What Is Political Psychology?" *Perspectives on Politics* 7(4): 859–82.

Murray, Damian R., and Mark Schaller. 2016. "The Behavioral Immune System: Implications for Social Cognition, Social Interaction, and Social Influence." In *Advances in Experimental Social Psychology*, eds. James M. Olson and Mark P. Zanna. Cambridge, MA: Acdemic Press, 75–129.

Nunes, Andreia, Teresa Limpo, César F. Lima, and São Luís Castro. 2018. "Short Scales for the Assessment of Personality Traits: Development and Validation of the Portuguese Ten-Item Personality Inventory (TIPI)." *Frontiers in Psychology* 9(461): 1–5.

O'Shea, Brian A., Derrick G. Watson, Gordon D.A. Brown, and Corey L. Fincher. 2020. "Infectious Disease Prevalence, Not Race Exposure, Predicts Both Implicit and Explicit Racial Prejudice Across the United States." *Social Psychological and Personality Science* 11(3): 345–55.

Olufemi, Temitayo Deborah. 2012. "Theories of Attitudes." In *Psychology of Attitudes*, eds. Corey D. Logan and Michelle I. Hodges. New York: Nova Science Publishers, 61–78.

Osborne, Danny, Nicole Satherley, and Chris G Sibley. 2018. "Personality and Ideology: A Meta-Analysis of the Reliable, but Non-Causal, Association between Openness and Conservatism." In *The Oxford Handbook of Behavioral Political Science*, eds. Alex Mintz and Lesley G. Terris. New York: Oxford University Press, https://doi.org/10.1093/oxfordhb/9780190634131.013.

Osborne, Danny, and Chris G. Sibley. 2022. "Political Psychology: Advancing an International Perspective on the Psychology of Political Behaviour." In *The Cambridge Handbook of Political Psychology*, eds. Danny Osborne and Chris G. Sibley. New York: Cambridge University Press, 3–21.

Oswald, Michael, Mario Schäfer, and Elena Broda. 2022. "The New Age of Populism: Reapproaching a Diffuse Concept." In *The Palgrave Handbook of Populism*, ed. Michael Oswald. Cham: Palgrave Macmillan, 3–27.

Paulhus, Delroy L., and Kevin M. Williams. 2002. "The Dark Triad of Personality: Narcissism, Machiavellianism, and Psychopathy." *Journal of Research in Personality* 36: 556–63.

Persson, Björn N., Petri J. Kajonius, and Danilo Garcia. 2019. "Revisiting the Structure of the Short Dark Triad." *Assessment* 26(1): 3–16.

Reeskens, Tim, and Marc Hooghe. 2010. "Beyond the Civic-Ethnic Dichotomy: Investigating the Structure of Citizenship Concepts across Thirty-Three Countries." *Nations and Nationalism* 16(4): 579–97.

Reeskens, Tim, and Matthew Wright. 2013. "Nationalism and the Cohesive Society: A Multilevel Analysis of the Interplay Among Diversity, National Identity, and Social Capital Across 27 European Societies." *Comparative Political Studies* 46(2): 153–81.

Rico, Guillem, Marc Guinjoan, and Eva Anduiza. 2017. "The Emotional Underpinnings of Populism: How Anger and Fear Affect Populist Attitudes." *Swiss Political Science Review* 23(4): 444–61.

Roberts, Kenneth M. 2019. "Crises of Representation and Populist Challenges to Liberal Democracy." *Chinese Political Science Review* 4(2): 188–99.

Ryan, William S., Jeffrey M. Hunger, and Brenda Major. 2017. "Applying Intergroup Relations Research to Understanding LGB Health Disparities." *Journal of Social Issues* 73(3): 477–92.

Sagiv, Lilach, Sonia Roccas, and Osnat Hazan. 2012. "Identification With Groups: The Role of Personality and Context." *Journal of Personality* 80(2): 345–74.

Sanchez-Roige, Sandra et al. 2018. "The Genetics of Human Personality." *Genes, Brain and Behavior* 17(e12439): 1–13.

Schellhaas, Fabian M. H., and John F. Dovidio. 2016. "Improving Intergroup Relations." *Current Opinion in Psychology* 11: 10–14.

Settle, Jaime, and Laurel Detert. 2023. "Biology and Politics." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 280–309.

Smith, Antony D. 1991. *National Identity*. Reno: University of Nevada Press.

Soliz, Jordan, and Christine E. Rittenour. 2012. "Family as an Intergroup Arena." In *The Handbook of Intergroup Communication*, ed. Howard Giles. New York: Routledge, 331–43.

Sorokowski, Piotr et al. 2020. "Can Information about Pandemics Increase Negative Attitudes toward Foreign Groups? A Case of COVID-19 Outbreak." *Sustainability* 12(4912): 1–10.

Speklé, Roland F., and Sally K. Widener. 2018. "Challenging Issues in Survey Research: Discussion and Suggestions." *Journal of Management Accounting Research* 30(2): 3–21.

Thornhill, Randy, and Corey L. Fincher. 2014. *The Parasite-Stress Theory of Values and Sociality: Infectious Disease, History and Human Values Worldwide*. Cham: Springer.

Tropp, Linda R., and Trisha A. Dehrone. 2023. "Prejudice Reduction and Social Change: Dual Goals to Be Pursued in Tandem." In *Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears, Jack S. Levy, and Jennifer Jerit. New York: Oxford University Press, 1062–94.

Tropp, Linda R., and Ludwin E. Molina. 2018. "Intergroup Processes: From Prejudice to Positive Relations Between Groups." In *The Oxford Handbook of Personality and Social Psychology*, eds. Kay Deaux and Mark Snyder. New York: Oxford University Press, 621–44.

Vasilopoulos, Pavlos. 2019. "Affective Intelligence and Emotional Dynamics in Voters' Decision-Making Processes." In *Oxford Research Encyclopedia of Politics*, ed. William R. Thomson. New York: Oxford University Press, https://doi.org/10.1093/acrefore/9780190228637.013.

Vasilopoulos, Pavlos, Haley Mcavay, Sylvain Brouard, and Martial Foucault. 2023. "Emotions, Governmental Trust and Support for the Restriction of Civil Liberties during the Covid-19 Pandemic." *European Journal of Political Research* 62(2): 422–42.

Wamsler, Steffen, Markus Freitag, Julian Erhardt, and Maximilian Filsinger. 2023. "The Pandemic and the Question of National Belonging: Exposure to Covid-19 Threat and Conceptions of Nationhood." *European Journal of Political Research* 62(2): 510–29.

Watson, David, Lee Anna Clark, and Auke Tellegen. 1988. "Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales." *Journal of Personality and Social*

Psychology 54(6): 1063–70.

Weinschenk, Aaron C. 2017. "Big Five Personality Traits , Political Participation , and Civic Engagement : Evidence from 24 Countries." *Social Science Quarterly* 98(5): 1406–21.

West, Emily A., and Shanto Iyengar. 2022. "Partisanship as a Social Identity: Implications for Polarization." *Political Behavior* 44(2): 807–38.

Wright, Matthew, Jack Citrin, and Jonathan Wand. 2012. "Alternative Measures of American National Identity: Implications for the Civic-Ethnic Distinction." *Political Psychology* 33(4): 469–82.

Zettler, Ingo et al. 2022. "The Role of Personality in COVID-19-Related Perceptions, Evaluations, and Behaviors: Findings Across Five Samples, Nine Traits, and 17 Criteria." *Social Psychological and Personality Science* 13(1): 299–310.

Zmigrod, Leor et al. 2021. "The Cognitive and Perceptual Correlates of Ideological Attitudes: A Data-Driven Approach." *Philosophical Transactions of the Royal Society B: Biological Sciences* 376(20200424): 1–14.

Zmigrod, Leor, Peter J. Rentfrow, and Trevor W. Robbins. 2018. "Cognitive Underpinnings of Nationalistic Ideology in the Context of Brexit." *Proceedings of the National Academy of Sciences of the United States of America* 115(19): E4532–40.

7. Declaration of authorship

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Nathalie Hofstetter