

# Validation of a Model of Right-Wing Extremist Attitudes Based on a Repeated Cross-Sectional Survey in Germany

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Measurement Instruments for the Social Sciences, 2025, Vol. 7, Article e16909, <https://doi.org/10.5964/miss.16909>

**Received:** 2025-02-04 • **Accepted:** 2025-07-11 • **Published (VoR):** 2025-11-21

**Handling Editors:** Ayline Heller, GESIS – Leibniz Institute for the Social Sciences, Germany; Marius Dilling, Universität Leipzig, Germany; Peter Schmidt, Justus-Liebig-Universität Gießen, Germany

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**Supplementary Materials:** Materials [see [Index of Supplementary Materials](#)]



## Abstract

The paper presents a comprehensive validation of a model for measuring Right-Wing Extremist Attitudes (RWE-A) in Germany, utilizing five repeated cross-sectional surveys from the so-called Mitte-survey (2014–2023), a representative population survey conducted every two years. Building on a long tradition of attitude research, the study examines an 18-item scale representing six theoretically grounded subdimensions: (1) support for a right-wing dictatorship, (2) national chauvinism, (3) trivialization of National Socialism, (4) xenophobia, (5) anti-Semitism and (6) social Darwinism. The survey instrument has been in use in Germany for 20 years, developed by a consensus of experts, to record such an extreme right-wing world view. We tested the psychometric properties of the scale using confirmatory factor analysis and multiple group comparisons, focusing on measurement invariance over time and across demographic subgroups. Our results confirm a coherent, stable second-order factor structure for RWE-A, invariant across all survey waves and most population strata. Notably, also anti-Semitism remains closely tied to the overall construct of RWE-A. The study detects a significant decline in RWE-A from 2014 to 2021, followed by a marked increase in 2023. Latent mean differences indicate a growing polarization in the population. Demographic analyses show consistent associations between RWE-A and lower education, older age, residence in East Germany, and right-wing political self-identification. Voting preferences reveal a sharp increase in RWE-A among supporters of the far-right party “Alternative für Deutschland” (AfD). The findings underline the reliability and construct validity of the RWE-A



scale and highlight its importance for longitudinal monitoring and comparative research on anti-democratic attitudes.

## Keywords

right-wing extremism, measurement validation, anti-Semitism, survey research, political attitudes, Germany

Right-wing Extremism in Germany and elsewhere manifests itself in acts of hatred and terrorism, support for far-right movements and parties, but also finds ideological support in the broader society (Decker et al., 2024; Zick et al., 2023). It is of public, political, safety and scientific interest to know about the prevalence of Right-wing Extremist Attitudes (RWE-A) in the population. For this purpose, measures and validations of RWE-A were developed, which are used in extensive survey studies to document the spread and development of right-wing extremism. The present paper is part of this research tradition.

The exile research group led by Theodor W. Adorno and Else Frenkel-Brunswik, in addition to their US colleagues from the University of California at Berkeley, Daniel Levinson and R. Nevitt Sanford, provided a central basis for research into the assessment of RWE-A. Under the impression of National Socialism in Germany and fascist propaganda in American politics, they developed the famous F-Scale as part of the study *The Authoritarian Personality* (Adorno et al., 1950) to measure the justified potential susceptibility of individuals to fascism. Despite critics and new developments (Altemeyer, 1988), the F-scale represents a milestone in quantitative research into an anti-democratic attitude pattern and the assumption of an interrelated attitude syndrome (Ziege, 2019).

Following a wave of far-right hate crimes in Germany in the 1990s, a group of experts took up this earlier research and developed a consensus definition of far-right attitudes, consisting of six dimensions reflecting political and social facets and operationalized initially with five and later with three items each. They agreed on authoritarianism not as part of the RWE-A syndrome but as a predictor of it (Kreis, 2007). The 18-item scale was evaluated for the first time in representative surveys in 2002 and 2006 (Brähler & Niedermayer, 2002; Decker & Brähler, 2006). Since, it has been surveyed every two years as part of the *Mitte-surveys* on RWE-A<sup>1</sup> in the population published and funded by the Friedrich Ebert Foundation, conducted by Zick et al. (Zick & Klein, 2014; Zick & Küpper, 2021; Zick et al., 2016, 2019, 2023; Zick & Mokros, 2023), and previously by Decker et al. (Decker & Brähler, 2006, 2008; Decker et al., 2010, 2012), who have continued their research under the label *Leipzig Authoritarianism study*. Both major studies use the identical 18-item scale to measure RWE-A. Various regional studies (e.g., Reiser et al., 2024) use similar but not identical measures.

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1) We use the acronym *RWE-A* to provide a terminology that reflects the subject and the underlying concept of the scale of right-wing extremist attitudes, and that is coherent and comprehensible with international discourse. The original scale was first labeled with *FR-LF* (*Fragebogen zu rechtsextremen Einstellungen in der Leipziger Form*).

This paper examines the 18-item scale RWE-A using five datasets from the Mitte-Survey 2014–2023. By using structural equation modeling with multiple group comparisons, we test the aggregation of the six dimensions into a higher construct, examine level changes over time, report differences by demographic characteristics, and validate the measurement using political self-positioning and voting preference.

## Conceptualizing Right-Wing Extremist Attitudes (RWE-A)

At its core, RWE is a rejection of democracy in terms of its constitution, plurality in politics and society, and universal equality of citizens (Lipset & Raab, 1971; and Jungkunz, 2022, on the distinction between left-wing and right-wing extremism). It falls under the umbrella term *far right* (Pirro, 2023), which covers several related phenomena that refer to the same or similar actors, parties and groups as well as to ideology. Thus, it includes behavior, such as activities in right-wing extremist groups, politically motivated violence, voting decisions as well as ideology driven manifest and latent attitudes (Stöss, 2010). However, the specific facets that make up right-wing extremist ideology are less clear. The theoretical concept also overlaps with related phenomena such as right-wing populism and the ideology of the New Right, prominently represented by the Identitarian movement (e. g. Bar-On, 2023). As the phenomena derive from different lines of research, they are not always conceptually distinct. Taken together, there is agreement that right-wing extremist ideology is shaped by ideas about the political system and the constitution of the population. Contemporary research highlights as well the importance of nationalism and ethnocentrism (Mudde, 2019).

Another challenge is the dynamic nature of radicalization, the changing and blending of the phenomena over time (Blee & Latif, 2020). The New Right explicitly pursues a strategy of ideological mimicry. Outwardly, it distances itself from the violent RWE ‘of the street’ and, in fighting ‘the battle of the minds’, aims to spread right-wing extremist ideologies to a wider audience using themes and concepts that are easier to relate to. In empirical studies, however, right-wing extremist, populist and New Right attitudes are highly correlated with each other that they can hardly be separated (Küpper et al., 2019; Vehrkamp, 2021). This raises the question of whether the ideological character of RWE-A is also changing because of the mutual reinforcement of right-wing populism and the New Right as part of a general shift to the right in society. Likewise, this becomes a matter of the stability of models for measuring RWE-A over time. Furthermore, the observation of authoritarian and xenophobic positions also among left-wing parties and voters (Jungkunz, 2022; Küpper, 2023) raises the question if it is appropriate to validate RWE-A by political self-positioning and voting preferences.

### The Measurement Model of RWE-A

Based on the above-mentioned consensus definition, RWE consists of a pattern of attitudes characterized by ideas of inequality on the one hand and a dismissive attitude

towards the democratic state on the other (Decker & Brähler, 2006). Three dimensions relate to the historical-political ideology of RWE (in Germany) and includes the *support of a right-wing authoritarian dictatorship*, *national chauvinism* and the *trivialization of National Socialism*. The other three dimensions reflect an ethnic-racist view of humanity and encompass *xenophobia*, *anti-Semitism* and *Social Darwinism*, which attribute different values to peoples and groups within the population and between people. A qualitative study accompanying the *Thuringia Monitor*, in which respondents were asked about their associations with individual statements to capture RWE-A, essentially confirms the theoretical framework of the subdimensions (Best & Salomo, 2014). Derived from theory, definition and facets of RWE-A there are two different suggestions for its internal structure of the six equal first-order dimensions. The authors of the *Mitte*-survey continue to follow the original delineation of a political and a social higher-order dimension of RWE-A, each one conceptualized by three first-order dimensions as described above (Zick & Mokros, 2023). The authors of the *Thuringia Monitor* as well as of the *Leipzig Authoritarianism* study suggest a two dimension second-order structure, namely with an ethnocentrism factor, which binds the national chauvinist and xenophobic attitudes, and a neo-Nazi ideology factor, which binds the Social Darwinism, trivialization of National Socialism, anti-Semitism, and support of right-wing authoritarian dictatorship (Best & Vogel, 2022; Decker et al., 2024). Nevertheless, all of these studies conceptualize one common higher-order factor RWE-A consisting of all six dimensions summed up by 18 items.

The 18-item scale operationalizes RWE-A by means of statements (see Figure 1) to which respondents express their disagreement or agreement on a 5-point Likert scale (“fully disagree”, “mostly disagree”, “partly agree/partly disagree”, “mostly agree” and “fully agree”). The original German wording as well as the English translation we are following here can be found in Heller et al. (2022). The survey method of the former *Mitte*-survey (until 2012) and the following *Leipzig Authoritarianism* study are paper-and-pencil interviews, of the *Mitte*-survey since 2014 computer-assisted telephone interviews. The differences between the two survey methods have repeatedly appeared to have an impact on response behavior and the results (Faulbaum & Mokros, 2023; Heller et al., 2024). Heller et al. (2020) confirmed the reliability and validity of the RWE-A construct for the *Leipzig* survey in 2018 and reflected the need to examine it over time. The fundamental question is whether respondents understand the items in the same way and whether the structure of the constructs analyzed is identical across surveys. Only then results of the respective study series will be comparable (Leitgöb et al., 2023). The structural uniformity of a measurement instrument over time can be assessed empirically using measurement invariance analyses.



## Hypothesis and Methods

We hypothesize construct validity of the model of RWE-A, i.e. the attachment of individual items to their factors or dimensions remains stable over the years, and content validity, i.e. RWE-A corresponds with political orientation and voting preferences. This allows the interpretation of latent mean differences and meanings over time. Additionally, we tested the influence of demographic factors on the second-order factor RWE-A simultaneously with the invariance restrictions (configural, metric and scalar) of the multiple group model comparisons via structural equation modeling. For this purpose, we hypothesize that age, sex, education and region (East vs. West Germany) exert significant influence on the expression of Right-Wing Extremist Attitudes (RWE-A), while the underlying factor structure and construct validity of the RWE-A model remain invariant across demographic subgroups and time points. Based on the empirical long-term observations from the cited major studies on far-right attitudes (Decker et al., 2024; Zick et al., 2023), and the recent electoral successes of far-right parties in Germany and elsewhere, we expect higher approval ratings among men, younger and less well-educated respondents from Eastern Germany. Apart from that, we expect that respondents, who consider themselves to be on the right-wing of the political spectrum, to agree more strongly with RWE-A than respondents who tend toward the political center or left. We expect the same from respondents who favor the far-right party “Alternative für Deutschland” (AfD) to have the highest approval ratings for RWE-A compared to those who vote for the conservatives (CDU/CSU) or the liberals (FDP), with approval of RWE-A being lowest among respondents who favor the Social Democrats (SPD), the Greens (Bündnis90/DieGrünen), or the Left (Die Linke). We validated the first-order and second-order factor model of RWE-A according to the specification of Küpper and Zick (2024, see Figure 1) using confirmatory factor analysis with multiple group comparisons based on five cross-sectional, representative CATI surveys in Germany from the Mitte-surveys 2014 to 2023 (survey periods: June to August 2014; June to August 2016, September 2018 to February 2019, January to February 2021, and January to February 2023). The representativeness of each survey was ensured by stratified random sampling of the adult, German-speaking population and a carefully weighting of the data to compensate for biases in the composition of the sample in comparison with the reference population (e. g. Faulbaum & Mokros, 2023)

## Results of the Model-Test for RWE-A in Germany

The simultaneous analysis of the measurement model over time provides information on construct validity (Reinecke, 2014). The following questions are examined: a) how valid is the measurement model of the six dimensions across the Mitte-surveys, b) to what extent can the six dimensions be reduced to a common second-order factor RWE-A, c)

does the internal structure remain stable over time, d) does the level of agreement change significantly over time, e) do exogenous demographic variables have an impact on it, and f) does RWE-A correspond to political self-positioning and voting preferences?

## Multiple Group Comparisons

Before testing the measurement invariance of the second-order factor model, it is necessary to test the invariance of the first-order factors which is a prerequisite for the assessment of invariance of the second-order factor model (Rudnev et al., 2018).<sup>2</sup> Therefore, we examined the measurement invariance of the first-order factor model for RWE-A. The confirmatory factor analyses are based on six first-order factors with three items each (item labels are REX01 to REX18, see Figure 1). All surveys from 2014 to 2023 are considered. In the multiple group comparisons three model variants are estimated: the configural model variant, the metric model variant and the scalar model variant. Configural model means that the model structure is the same for the groups, but all estimated parameters differ. Metric model means that the factor loadings are equated across the groups so that comparisons of covariances and unstandardized regression coefficients are possible. Scalar model means that the factor loadings and additionally the intercepts of the items are equated across the groups. By equating the intercepts, the mean difference at the construct level between the first group (2014) and all other groups (2016–2023) can be determined.

For all model estimates, the full-information-maximum-likelihood method (FIML) was used to utilize all available information in the data (Reinecke, 2014). No residual correlations between the items are specified. Table 4 in the Appendix shows the comparison of the three model variants with the group-specific and total  $\chi^2$ -values of the simultaneous analyses as well as the goodness-of-fit measures RMSEA and CFI. The specifications of the configural, metric and scalar model are nested and allow  $\chi^2$ -difference tests. The  $\chi^2$ -values of the group samples can be reliably compared with each other, as the group sizes hardly differ with exception for the year 2021 (2014:  $N = 2,004$ ; 2016:  $N = 2,003$ ; 2019:  $N = 2,002$ ; 2021:  $N = 1,748$ ; 2023:  $N = 2,026$ ). The total size of the data set across the five Mitte-surveys is  $N = 9,783$ . It is noticeable that the model fit for 2023 is worse compared to previous years. If the sample size is large ( $> 300$ ) the  $\chi^2$ -difference is known to reject models even when violations are minor (Chen, 2007). According to Chen et al. (2005) a difference in CFI between the model variants not larger than .01 implies that the model fit of the most parsimonious model can be accepted. The CFI differences in Table

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2) The procedure in Rudnev et al. (2018) is a bit different to ours. They tested combinations of metric and scalar invariances of first-order and second-order models while our procedure is stepwise: At first, tests of the configural, metric and scalar invariances of the first-order factor model and at second, tests of the same invariance restrictions for the second-order factor model. In our view, this stepwise strategy of testing multiple group confirmatory factor models is more informative according to the requirements for scalar invariance of the second-order factor model.

4 of the Appendix allow us to accept the scalar model variant of the first-order factor model as a basis for the analysis of the second-order factor model.

Latent mean differences are significant for all six first-order factors across all surveys. With the sample from 2014 as the reference year, the latent means are decreasing from 2016 to 2021 whereas the latent means in 2023 are increasing compared to 2014 (see Appendix, Table 5). This result confirms the increasing tendency of right-wing attitudes in the last couple of years.

In the second step we examined the invariance of the second-order factor model for RWE-A. In all model variants the scalar model specification of the first-order model based on the results of the first step are applied. In the configural variant of the second-order factor model all second-order factor loadings are free across the samples as well as the intercepts of the first-order factors. Due to some large modification indices of the residual covariances of the first-order factors we additionally admitted the residual covariances between national chauvinism (F2) and xenophobia (F4) and between trivialization of National Socialism (F3) and anti-Semitism (F5) for all samples. The configural model shows an acceptable model fit (see Table 1). The decision to correlate the factor residuals can be explained by the fact that national chauvinism and xenophobia share an enduring ethnocentric attitude in which the own nation is considered superior to others, while anti-Semitism and the trivialization of National Socialism are more strongly linked by their historical references. The release of the residual covariance at factor level takes account of the overlap in content between the sub-dimensions without making excessive model adjustments at item level (overfitting). If item residuals were correlated instead, this would be accompanied by a stronger model fit, which would weaken a theoretical interpretation, especially as the items also contain methodological artifacts and specific effects that do not necessarily affect the theoretical construct. Additionally, model results contain no hints of significant model modifications on the item level.

For the metric model the second-order factor loadings are restricted to be equal across the samples and in the scalar variant latent mean differences of the second-order factor RWE-A are additionally estimated. Overall, restrictions of the metric and scalar variant have little impact on the model fits. Due to the parsimoniousness of the scalar model the RMSEA is slightly higher compared to the metric or the configural model variant. Differences between the CFI are all below .01 (see Table 1) so that it is possible to substantially discuss the mean differences of RWE-A obtained from the scalar model variant.

**Table 1**

*Goodness-Of-Fit of the Model Variants for the Second-Order Factor Model of RWE-A According to the Multiple Group Comparison 2014-2023*

Model	Group	$\chi^2$	<i>df</i>	$\chi^2_{diff}$	RMSEA	CFI	CFI <sub>diff</sub>
Configural	2014	800.967					
	2016	828.639					
	2019	868.175					
	2021	674.309					
	2023	1326.476					
	$\Sigma$	4498.566	731	—	.051	.956	—
Metric	2014	817.453					
	2016	875.572					
	2019	872.621					
	2021	684.999					
	2023	1382.303					
	$\Sigma$	4632.948	751	134.382	.051	.954	.002
Scalar	2014	845.175					
	2016	916.275					
	2019	885.548					
	2021	703.920					
	2023	1508.491					
	$\Sigma$	4859.410	771	226.462	.052	.952	.003

## Changes in RWE-A 2014–2023

Table 2 provides the latent mean changes and variances of the construct RWE-A over the period from 2014 to 2023 according to the scalar model of the multiple group comparison in Table 1. Due to statistical identification the latent mean of RWE-A has to be fixed at zero for one group (here the first sample of 2014). The estimated mean values for the following years 2016 to 2023 show the changes compared to reference year 2014. The level of RWE-A decreases until 2021 (unstandardized estimates are between  $-.036$  and  $-.069$ , standardized values are between  $-.084$  and  $-.166$ ), but increase in 2023 (unstandardized estimate is  $.138$ , standardized value is  $.249$ ). The variance of RWE-A between 2016 and 2021 is between  $.144$  and  $.184$  and fluctuates on a low level. In contrast, the variance for 2023 shows a significantly higher value ( $.307$ ). Even a multi-group comparison limited to just two periods (e.g., 2021 and 2023) shows a significant increase in RWE-A.

**Table 2***Changes in Means and Variances of the Construct RWE-A According to the Multiple Group Comparison 2014–2023*

Group	RWE-A	Unstandardized Estimates			Standardized Estimates		
		Estimate	S.E.	z-value	Estimate	S.E.	z-value
2014	Mean	.000	—	—	.000	—	—
	Variance	.175	.009	19.341	1.000	—	—
2016	Mean	-.069	.014	-4.863	-.166	.034	-4.863
	Variance	.172	.009	19.479	1.000	—	—
2019	Mean	-.036	.014	-2.536	-.084	.033	-2.537
	Variance	.184	.009	19.616	1.000	—	—
2021	Mean	-.050	.014	-3.609	-.132	.037	-3.608
	Variance	.144	.008	18.748	1.000	—	—
2023	Mean	.138	.016	8.362	.249	.030	8.377
	Variance	.307	.016	19.817	1.000	—	—

*Note.* In the first group 2014, the mean value of RWE-A has to be fixed to zero, so that the first group can be estimated for the other groups 2016–2023.

## Effect of Exogenous Demographic Variables

Next, we examine the influence of selected exogenous demographic variables on RWE-A that showed continuously significant differences on the agreement or disagreement with RWE-A over time. Therefore, [Table 3](#) shows the influence of the exogenous variables age, education, region, and political self-positioning on the construct RWE-A. Estimates are fixed across some surveys for Age (2014–2019), Education (2014–2021) and Political Position (2014–2021). For *Sex* estimates are fixed across all surveys (2014–2023).

The younger the respondents, the more likely they agree to RWE-A. *Age* has the strongest effect in 2023 (unstandardized: -.121, standardized: -.167). *Sex* has no effect on RWE-A. The effect of *education* is largely stable over years (unstandardized: -.208, standardized: -.371) and declines slightly in 2023 (unstandardized: -.154, standardized: -.231). People with a higher level of education are tending recently more to RWE-A, which will be discussed later in more detail. People living in *Western Germany* have a slightly lower level of RWE-A than those living in the former socialist *Eastern Germany*, which also remains stable over time (unstandardized: -.071, standardized: -.069).

Finally, we validated the construct of RWE-A based on political self-positioning and voting preference. *Political self-positioning*, measured using the so-called *right-left scale*, has a robust effect on RWE-A over the years 2014 to 2021 (see [Table 3](#)): The more respondents position themselves as right-wing with their political opinion the more likely they hold RWE-A (unstandardized: .192, standardized: .363). However, a look at the approval ratings (most recently [Zick et al., 2023](#)) shows that the influence of political

self-positioning is not linear for RWE-A, but rather corresponds to a ‘golf club curve’: People who position themselves on the “left” of the political spectrum tend to agree more often, those who position themselves “more to the left” are particularly unlikely to agree, followed by those who see themselves “right in the center”. Then agreement increases significantly among those who position themselves “more to the right” and even more so among those who position themselves on the “right”.

**Table 3**

*Effect of the Exogenous Variables Age, Education, Region, and Political Self-Positioning on the Construct RWE-A According to the Multiple Group Comparison 2014–2023*

Group	Exog. Var.	Unstandardized Estimates			Standardized Estimates		
		Estimate	S.E.	z-value	Estimate	S.E.	z-value
2014–2019	Age	-.018	.007	-2.507	-.037	.015	-2.508
2021		-.040	.014	2.825	.073	.026	2.836
2023		-.121	.017	-7.207	-.167	.023	-7.380
2014–2023	Sex	-.003	.009	-.311	-.003	.011	-.311
2014–2021	Education	-.208	.007	-27.776	-.371	.013	-29.468
2023		-.154	.016	-9.911	-.231	.022	-10.348
2014–2023	Region	-.071	.012	-6.169	-.069	.011	-6.179
2014–2021	Political position	.192	.007	26.280	.359	.013	27.735
2023		.257	.016	15.714	.366	.021	17.614

*Note.* Age is categorized into four groups (1: 16–24; 2: 25–39; 3: 40–64; 4: 65 and older). Education is categorized into three groups (1: low-level; 2: mid-level; 3: high-level). Region is categorized in two groups by the place of residence in East or West Germany (1: East, 2: West). Political self-positioning is categorized into five groups (1: left; 2: rather left; 3: center; 4: rather right; 5: right).

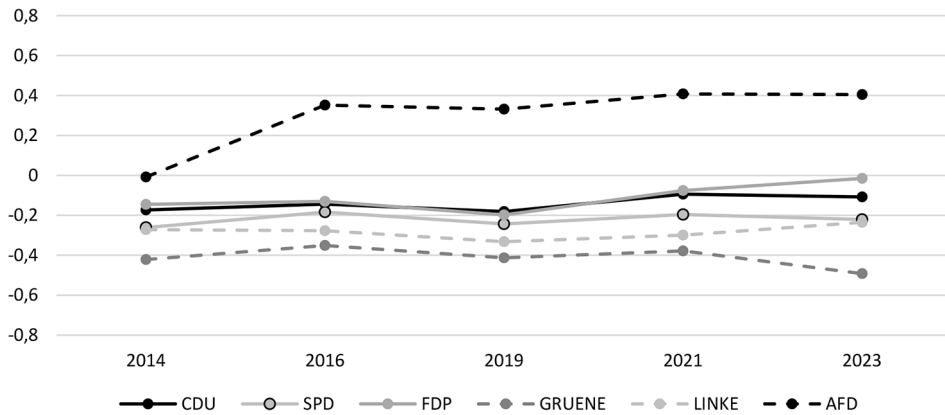
## Effect of Voting Preference on RWE-A

*Voting preferences* are measured by the so-called Sunday poll<sup>3</sup> (“If there were a general election next Sunday, which party would you vote for?”) and the preferences are categorized dichotomous (0: no; 1: yes). They have the expected influence on RWE-A (see [Figure 2](#)): The more “left” the voting preference is, the weaker the RWE-A are. The more conservative and right-wing the voting preference, the stronger RWE-A. The effect size for the far-right party AfD increases significantly over time (the positive coefficient increases). There is also an increase in the effect size for the Green Party (the negative coefficient increases). This could indicate increasing polarization.

3) In Germany, elections are generally held on a Sunday.

**Figure 2**

*Effect of the Exogenous Variable Voting Preference on the Construct RWE-A According to the Multiple Group Comparison 2014–2023*



*Note.* The preference for the respective party was recorded by asking which party would be voted for if general elections were held next Sunday. The variable is categorized dichotomously (0: no; 1: yes).

## Discussion

Overall, the analyses reveal a surprisingly coherent and remarkably stable superordinate construct of RWE-A within the German population. These attitudes can be reliably and validly described based on the six central dimensions measured by the employed items. The factor loadings from 2023, in comparison to those from 2014, are increasing, thus suggesting that the construct is becoming increasingly more unified.

In our view, the close relationship between the anti-Semitism sub-dimension and the overall construct of RWE-A is particularly noteworthy. Anti-Semitism is a phenomenon in its own right – as devaluation of Jews and as comprehensive world view (Rensmann, 2020) – to which ideas of national order and national identity have been negatively attached throughout history (Bauman, 1989). Although anti-Semitism is officially outlawed in Germany, it is prevalent among various parts of the population and appears to be less dependent on education and political self-positioning than xenophobia (e.g., Decker et al., 2024; Zick et al., 2023). Anti-Semitism has already spread during the Covid-19 pandemic (Comerford & Gerster, 2021) and dramatically increased after the Hamas terrorist attack on Israel on October 7, 2023 (FRA, 2024). Contrary to expectations, however, the relationship between anti-Semitism and the construct of RWE, along with its other sub-dimensions, has not weakened in recent years; rather, it has intensified. Empirical evidence from the USA shows, contrary to the widespread ‘horseshoe theory’, that the epicenter of anti-Semitic attitudes among young adults lies on the extreme right, at least

before October 7, 2023 (Hersh & Royden, 2023). In Germany anti-Semitism is also present among parts of the population positioned themselves as left-wing with rising tendency after 2023 (Decker et al., 2024). This suggests that anti-Semitism may also play a role in the pathway to RWE-A even among people self-identified as left-wingers.

Xenophobia is particularly widespread among the German population, as well as in other countries (e.g., Decker et al., 2024; Zick et al., 2023). It is so common and little sanctioned that the question arises whether it can serve as a valid indicator of RWE. However, the empirical evidence shows that individuals, who exhibit xenophobic tendencies, are also more likely to agree to dimensions of RWE-A.

The sub-dimension of social Darwinism is historically and currently central to RWE and warrants renewed attention. Similar to anti-Semitism, social Darwinism in National Socialism justified the murder of individuals deemed “harmful to the healthy body of the people”. Recently, in Germany there has been a troubling resurgence of acts of hatred against individuals with physical and mental disabilities, as well as against social institutions that support them.

The sub-dimension of trivialization of National Socialism is particularly significant and specific, both theoretically and empirically. In Germany, the remembrance of the Holocaust is an integral part of public commemorative events and school education. Approximately 5% of German respondents in a study conducted by the Claims Conference (2025) across eight countries reported that they had never heard of the term Holocaust, and 49% were unaware that six million Jews were killed during it. Twenty four percent expressed doubts regarding its occurrence. Among younger respondents, uncertainty and skepticism about the Holocaust were even more prevalent.

Concerning the changes of the level of RWE the data indicate a significant decline in RWE-A from 2014 to 2021, but a notable increase in 2023. RWE-A polarizes, i.e. there are both: clearer agreement and clearer disagreement. Frequency evaluations conducted as part of the Mitte-survey reveal a drastic rise in a manifest far-right worldview (defined by “somewhat” or “fully” agreement with all items) and a growing grey range (resulted from partial agreement with all items). It can be speculated that RWE-A were already present prior to this period but were suppressed due to social desirability of having learned from the Nazi history. With the increasing distance from the history of National Socialism and a global shift to the right, this inhibition appears to be diminishing in Germany. Right-wing extremist views are also deliberately reawakened by political actors expressing these positions are no longer a source of shame. On the contrary, it is becoming popular, especially among young people, who are particular targeted by the far-right propaganda via social media, daily used by nearly all young people (Rothut et al., 2024).

Furthermore, education appears to be increasingly losing the protective role that is both hoped for and expected in a democracy. From the beginning of the survey, there was an ongoing finding of a gradient from lower education and higher approval ratings

to RWE-A and from higher education to lower approval ratings. This effect remains significant in 2023, but it is less pronounced than 2014 to 2021. It will be necessary to examine whether this is a one-off value or part of an ongoing approximation of the effect of education. This raises fundamental questions about the extent to which, and the nature of education that fosters a democratic mindset. It also prompts an examination of how seriously democracy education is implemented within the German education system (Dippelhofer, 2019).

The perceived lack of differences between men and women regarding RWE-A challenges the myth that RWE is solely a male issue (e.g. Hartevelde & Ivarsflaten, 2018). The discrepancy between ideology and action aligns with far-right beliefs, which suggest that women should remain in the background, supporting their husbands and sharing their convictions.

Until recently, it was unusual to be 'openly' right-wing in Germany, but this is changing with the growing far-right success of the AfD, and recent studies suggest a trend towards polarization in political orientation (Decker et al., 2024). Findings confirm a correlation between RWE-A and rightward political identification, suggesting that as the AfD normalizes, it attracts or amplifies extremist views. With the observed correlation between RWE-A and political self-positioning, an actual rise or a growing openness to right-wing identification and the normalization of right-wing extremist views might also be influenced by conceptual inconsistencies in how people understand and report their political orientation on the left-right scale, like the findings by Bauer et al. (2017) suggests. Our observation of a golf club curve also suggests similarities between people on the far right and far left of the spectrum in fundamental values and orientations (Kteily & Brandt, 2025). Moreover, although far-right attitudes are only slightly more common in the former socialist Eastern Germany, there is concern that such attitudes could increasingly influence voting behavior, a trend already emerging in the West.

## Conclusion

We analyzed a theory-based construct of RWE-A through large survey studies conducted in Germany since 2006, specifically focusing on the last five survey years of the Mitte-survey, using multiple group comparisons. For this analysis, a confirmatory factor model was developed based on 18 items encompassing six first-order factors: support of a right-wing dictatorship, national chauvinism, trivialization of National Socialism, xenophobia, anti-Semitism and Social Darwinism. Additionally, a superordinate second-order factor representing RWE-A was included.

Various sub-facets of RWE-A form a coherent and stable construct. The tested 18-item scale effectively captures this construct with reliability and validity. It is noteworthy how clearly the sub-dimensions, which may initially seem quite distinct, are interconnected. It remains to be seen how effectively the scale depicts and records RWE-A in other countries, especially to what extent the sub-dimension of trivializing National Socialism

might be examined. For example, Jungkunz et al. (2024) successfully tested a scale of RWE-A with fewer sub-dimensions, and without a direct reference to a National Socialist past, across three Western nations.

Moreover, the results underline the importance of monitoring RWE-A as a coherent ideological construct over time. Future research should examine the applicability and adaptability of the measurement model in international contexts and investigate how shifts in contextual factors such as political discourse and polarization may influence the expression and normalization of ideological subdimensions and right-wing extremist attitudes as a whole.

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**Funding:** Each survey on which this manuscript is based was headed by Prof. Dr. Andreas Zick at the Institute for Interdisciplinary Research on Conflict and Violence at Bielefeld University and funded by the Friedrich Ebert Foundation, Berlin.

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**Acknowledgments:** The authors have no additional (i.e., non-financial) support to report.

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**Competing Interests:** The authors declare that they have no financial or non-financial competing interests that could have appeared to influence the work reported in this manuscript.

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**Ethics Statement:** Each survey was approved by the executing polling organization and informed consent was obtained from each participant.

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**Author Note:** All authors contributed equally to the manuscript. The authors thank the student assistants Lilly Bückler and Jana Springer for their support.

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**Data Availability:** The datasets generated and analyzed for this manuscript are not publicly available due to restrictions by the founder. Interested researchers may request access to parts of the data by contacting the Friedrich Ebert Foundation.

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## Supplementary Materials

The supplementary materials provide detailed results of the longitudinal measurement invariance analyses and latent mean comparisons for the first-order factor model of the RWE-A. Table 4 reports goodness-of-fit indices for configural, metric, and scalar multiple-group models across the 2014, 2016, 2019, 2021, and 2023 survey waves. Table 5 presents latent mean differences for all six first-order factors, using 2014 as the reference group, for each subsequent survey year (see Küpper et al., 2025).

### Index of Supplementary Materials

Küpper, B., Reinecke, J., Mokros, N., & Zick, A. (2025). *Supplementary materials to "Validation of a model of right-wing extremist attitudes based on a repeated cross-sectional survey in Germany"* [Tables]. PsychOpen GOLD. <https://doi.org/10.23668/psycharchives.21390>

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