

# On the Association of Interpersonal Trust With Right-Wing Extremist and Authoritarian Attitudes

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Journal of Social and Political Psychology, 2022, Vol. 10(2), 460–474, <https://doi.org/10.5964/jspp.6741>

Received: 2021-05-14 • Accepted: 2022-03-09 • Published (VoR): 2022-09-26

Handling Editor: Jasper Van Assche, Ghent University, Ghent, Belgium

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## Abstract

Right-wing extremism and authoritarianism have been identified as major, if not the major threats to democracy in recent years. The rise of right-wing extremist and populist parties in many democratic countries throughout the world has renewed the interest in identifying the roots and determinants of these anti-democratic attitudes. Even though factors on many levels of analysis (macro-, meso- and micro-level) have been taken into consideration as possible sources of the development of these kinds of positions, the relationship of interpersonal trust with both right-wing extremism and authoritarianism has yet to be systematically examined. The aim of the current study was to shed light on the connection between these constructs by analyzing data from a German representative study conducted in 2018 (N = 2,416). Multiple linear regression found interpersonal trust to reliably predict all facets of right-wing extremism and authoritarianism included in the study, even when controlling for standard socioeconomic factors (e.g. age, gender, education, income). The lack of interpersonal trust may thus be seen as a major contributing factor to right-wing extremist and authoritarian attitudes. As such, it should be included in future studies about this topic and the nature of the revealed connection should be further examined.

## Keywords

right-wing extremism, right-wing authoritarianism, interpersonal trust, anti-democratic attitudes, authoritarian attitudes

## Non-Technical Summary

### Background

In the past years, there has been a striking increase in anti-democratic movements throughout the world: right-wing extremist and populist parties are on the rise and gaining support among the general population of many western countries. Right-wing extremism and authoritarianism pose a great threat to the freedoms achieved by democracy, as they strive to restrict or even abolish them, e.g. by calling for a single, strong leader to govern the country, by sanctioning deviant behavior of any kind, and by favoring xenophobic, anti-Semitic, and nationalistic ideologies.

In the past, many researchers tried to understand why people in even the most liberal and free societies showed the tendency to endorse anti-democratic attitudes. Different levels of analysis have been taken into consideration to try to explain



the underlying mechanisms: the macro-level, for example, considers factors that are related to political culture and policy making. Research has shown that people are less likely to express prejudice, if they are sanctioned by the government. The meso-level, on the other hand, consider group-specific dynamics that foster right-wing extremist and authoritarian attitudes, e.g. if I live in a neighborhood without any contact to foreigners, I am more likely to develop prejudices against them, because of a lack of (opportunity for) positive interactions. Finally, the micro-level focuses on individual characteristics. Education, gender, personality, and socialization are all important when looking at the development of anti-democratic attitudes.

It is rather obvious that all three levels of analysis have to be taken into consideration when trying to explain the roots of right-wing extremist and authoritarian attitudes. To this end, it may be useful to look at those factors that are located at the intersections of multiple levels to understand how these levels are connected. Interpersonal trust is one of these factors as it involves the individual, micro level as well as the group-related, meso level.

#### **Why was this study done?**

Interpersonal trust describes a person's expectation that the others can be relied upon, even if they are unknown. Because interpersonal trust is related to many characteristics that have been identified to influence right-wing extremist and authoritarian attitudes, we believe that interpersonal trust itself may show a strong connection to anti-democratic attitudes and that investigating it may help shed light on the connection of the levels mentioned above.

#### **What did the researchers do and find?**

We used the data from a German representative sample of 2018 consisting of 2,416 participants to assess the relationship of interpersonal trust with right-wing extremist and authoritarian attitudes. For that, we used a statistical method called multiple linear regression, that also let us control for other important factors like age, gender, education, and income. This way we made sure that any differences we found were not due to differences in these characteristics.

Even when taking these factors into consideration, we found a strong connection of interpersonal trust and all facets of right-wing extremist and authoritarian attitudes that were included in the study. Our results show that there is a negative, linear connection: people with low degrees of interpersonal trust are significantly more likely to endorse right-wing extremist and authoritarian attitudes than people showing higher values.

#### **What do these findings mean?**

These results show that it is important to consider interpersonal trust. Fostering interpersonal trust may help reduce right-wing extremist and authoritarian attitudes and may thus contribute to strengthening democracies worldwide. On the individual level, our findings suggest that these anti-democratic attitudes are deeply connected to a general distrust towards others and a fear of the unknown. Even though we discuss possible connections of interpersonal trust with other factors relevant to this topic, future studies should try to further shed light on these relationships.

The continuing rise and success of far-right and authoritarian movements all over the world raised great concern about anti-democratic tendencies in political discourse: the number of right-wing politically motivated criminal offenses increased by over 10% in Germany in 2020 compared to 2019 ([Bundesministerium des Innern, für Bau und Heimat \[BMI\], 2021](#)) and in many other European countries a dramatic increase in xenophobic hate crimes was observed as well ([European Union Agency for Fundamental Rights, 2021](#)). It is of eminent public interest to understand the determinants of these developments, which threaten the stability of democracies from within. History has made abundantly clear that democracies do not inherently progress to more stability and liberty, instead they are challenged by severe anti-democratic and repressive processes. To explain this self-destructive momentum, [Adorno and Horkheimer \(1947/2002\)](#) pointed towards a notion they called the *dialectic of enlightenment*. They postulated that all economic or scientific advances were accompanied by, in fact creating, regressive tendencies that threatened to overpower progress. Against the background of Auschwitz and the demise of Germany's first representative democracy, they were thus able to explain why societies were not continually improving, but much rather saw themselves confronted with tendencies hindering or even reversing their accomplishments.

Trying to understand how a majority of German citizens was able to support or at least tolerate a most inhumane system that was responsible for the murder of millions of innocent people, Hannah Arendt suggested that certain

disruptions of societal order could create a *radical evil*, characterized by a profound inability to empathize with others and by cognitive inflexibilities leading to a depletion of interpersonal relationships (Arendt, 2002). In the attempt to further understand how progress of a society depends on and interacts with its individuals, Adorno, Frenkel-Brunswick, Levinson, and Sanford (1950) identified the *Authoritarian Personality* as a trait-like set of beliefs, attitudes and values that lead to anti-democratic tendencies and right-wing extremism. In this tradition, right-wing extremist and authoritarian attitudes have been identified as central threats to democracy and progress, and countless studies have been conducted to understand the social, political and psychological underpinnings of these positions. Based on the Authoritarian Personality, Altemeyer (1981, 1988, 1996) ridded the concept of some of its original flaws and developed his conception of right-wing authoritarianism, which has become the most prominent conception internationally. The new conception turned away from the psychoanalytic roots of the Authoritarian Character in early childhood developments and rather defines authoritarianism as disposition that can be activated and intensified by situational factors (Asbrock & Fritsche, 2013; Duckitt & Sibley, 2009; Stenner, 2005). It consists of three distinct dimensions: *authoritarian submission* describes the willingness of a person to follow the rule of a strong leader; *authoritarian aggression* accounts for the extent to which they feel the need to punish deviant behavior of any kind; *conventionalism* is defined as a person's reluctance to change and adherence to established social norms. Authoritarianism is thus closely related to conservatism as well as many forms of generalized prejudice (Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Jost, Glaser, Kruglanski, & Sulloway, 2003) and it also captures some of the aspects of Arendt's idea of a *radical evil*. In this study we follow Altemeyer's conception of authoritarianism.

In the German speaking realm, following Adorno et al. (1950), authoritarianism is often considered a character trait largely influenced by socialization and is therefore seen as prerequisite of right-wing extremist and other anti-democratic attitudes. Definitions of right-wing extremist attitudes, on the other hand, consist of multiple inter-related dimensions, held together by a worldview of inequality (Zick, Wolf, Küpper, Davidov, Schmidt, & Heitmeyer, 2008). To foster reproducibility of research, leading German political scientists tried to merge existing definitions of right-wing extremism at a consensus conference in 2001 (Kreis, 2007), agreeing upon a definition that differentiates between social and political aspects and consists of six dimensions: The *support of right-wing dictatorship*, *chauvinistic nationalism*, *antisemitism*, *xenophobia*, *social Darwinism*, and the *belittlement and trivialization of the crimes of National Socialism*. This definition is used in several long-term projects monitoring right-wing extremist and related attitudes in Germany (Decker, Kiess, & Brähler, 2016; Zick, Krause, Berghan, & Küpper, 2016) and therefore will be used in the current investigation.

Both authoritarianism and right-wing extremist attitudes may predict far-right voting behavior (Decker & Brähler, 2018; Dunwoody & Plane, 2019), acceptance of violence (Decker et al., 2016) as well as prejudice against an outgroup, especially when it is perceived as threatening (Duckitt & Sibley, 2007, 2009; Ekehammar et al., 2004). Additionally, there is a correlation between acceptance of corporal punishment, violent educational methods and authoritarianism, even across generations (Clemens et al., 2020). Thus, even though they may not completely bridge the gap between attitudes and actions, authoritarianism and right-wing extremist attitudes may serve as an indicator of (anti-democratic) action potential.

The relationship between authoritarianism and right-wing extremism is a highly debated topic and due to methodological problems, it remains unclear, whether or not the two are equivalent or one predisposes to the other. As we want to focus on the conditions that bring about anti-democratic attitudes, we will use both authoritarianism and right-wing extremism as indicators for individual anti-democratic action potential that may ultimately promote a free society's tendency to become suppressive. To capture these conditions, multiple factors on different levels of analyses have been taken into consideration: factors of political culture and policy making (macro-level); group-related factors (meso-level), as in threat theory (Sherif & Sherif, 1979; Stenner, 2005; Stephan & Stephan, 2000), social identity theory (Tajfel & Turner, 2004) and theories of intergroup contact (Allport, 1954; Pettigrew & Tropp, 2000; Pettigrew, Tropp, Wagner, & Christ, 2011); but also individual factors (micro-level) regarding personality or socialization (e.g. Adorno et al., 1950 and Hopf, 1993). Following Arendt's work, we are especially interested in the role of interpersonal relationships, namely in interpersonal trust, which can be seen as an individual factor on the micro-level that also functions on the meso-level, influencing intergroup contacts and perceived threat, but also being influenced by them.

Interpersonal trust is a complex and multifaceted construct and definitions differ by the context under investigation. Rousseau, Sitkin, Burt, and Camerer (1998) offered a widely used definition, treating interpersonal trust as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (p. 395). Based on this definition, Botsford (2020) differentiates two main conceptualizations of interpersonal trust. The *behavioral* perspective focuses on actual trust behavior (e.g. Coleman, 1990), understanding trust as a type of risk-taking action, whereas the *attitudinal* perspective focuses on cognitions: following Erikson’s (1950) concept of *basic trust*, Rotter (1967) describes interpersonal trust as the expectation that the other can be relied upon. Thus, the attitudinal perspective, as investigated in this study, may be seen as a prerequisite for trusting behavior. A body of research has shown that interpersonal trust is associated with individual and social characteristics. For example, on an individual level, interpersonal trust is higher among persons who are more open for new experiences (Miklikowska, 2012), have no recent history of misfortune or traumatic experiences (Alesina & La Ferrara, 2002), and report a higher level of life satisfaction (Helliwell & Putnam, 2004).

Socio-political characteristics that are associated with low levels of interpersonal trust are the belonging to a group, which historically felt discriminated against, living in a racially mixed community, and living in a community with a high degree of income disparity (Alesina & La Ferrara, 2002). Coleman (1990) showed that familiarity with the other party strongly influences interpersonal trust, as it is considered easier to anticipate the behavior of someone we perceive as familiar. Moreover, contact with an unfamiliar outgroup in general, and longer and more stable interactions specifically with the expectation of repeated interactions in the future may increase the level of interpersonal trust. As these are central preconditions for reducing prejudice and xenophobic attitudes (Allport, 1954), we propose that there is a strong connection between interpersonal trust and these dimensions of right-wing extremist attitudes. Moreover, a study by Jost et al. (2003) could show that political conservatism, a construct closely related to authoritarianism, is negatively connected to openness to experience and uncertainty tolerance, while it is positively associated with intolerance of ambiguity and needs for structure, order, and closure. Other studies have stressed the psychosocial function of the authoritarian dynamic to manage uncertainty and threat (Asbrock & Fritsche, 2013; Duckitt & Sibley, 2009; Oesterreich, 2005). As this idea is conceptually related to interpersonal trust, it makes sense to assess the direct relationship of interpersonal trust and both authoritarianism and right-wing extremism. Finally, the concept serves as a strong predictor for the support of democratic values (Miklikowska, 2012).

Due to the apparent lack of empirical work on the relation of interpersonal trust to authoritarianism and right-wing extremist attitudes, we set out to study 1) whether interpersonal trust is associated with authoritarianism and right-wing extremism and 2) whether such an association was independent of important socioeconomic factors.

## Method

### Setting and Participants

In this study, we analyzed data from a national representative survey of the general population of Germany. The survey was conducted by an independent institute for opinion and social research (USUMA, Berlin) from May to July of 2018. Inclusion criteria were an age of  $\geq 14$  years and sufficient ability to understand the written German language. For selection of participants, a stratified random sampling procedure was used. 258 sample points were randomly selected from the area of Germany and interviewers contacted households by random-route sampling. A Kish grid was used to select the target persons within each household. In total 5,316 households were contacted and 2,516 participants completed interviews (response proportion 47.3%). Most common reasons for nonresponse were: household declining to give information ( $n = 1,189$ , 22.4%), nobody encountered at address in four attempts ( $n = 712$ , 13.4%), and target person declining interview ( $n = 675$ , 12.7%). All adult participants provided their informed consent. In case of minors enrolled in the present study, informed consent was also obtained from the next of kin, caretaker, or guardian. After a sociodemographic interview that was conducted in a face-to-face manner by trained and experienced interviewers, participants completed self-report, paper-and-pencil questionnaires regarding political attitudes, physical

and psychological symptoms, in the presence (but without any interference) of the interviewer. Total interview time was about 45-60 minutes.

Comparison of gender and age groups to data provided by Germany's Federal Statistical Office (2019), a slight overrepresentation of female participants as well as an underrepresentation of younger age groups could be observed (detailed socioeconomic data may be found in Table 1). As these were minor deviations, the data can be assumed to be representative of the German population.

**Table 1**

*Characteristics of Study Participants*

Variable	Overall ( <i>N</i> = 2,416)	Interpersonal trust ( <i>M</i> and <i>SD</i> )	Missings ( <i>n</i> )
<b>Gender</b>			0
Male	1093 (45.2%)	7.37 (1.76)	
Female	1323 (54.8%)	7.40 (1.71)	
<b>Age (<i>M</i> ± <i>SD</i>)</b>	48.19 ± 17.61		0
<b>Living with partner</b>			37
Yes	1415 (59.5%)	7.42 (1.64)	
No	964 (40.5%)	7.35 (1.86)	
<b>Household size (<i>M</i> ± <i>SD</i>)</b>	2.14 ± 1.13		0
<b>Education</b>			5
≤ 9 years	822 (34.1%)	7.06 (1.73)	
10 years	991 (41.1%)	7.38 (1.70)	
≥ 11 years	598 (24.8%)	7.84 (1.70)	
<b>Current employment</b>			23
Employed	1622 (67.8%)	7.51 (1.67)	
Unemployed	771 (32.2%)	7.12 (1.83)	
<b>Retirement</b>	570 (23.8%)		23
Yes		7.33 (1.73)	
No	1823 (76.2%)	7.40 (1.73)	
<b>Household equivalence income (in €, <i>M</i> ± <i>SD</i>)</b>	1771 ± 748		72

*Note.* *M* = mean; *SD* = standard deviation.

As we were interested in the perspective of a German native population, we excluded survey participants without German citizenship, resulting in an analysis sample of *N* = 2,416 persons.

## Variables/Measures

### Authoritarianism

The *Authoritarianism – Ultra Short* (A-US) scale was used to measure authoritarianism. It consists of three items, one for each dimension of authoritarianism (aggression, submission and conventionalism; for original wording as well as English translations following Heller, Zenger, et al. (2020), see Table 2). The items were selected from the *Short Scale for Authoritarianism* (KSA-3, Beierlein, Asbrock, Kauff, & Schmidt, 2014), taking the item with the highest factor loading for each dimension of the KSA-3 in order to best represent those dimensions in the A-US. Participants were asked to indicate their degree of agreement on a five-point scale, with 1 indicating strong opposition and 5 indicating strong agreement. By adding up each item, an overall authoritarianism score was calculated. If one of the three items was missing, the sum score was calculated as the mean of the two remaining items multiplied by three. The sum score was not calculated if more than one item was missing. The A-US sum score has adequate validity and reliability to measure

authoritarianism with internal consistency measured by McDonald's  $\omega$  (1999) ranging between 0.68 and 0.71 in three samples, with limits regarding assessment of the three dimensions (Heller, Zenger, et al., 2020).

**Table 2**

*Original Wording and Translation of the A-US*

No.	German original	English translation	Dimension
1	Unruhestifter sollten deutlich zu spüren bekommen, dass sie in der Gesellschaft unerwünscht sind.	Troublemakers should clearly feel the effects of the fact that they are unwanted in the society.	Aggression
2	Menschen sollten wichtige Entscheidungen in der Gesellschaft Führungspersonen überlassen.	People should leave important decisions to those in charge / the leaders.	Submission
3	Bewährte Verhaltensweisen sollten nicht in Frage gestellt werden.	Established conducts should not be questioned.	Conventionalism

### Right-Wing Extremism

The *Leipzig Scale on Right-Wing Extremist Attitudes (Fragebogen zur Rechtsextremen Einstellung [FR-LF]; Decker, Hinz, Geißler, & Brähler, 2013; see also Kiess, Decker, & Brähler, 2016)* was used to assess right-wing political attitudes. It is made up of six dimensions: *Support for a right-wing dictatorship, chauvinism, xenophobia, antisemitism, social Darwinism* and *belittling the crimes of National Socialism*. Each dimension consists of three items to be rated on a five-point scale ranging from 1 = "I fully disagree" to 5 = "I fully agree". The original wording as well as translations following Kiess et al. (2016) may be found in Table 3. For each dimension, a score was calculated using the assigned three items (one missing item was allowed, as described above for authoritarianism) and a right-wing extremism sum score was calculated by adding the scores of all subdimensions. The questionnaire has good to very good internal consistency with  $\omega = 0.77$  for the social Darwinism to  $\omega = 0.90$  for the antisemitism dimensions and  $\omega = 0.96$  for the second-order, general factor (Heller, Brähler, & Decker, 2020).

**Table 3**

*Original Wording and Translation of the FR-LF*

No.	German	English	Dimension
1	Im nationalen Interesse ist unter bestimmten Umständen eine Diktatur die bessere Staatsform.	Under certain circumstances a dictatorship better serves the national interest.	Support for a right-wing dictatorship
2	Ohne Judenvernichtung würde man Hitler heute als großen Staatsmann ansehen.	Had it not been for the Holocaust, Hitler would be regarded as a great statesman today.	Belittling the crimes of National Socialism
3	Was Deutschland jetzt braucht, ist eine einzige starke Partei, die die Volksgemeinschaft insgesamt verkörpert.	Germany needs a strong single party that represents the ethnic community as a whole.	Support for a right-wing dictatorship
4	Wir sollten einen Führer haben, der Deutschland zum Wohle aller mit starker Hand regiert.	We should have a leader that rules Germany with a firm hand to the benefit of all.	Support for a right-wing dictatorship
5	Wie in der Natur sollte sich in der Gesellschaft immer der Stärkere durchsetzen.	Just as in nature, the strongest in a society should always get their way.	Social Darwinism
6	Die Ausländer kommen nur hierher, um unseren Sozialstaat auszunutzen.	Foreigners only come here to abuse the welfare system.	Xenophobia
7	Auch heute noch ist der Einfluss der Juden zu groß.	The influence of the Jews is still too strong.	Antisemitism



No.	German	English	Dimension
8	Wir sollten endlich wieder Mut zu einem starken Nationalgefühl haben.	We should dare to have strong nationalist feelings again.	Chauvinism
9	Eigentlich sind die Deutschen anderen Völkern von Natur aus überlegen.	The Germans are actually superior to other people in nature.	Social Darwinism
10	Wenn Arbeitsplätze knapp werden, sollte man die Ausländer wieder in ihre Heimat zurückschicken.	When jobs are scarce, foreigners should be sent home.	Xenophobia
11	Die Verbrechen des Nationalsozialismus sind in der Geschichtsschreibung weit übertrieben worden.	The crimes of National Socialism have been greatly exaggerated.	Belittling the crimes of National Socialism
12	Was unser Land heute braucht, ist ein hartes und energisches Durchsetzen deutscher Interessen gegenüber dem Ausland.	Today our country needs to firmly and energetically enforce its interests against other nations.	Chauvinism
13	Die Juden arbeiten mehr als andere Menschen mit üblen Tricks, um das zu erreichen, was sie wollen.	More than other people, the Jews use dirty tricks to achieve their goals.	Antisemitism
14	Das oberste Ziel der deutschen Politik sollte es sein, Deutschland die Macht und Geltung zu verschaffen, die ihm zusteht.	The highest aim of German politicians should be to ensure that Germany has the power and recognition it deserves.	Chauvinism
15	Es gibt wertvolles und unwertes Leben.	There is worthy and unworthy life.	Social Darwinism
16	Die Bundesrepublik ist durch die vielen Ausländer in einem gefährlichen Maß überfremdet.	Germany is losing its identity because of the large number of foreigners.	Xenophobia
17	Die Juden haben einfach etwas Besonderes und Eigentümliches an sich und passen nicht so recht zu uns.	The Jews just have something peculiar about them and don't really fit in with us.	Antisemitism
18	Der Nationalsozialismus hatte auch seine guten Seiten.	National Socialism also had positive aspects.	Belittling the crimes of National Socialism

## Interpersonal Trust

We used the SOEP-trust instrument developed by Naef and Schupp (2009) for the German Socio-Economic Panel Study. It measures interpersonal trust in a generalized or unknown other as opposed to trust in institutions or known others. Agreement to three items is indicated on a four-point scale (1 = “disagree strongly”, 2 = “disagree somewhat”, 3 = “agree somewhat”, 4 = “agree strongly”). The wordings of the items are: 1) “In general, you can trust people”, 2) “Nowadays you can't rely on anybody”, and 3) “It's better to be cautious before trusting strangers”. Items 2 and 3 were reversed for further analysis. A sum score was calculated if response to no more than one item was missing, as described above for authoritarianism. The resulting sum score ranged from 3 to 12 with higher values indicating greater interpersonal trust. The internal consistency of SOEP-trust is acceptable, with  $\omega = 0.67$  in this sample.

## Socioeconomic Factors

Interviewers personally asked participants about socioeconomic factors, including age, gender, household net income (divided into 13 income groups ranging from below 500€ to above 5,500€, approximately converted to continuous values by using the mean of each group, 450€ for the lowest and 5,500€ for the highest), number of persons living in the household, highest educational degree, current occupation, and retirement status. Household equivalence net income was calculated by dividing net household income by the square root of the number of persons living in the household.

Education was grouped into *low* ( $\leq 9$  years), *medium* (10 years), and *high* ( $\geq 11$  years of formal education). Occupation status was dichotomized into *unemployed* and *employed* (including full- or part-time employment, self-employment and being in training or qualification). Retirement was dichotomized to *yes* or *no*.

## Statistical Analysis

For description of the sample's characteristics we calculated proportions and means with standard deviations for the total sample and means and standard deviations of interpersonal trust stratified by categories of sociodemographic variables. We calculated Pearson correlation coefficients between the primary study variables (interpersonal trust and political attitudes variables) as well as age and income.

To further study the relation of interpersonal trust with authoritarianism and right-wing extremist attitudes, linear regression models were calculated. We used scatterplots, comparing a locally weighted running line smoother (LOESS) to the linear regression line, to ascertain linearity of the relation between interpersonal trust and the respective political dimension. To exclude confounding by socioeconomic factors, we added age, gender, education, occupational status, retirement status, and household equivalence net income to the linear regression models in a second step. Adjusted  $R^2$ s were calculated for all models. Statistical analyses were done with R Statistical Software (version 3.6.1; R Core Team, 2019) and the packages *dplyr* (version 1.0.5; Wickham, François, Henry, & Müller, 2021), *ggplot2* (Wickham, 2016), *psych* (version 2.0.12; Revelle, 2020) and *MBESS* (version 4.8.0; Kelley, 2020).

## Results

The final sample was comprised of 2,416 individuals, 45.2% of whom self-identified as men and 54.8% as women. The average age was 48.2 years (standard deviation of 17.6). More details on participant's characteristics can be found in Table 1. Missing values due to incomplete answers on questionnaires were few and never exceeded 5% (Schafer, 1999; exact numbers are shown in the Table 1). Mean values of interpersonal trust in Table 1 differ by sociodemographic status: trust levels are somewhat higher in women, in persons living with a partner, in the more educated, in the employed and somewhat lower in retired persons. Because we did not intend to test any hypotheses about the influence of sociodemographic variables on interpersonal trust, no  $p$ -values are reported for these comparisons.

Correlations among primary study variables are shown in Table 4. Interpersonal trust is negatively associated with all dimensions of right-wing extremism ( $r = -0.28$  for the sum score) and authoritarian attitudes ( $r = -0.20$  for the sum score). Of the areas of right-wing extremism, the connection was most pronounced for xenophobia ( $r = -0.31$ ) while the relationship to antisemitism and social Darwinism was less strong ( $r = -0.18$ ). Regarding authoritarianism, the strongest connection was observed with authoritarian aggression ( $r = -0.19$ ). As expected, dimensions of right-wing extremism and authoritarianism are highly correlated among each other.

To statistically test our hypotheses, we calculated unadjusted and adjusted linear regression models of the effect of interpersonal trust on authoritarian and right-wing extremist attitudes. Results are shown in Table 5. Interpersonal trust is significantly associated with right-wing extremist and authoritarian attitudes; the associations are negative, i.e. the lower interpersonal trust, the higher the agreement to the respective political attitude statements. The association is strongest between trust and xenophobia (standardized regression coefficient of  $-0.31$ ) and weakest between trust and authoritarian submission and conventionalism (both with a standardized regression coefficient of  $-0.14$ ).



**Table 4***Pearson's Correlation Coefficients Among Primary Study Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Interpersonal Trust	–												
2. Age	-0.05	–											
3. Household income	0.13	-0.10	–										
4. RWE: Support for a right-wing dictatorship	-0.21	0.06	-0.11	–									
5. RWE: Chauvinism	-0.25	0.12	(-0.05)	0.60	–								
6. RWE: Xenophobia	-0.31	0.12	-0.09	0.52	0.73	–							
7. RWE: Antisemitism	-0.18	0.12	-0.08	0.58	0.56	0.58	–						
8. RWE: Social Darwinism	-0.18	0.07	-0.08	0.69	0.56	0.55	0.68	–					
9. RWE: Belittling the crimes of National Socialism	-0.22	0.06	-0.10	0.70	0.54	0.53	0.66	0.65	–				
10. RWE: Sum score	-0.28	0.12	-0.1	0.82	0.82	0.82	0.82	0.83	0.81	–			
11. A-US: Authoritarian aggression	-0.19	0.09	(-0.01)	0.23	0.39	0.37	0.24	0.19	0.16	0.33	–		
12. A-US: Authoritarian submission	-0.14	0.10	-0.08	0.40	0.34	0.34	0.37	0.44	0.32	0.45	0.31	–	
13. A-US: Conventionalism	-0.14	0.20	(-0.05)	0.30	0.38	0.38	0.33	0.30	0.23	0.40	0.43	0.48	–
Authoritarianism Score	-0.20	0.16	-0.06	0.40	0.48	0.46	0.40	0.40	0.30	0.50	0.75	0.76	0.82

Note. All correlations, except those in brackets, are statistically significant at  $p < .01$ .

**Table 5***Results of Unadjusted and Adjusted Linear Regression Analysis on Authoritarian and Right-Wing Extremist Attitudes*

Scale/Dimension	Unadjusted Analysis				Adjusted Analysis			
	coef.	std. coef.	<i>p</i>	adj. $R^2$	coef.	std. coef.	<i>p</i>	adj. $R^2$
RWE: Support for a right-wing dictatorship	-0.35	-0.21	< .001	0.05	-0.29	-0.18	< .001	0.08
RWE: Chauvinism	-0.46	-0.25	< .001	0.06	-0.40	-0.21	< .001	0.11
RWE: Xenophobia	-0.64	-0.31	< .001	0.10	-0.57	-0.28	< .001	0.15
RWE: Antisemitism	-0.31	-0.18	< .001	0.03	-0.25	-0.14	< .001	0.09
RWE: Social Darwinism	-0.28	-0.18	< .001	0.03	-0.22	-0.14	< .001	0.07
RWE: Belittling the crimes of National Socialism	-0.35	-0.22	< .001	0.05	-0.30	-0.19	< .001	0.08
RWE: Sum score	-2.38	-0.28	< .001	0.08	-2.01	-0.24	< .001	0.14
A-US: Authoritarian aggression	-0.13	-0.19	< .001	0.04	-0.12	-0.18	< .001	0.06
A-US: Authoritarian submission	-0.09	-0.14	< .001	0.02	-0.07	-0.11	< .001	0.04
A-US: Conventionalism	-0.09	-0.14	< .001	0.02	-0.07	-0.11	< .001	0.08
Authoritarianism Score	-0.30	-0.20	< .001	0.04	-0.26	-0.17	< .001	0.10

Note. Multivariate analysis adjusted for: age, sex, employment status, retirement status, education, household equivalence net income. RWE = right-wing extremism; A-US = Authoritarianism - Ultra Short; coef. = linear regression coefficient; std. coef. = standardized linear regression coefficient; adj.  $R^2$  = adjusted  $R$ -squared.

Adjustment by age, gender, and socioeconomic factors lead only to a minor attenuation of the observed effects and none of the statistical significances were lost. Relevant confounding or mediation of the association by any of the covariates is thus unlikely. Graphical representations (see [Figure A1](#) in the Appendix) of the associations indicate only minimal deviations from linearity, supporting the appropriateness of the linear regression model.

## Discussion

Our results suggest that there is indeed a strong link between interpersonal trust and authoritarian and right-wing extremist attitudes. Of the six dimensions, this effect was most pronounced for chauvinistic nationalism and xenophobia.

Keeping in mind that we were measuring interpersonal trust in a generalized or unknown other, a form of trust that is promoted by the familiarity of the other (Coleman, 1990), this connection is not surprising. The results show that nationalism and xenophobia are indeed strongly connected to a certain distrust of the unfamiliar. This was supported by the high correlation of xenophobic and chauvinistic attitudes to the interpersonal trust sum score.

Similar results were observed for the relationship of interpersonal trust and authoritarianism. There was a very strong connection to the item capturing authoritarian aggression, whereas the connections with the items regarding authoritarian submission and conventionalism were less pronounced. This suggests that there may be a stronger relation of interpersonal trust to the acceptance of violence as well. As the A-US scale is not very well fit to differentiate between the three dimensions of authoritarianism (Heller, Zenger, et al., 2020), these results should only be seen as preliminary and should be further examined in future studies.

A consistent linear relation between interpersonal trust and right-wing extremist and authoritarian political attitudes was observed, thus low levels of interpersonal trust may foster anti-democratic attitudes while high levels of trust may serve as a protective element regarding authoritarian and right-wing extremist attitudes.

Our results further show that interpersonal trust is not evenly distributed across the population. In fact, those factors of social inequality that are known to influence authoritarian and right-wing extremist attitudes are also connected to interpersonal trust: lower education, male gender, older age, current unemployment, and lower income are all accompanied by lower levels of interpersonal trust. This can be seen as a first indicator that individual, micro-level factors, and meso- as well as macro-level factors all play a role in interpersonal trust as well as authoritarian and right-wing extremist attitudes.

Some limitations of our study have to be pointed out that are connected mainly to the nature of the data being national and cross-sectional. Even though right-wing extremism seems to be on the rise in many European countries (European Union Agency for Fundamental Rights, 2021), it is possible that right-wing extremism in Germany may differ from other cultural contexts due to its specific historic context. There may be emotional relics, like a defense against feelings of guilt, that may manifest in a reluctance to take historic responsibility and that may be passed on trans-generationally (Lohl, 2010). Even though this should not influence the connection of interpersonal trust and right-wing extremism, our results should be verified using international, cross-cultural samples.

Due to the major limitation of our study, the reliance on cross-sectional data only, conclusions regarding the directionality of observed associations cannot be drawn on an empirical basis. From a theoretical perspective, a complex interplay of factors taking effect on different levels is very likely. As mentioned above, we assume that interpersonal trust is located on the intersection of individual, micro-level factors and group-related, meso-level factors. Thus, other variables not assessed in this study will likely influence and interact with interpersonal trust. Figure 1 gives an overview of a possible causal model based on our results as well as previous research.

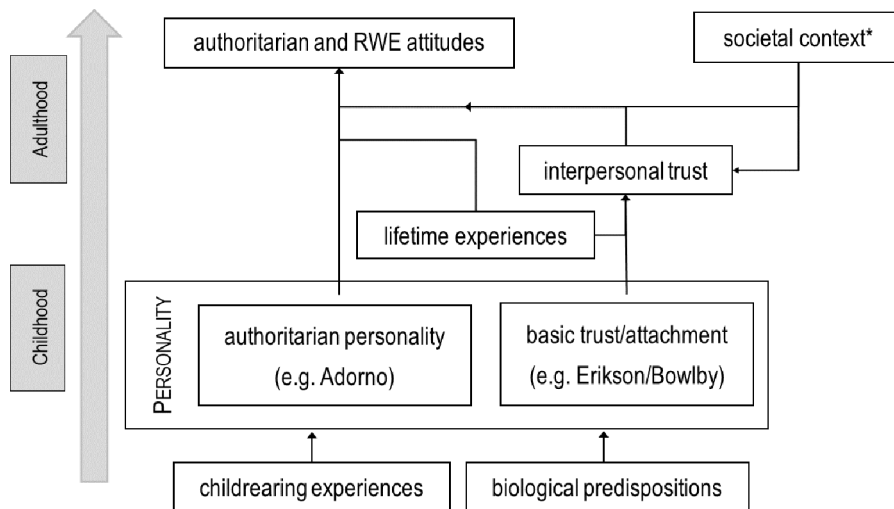
As proposed by Erikson's (1950) theory of the life cycle as well as Bowlby's attachment theory (Fonagy, 2001), early childhood experiences as well as biological predispositions influence the development of a basic trust and lay the grounds for future interpersonal relationships. Adorno et al. (1950) theorized that these early experiences are formative for authoritarian personality traits that may determine authoritarian and right-wing extremist attitudes in adulthood. The connection of recalled childhood rearing experiences and authoritarian and right-wing extremist attitudes was empirically tested by Hopf (1993) and others. While education has consistently been demonstrated to be a valid predictor of the expression of right-wing extremist attitudes, interestingly it does not influence the connection of interpersonal trust and right-wing extremist attitudes.

Attention should be drawn to the association of interpersonal trust with other group-related and structural factors. Lifetime experiences may influence and alter interpersonal trust, in a way that interpersonal disappointments may lead to a decrease in trust but also to a decreased likeliness of putting oneself in situations that could help adjust trust levels. Similar processes have been hypothesized and empirically tested for xenophobia, one of the dimensions of right-wing extremist attitudes: Allport's (1954) theory of intergroup contact predicts that positive interactions with an outgroup may reduce negative stereotypes. Yet, cross-lagged panel analysis showed that the attitudes towards an outgroup may influence the perception of the interaction (Schmidt, Weick, & Gloris, 2019), and it is reasonable to assume that people holding right-wing extremist and authoritarian attitudes will surround themselves with like-minded, increasing the

exposure to these kinds of ideas and possibly leading to radicalization instead of a decrease of prejudice through positive intergroup contact.

**Figure 1**

*Theoretical Model of Authoritarian and Right-Wing Extremist (RWE) Attitudes*



*Note.* For parsimony we focused on the concepts we consider to be most relevant and omitted plausible cross-dependencies. Due to its theoretical nature, only parts of it are tested in this study. \* threat theory, social identity theory, intergroup contact theory and social inequality.

Moreover, low levels of trust may foster intergroup anxiety and perception of threat caused by an outgroup, and rising levels of threat may in turn reduce the possibility of balancing trust levels, as they may lead to fewer contacts with the outgroup. This is also true for the connection of structural factors and authoritarianism and modern approaches have especially stressed the connection between threat perception and authoritarian attitudes (Asbrock, Sibley, & Duckitt, 2010; Dunwoody & Plane, 2019): In their dual process model, Duckitt and Sibley (2009) link authoritarian attitudes to a perception of the world as dangerous or threatening. Similarly, Oesterreich (2005) argues that the authoritarian reaction may be caused by anxiety and uncertainty, and Asbrock and Fritsche (2013) showed that authoritarian attitudes indeed increase when perception of threat is high. It is reasonable to assume that low interpersonal trust is connected to such perceptions thus additionally giving rise to authoritarian dynamics. Future studies should take these factors into consideration as mediator or moderator variables, as well as other concepts that are known to be connected to authoritarianism and show some overlap with the idea of interpersonal trust, like uncertainty tolerance, need for cognitive closure, intolerance of ambiguity, and a need for structure and order to reduce uncertainty (Jost et al., 2003).

Even though the clear workings and causal interdependencies of the proposed constructs have to be further investigated using more advanced methods and longitudinal study designs, we hope to have shown the importance of interpersonal trust when trying to understand right-wing extremist and authoritarian attitudes. As all three concepts seem to be connected to similar factors, we consider interpersonal trust a central component of social-psychological theories of authoritarianism and right-wing extremism. This is supported by the strong association we found in this study and it is still valid when social inequality factors are adjusted for. Nonetheless, social inequality influences have an effect not just on interpersonal trust but also on authoritarian and right-wing extremist attitudes. In order to tackle the anti-democratic tendencies in society caused by authoritarian and right-wing beliefs, it can be of great interest to further study the underlying mechanisms of interpersonal trust and how it can be strengthened. Reducing social inequality and promoting intergroup contact could be two important means to this end.

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**Funding:** The authors have no funding to report.

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**Acknowledgments:** The authors have no support to report.

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**Competing Interests:** The authors have declared that no competing interests exist.

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**Ethics Statement:** The study was approved by the Ethical Committee of the Faculty of Medicine, Leipzig University, Germany (No. 132/18-ek).

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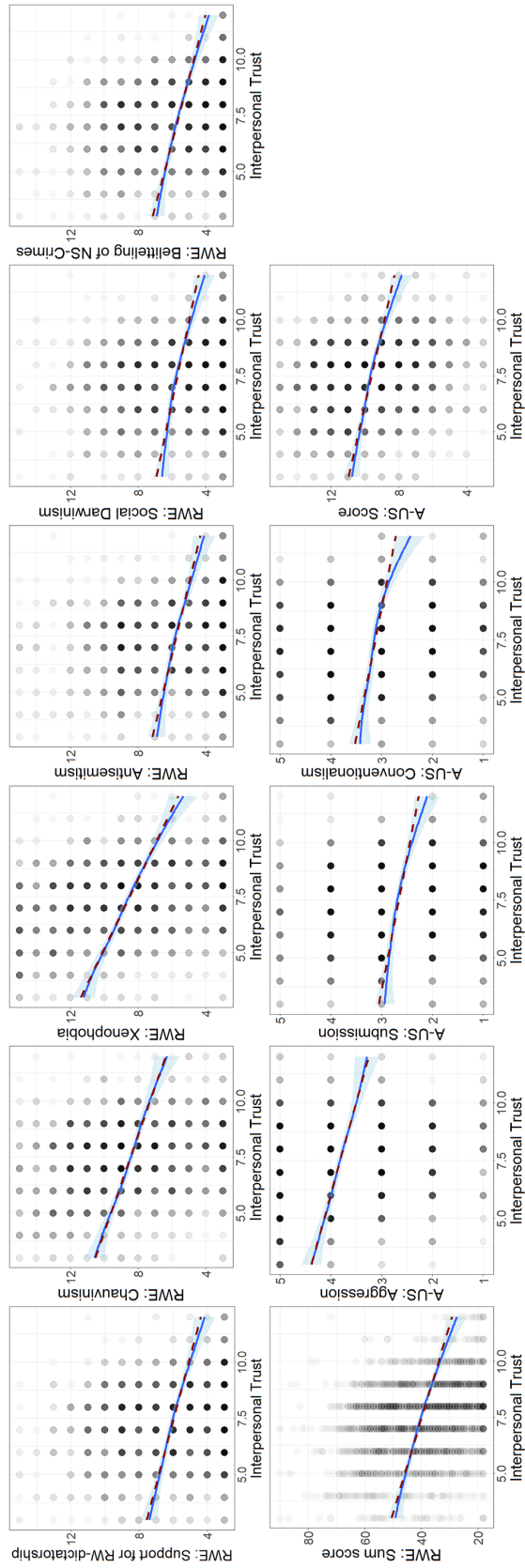
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## Appendix

**Figure A1**  
Scatterplots of the Associations of Interpersonal Trust With Political Attitudes Variables (Scores)



Note. Blue line with shading: locally weighted running line smoother (LOESS) with 95%-CI, red dotted line: unadjusted linear regression line. Note variable scale of axes, thus the slope of lines should not be interpreted as strength of association.