Right-wing authoritarianism, conspiracy mentality, and susceptibility to distorted alternative news

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ABSTRACT
At least since 2016, distorted news published in populist alternative media outlets have raised global concerns about the effects of distorted news on democratic process such as opinion formation and voting. Not all individuals are equally susceptible to distorted news. In three experimental studies (total N = 1,024), we demonstrate that (a) distorted alternative news are seen as less credible compared to journalist news; (b) the perceived credibility of distorted news is greater among right-wing authoritarians and conspiracy-minded individuals; (c) exposure to distorted news can bias these types of individuals' attitudes about an unknown political candidate; and (d) distorted news leads people in general to develop less favorable attitudes toward the targeted candidate as compared to journalist news.

Since the campaign leading to Donald Trump’s election as U.S. president in 2016, concerns regarding the impact of ‘fake news’, defined as disinformation that mimics professional news but fails to adhere to journalistic standards of reporting (Lazer et al., 2018), have been on the rise. For instance, the European Commission states that disinformation can be ‘a threat to democratic political and policy-making processes’ by ‘hampering the ability of citizens to take informed decisions’ and can ‘undermine electoral systems’ (Media Convergence and Social Media (Unit I.4), 2020, p. 1). Completely fabricated news reports represent only a small fraction of the larger problem of ‘information disorder’ (Wardle, 2018), in which true, half-true, and completely false information is sometimes presented side by side in a given online environment such as a specific weblog or social media platform. Furthermore, not all disinformation is entirely ‘fake’; often factual details are embedded in a broader, misleading narrative that is ideologically biased (Quandt et al., 2019).

This kind of distorted news has been described in relation to alternative news media. Alternative news media organizations position themselves as necessary correctives to a hegemonically interpreted ‘mainstream’ media system (Holt et al., 2019), and they challenge mainstream journalists’ authority in a given societal context (Ustadt
Figenschou & Ihlbaek, 2019). Despite their claims to inform the public, alternative news media contribute to the spreading of conspiracy theories, rumors, and fake news (Bader et al., 2020; Boberg et al., 2020; Humprecht, 2019), which are often embedded in a larger discursive stream of ideologically distorted discourses (Mourão & Robertson, 2019). In Germany, the context of the current study, alternative news media with a right-wing populist stance are particularly successful (Heft et al., 2020). These outlets often attack political elites while simultaneously promoting harsh critiques of liberal immigration policies using opinionated and misleading language (Bader et al., 2020; Frischlich et al., 2020; Humprecht, 2019).

The current studies examined the effects of reading distorted alternative news on individuals’ attitudes about unfamiliar political candidates, immigration policies, and the propensity of voting for political parties attacked in these articles. Relying on the differential susceptibility to media effects model (Valkenburg & Peter, 2013) as theoretical framework, we argue that most people derogate highly opinionated, distorted news as lacking in credibility and thus are relatively immune to these messages. We also hypothesized that certain individuals would be susceptible to ideologically distorted news messages.

The differential susceptibility to media effects model

Research in media and communication has long established that media effects vary as a function of individual differences. The differential susceptibility to media effects model by Valkenburg and Peter (2013) provides a comprehensive formalization for the relationship between media consumption and effects. The model’s basic assumption is that for media messages to have an effect, recipients must first attend to it and second respond to the content such as perceiving a news story to be interesting. This response varies depending on the individual characteristics of these recipients. For instance, persuasive appeals that are compatible with the recipient’s prior attitudes are more convincing than counter-attitudinal messages (e.g., Sherif et al., 1982).

Likewise, attitudinal congruence affects the processing of distorted news. In one experiment, for example, most participants who were exposed to prejudiced articles about criminal immigrants responded with internal counter-arguing and devaluation of these articles. Participants who already held negative attitudes about immigrants did not show such reactions and instead felt confirmed in their prejudices (Arndt, 2013). We build on this general framework by focusing on the perception of distorted news articles as being credible (vs. non-credible) as a key mechanism to explain when distorted news does and when it does not affect its readers.

The perceived credibility of distorted news

Perceived credibility is a major determinant of persuasion. Since the seminal work by Hovland et al. (1953), research has repeatedly shown that credible sources are more persuasive than non-credible ones (Pornpitakpan, 2004). In addition to source characteristics, features of a persuasive message and the channel by which it is transmitted can influence credibility ratings (Metzger et al., 2003). For instance, people in many countries
rate news received through social media platforms as less trustworthy than legacy journalist news (Newman et al., 2019).

Different aspects of perceived credibility (e.g., source and message factors) can interact with each other, as a study by Flanagin et al. (2020) showed. Participants in this study rated one-sided and two-sided messages that were presented in a highly credible (Encyclopedia Britannica), less credible (Wikipedia), or non-specified context. The authors found that two-sided messages were seen as more credible than one-sided message. This effect was especially strong in the neutral condition, in which information about the credibility of the source was missing. Because German social media users often incidentally stumble onto alternative news articles in their social networks (Müller & Schulz, 2021), and these articles are often characterized by highly opinionated, sensationalized language (Torabi Asr, 2019), which diminishes a message perceived credibility (Hamilton, 1998), we formulated the following hypothesis.

**H1. Distorted news will be perceived as being less credible than journalist news.**

**Individual susceptibility to distorted news**

Most plausible, not all recipients’ are immune to perceiving distorted news as credible. Individuals with attitudes that are highly compatible with the ideological bias in distorted news content should be more likely to fall for stories even when they are fake.

**Political ideology**

One of the factors increasing individuals’ susceptibility to distorted news is their political ideology. For instance, Faragó et al. (2020) found that participants in Hungary were more likely to accept fake news headlines when they aligned with their ideology (i.e., supporters of the right-wing government were more likely to believe pro-government fake news and to reject anti-government fake news, whereas opponents of the government showed the reversed picture).

Above and beyond the advantage of attitude-congruent distorted news, there are hints of ideological asymmetries in this context. For instance, Arendt et al. (2019) showed that, compared to left-leaning Germans, right-leaning Germans were more likely to judge fake news articles to be authentic, even when these articles dealt with apolitical topics such as children being tattooed. Furthermore, cognitive styles that are typical for individuals with a conservative or right-wing political ideology (such as a lower need for cognition and intolerance for ambiguity) are positively associated with belief in distorted news (for a review, see Jost et al., 2018). We therefore formulated the following hypothesis:

**H2. Participants who lean more strongly toward the political right-wing will perceive distorted news as being more credible than others.**

**Conspiracy mentality**

Alternative news outlets often transmit their counter-hegemonic stance by expressing anti-elitist sentiments and promoting conspiracy narratives (Frischlich et al., 2020; Mourão & Robertson, 2019; Starbird, 2017). Indeed, another factor that is associated
with individuals’ belief in and sharing of distorted news is their general propensity to distrust those in power and to accept conspiracy narratives (Faragó et al., 2020; Halpern et al., 2019).

A common definition of a conspiracy narrative is the conviction that ‘a group of actors meets in secret agreement with the purpose of attaining some malevolent goal’ (Van Prooijen & van Vugt, 2018, p. 770). Research has shown that a general conspiracy mentality underlies the propensity to belief in such conspiracy narratives (Imhoff & Bruder, 2014). Content analyses reveal that distorted news publishers in Germany contribute to the spreading of conspiracy narratives (Boberg et al., 2020). It has been shown that conservatives and rightists are especially prone to believe in conspiracy narratives (Lamberty et al., 2018) – in part because conspiratorial thinking resonates with their distrust of official institutions (van der Linden et al., 2021). Distrust toward ‘official’ accounts is also reflected in conspiracy believers rating historical information conveyed by a layperson as being as credible as historical information conveyed by an expert (Imhoff et al., 2018). We thus formulated the following hypothesis.

H3. Participants with a stronger (vs. weaker) conspiracy mentality perceive distorted news as being more credible in general.

Right-wing authoritarianism

We also explored right-wing authoritarianism as one key factor that could affect susceptibility to distorted news pertaining to immigration. Right-wing authoritarianism is understood to reflect a general psychological tendency to submit to authorities, support conventional values, and punish those who transgress the rules (Altemeyer, 1988; Duckitt, 2015). Right-wing authoritarianism is also strongly associated with out-group prejudice (Cohrs & Asbrock, 2009; Duckitt & Sibley, 2010). People with more (vs. less) authoritarian attitudes have been found to rate highly opinionated messages such as extremist propaganda (Rieger et al., 2013) and one-sided political statements (Lavine et al., 2005) more favorably. Consequently, holding right-wing authoritarian attitudes is likely to be associated with a stronger propensity to fall for distorted news that includes prejudicial and opinionated content.

H3. Participants with more (vs. less) right-wing authoritarian attitudes will perceive distorted news about immigrants as being more credible.

Effects of distorted news

The current studies tested the effects of exposure to distorted news on three outcome variables relevant to democratic functioning: Attitude formation concerning new political candidates and policy positions, and the likelihood of voting for specific political parties. First, we examined the effects on attitude formation toward a previously unknown candidate running for office. Attitudes toward political candidates are generally formed on the basis of prior knowledge and attitudes concerning the candidate’s party, among other things (Bartels, 2002). Situational factors, such as negative advertisements about the candidate (Schenck-Hamlin et al., 2000), can also influence attitude
formation. The effects of distorted news articles are likely to be strongest when participants lack strong prior attitudes toward about a candidate (Rapp, 2016). We thus formulated the following hypothesis:

H4. People who read a distorted news article attacking an unknown political candidate will rate the candidate more negatively than control participants.

Second, we examined whether exposure to distorted news would affect attitudes concerning a hotly contested public policy issue. To understand the effects of anti-immigration stances typically taken by distorted news outlets in Germany (Humprecht, 2019), we focused on research participants’ threat perceptions concerning refugees. Since the so-called ‘refugee crisis’ that began in 2015, when a larger share of displaced people than usual attempted to relocate in Germany, migration has been a highly debated topic in the country. Nationally representative surveys at the time of data collection showed that most citizens were satisfied with Germany’s acceptance of asylum seekers, but citizens who supported the far-right political party Alternative for Germany, which is infamous for promoting stereotypes of refugees as dangerous criminals, strongly opposed refugees (Zick et al., 2019). Reading news featuring negative stereotypes about immigrants can increase prejudice (Matthes & Schmuck, 2017), so we formulated the following hypothesis.

H5. People who read a distorted news article describing refugees as dangerous and threatening will perceive refugees as more threatening than those who did not read such an article.

Finally, we were interested in the effects of distorted news exposure on voting preferences – in particular, the initial stage of considering whether to vote for a certain party (Zimmermann & Kohring, 2020). To date, the few studies on the role of distorted news on voting behavior have produced mixed evidence. While Allcott and Gentzkow (2017) concluded that distorted news effects are rather limited when it comes to shaping votes (see also Guess et al., 2020, for a similar conclusion), Gunther et al. (2018) found that American citizens who believed in distorted news attacking the Democratic candidate Hillary Clinton in the 2016 election were less likely to vote for Democrats in that election. We therefore asked the following research question:

RQ1. Will readers of distorted news about a political candidate report a decreased likelihood of voting for the party of this candidate?

Perceived credibility as a statistical mediator

We expected that all of the above effects would be mediated by participants’ perceptions of the credibility of the distorted article. Once people perceive a distorted message as being credible, they should be more likely to form attitudes and behave in accordance with it. For instance, Halpern et al. (2019) showed that the effects of personal dispositions (such as having a conspiratorial mentality) on the sharing of distorted news were
mediated by participants’ perceptions of fake news as being credible. We thus expected that the effect of distorted news would depend on whether or not participants perceived the news to be credible.

**H6.** The effects of distorted news on attitudes should be mediated by perceived credibility of the message, such that

(a) exposure to distorted news has a negative indirect effect through perceived credibility on attitudes toward an unfamiliar candidate, and

(b) exposure to distorted news has a negative indirect effect through perceived credibility on attitudes toward refugees.

More speculative, we asked whether

**RQ2.** Will distorted news have negative indirect effect through perceived credibility on likelihood of voting for the party of the candidate who is attacked?

Figure 1 illustrates the theoretical model summarizing these assumptions.

**General procedure**

We tested our assumptions in three studies conducted in Germany between 2017 and 2019. Study 1 was largely exploratory. Study 2 was a partially preregistered study designed to investigate the effects of exposure to distorted news on perceived message credibility, candidate perception, attitudes toward refugees, and voting propensity, and to explore the association between perceived credibility and these three outcome variables.

Figure 1. Theoretical model.
Study 3 was fully preregistered with regard to the moderated mediation model being tested.

We employed a similar procedure for all three studies (see Figure 2). Participants were recruited through online mailing lists, advertisements on large social media platforms such as Twitter and German Facebook groups, and a commercial public opinion research panel (Study 3, Respondi) for online studies using the SoSciSurvey platform. Participants were told that the studies would be about ‘political news consumption.’

After answering sociodemographic questions, participants were randomly presented with either a distorted news article from an alternative news outlet or a typical journalist news media report. In the distorted news condition, participants saw an article from the far-right alternative Compact Magazine. This article, which reflected typical distorted news content with a right-wing editorial line (see Bader et al., 2020; Frischlich et al., 2020; Humprecht, 2019), derided a left-leaning politician from the German Green Party and depicted refugees in stereotypical terms as threatening and dangerous. To account for potential ideological asymmetries in responses to distorted news, in Study 3 we included a comparable version of the article representing a left-wing editorial line, in which the politician was described as being conservative and refugees were depicted positively but as victimized by conservatives who were unwilling to help them.

After reading the article, participants rated the article’s credibility, reported their attitudes toward the politician and toward refugees, and indicated their voting propensity with regard to the party of the politician described in the article. Each study ended with a full debriefing, the provision of links to debunking websites, and the opportunity to participate in a lottery for online-library vouchers.

In all three studies, we measured some variables that were not the focus of attention in this study to rule out alternative explanations for the link between distorted news
consumption and the outcome variables (e.g., trust in legacy journalist news media). A full description of these additional variables and their analysis is provided in Supplementary Material C. Supplementary Material C also reports additional analyses used to rule out alternative explanations. All materials, data, and scripts are provided via the open science framework: https://osf.io/xj7tm/.

**Analytical approach**

All analyses were calculated using R (Version 3.5.1; R Core Team, 2018). We tested our hypotheses using a combination of hierarchical regression analyses and moderated mediation models. Before conducting the analyses, we imputed missing values using the estimated maximization algorithm implemented in SPSS for parametric scales (Studies 1 and 2, Musil et al., 2002) or the MissForest algorithm for imputing mixed data types (Study 3, Stekhoven & Buhlmann, 2012). All variables were z-standardized before the analysis. Unless reported otherwise, the data were not found to violate assumptions for regression-based frameworks such as normality, variance homogeneity, and lack of multicollinearity.

**Study 1**

Study 1 provided an initial exploration of our theoretical model using a one-factorial between-subjects design with two conditions (news: distorted vs. journalist).

**Methods**

**Participants**

Data from 12 participants were excluded because their participation was unreasonably fast (i.e., relative speed index >2; see Leiner, 2013). We therefore analyzed data from a total of 301 individuals ($M_{age} = 28.29, SD = 9.63$). Most participants were university students (61%) and female (61%). Five were nonbinary in terms of gender identification. There were no significant differences across conditions with respect to age, gender, or student status (all $ps > .20$). Thus, random assignment appeared to be successful.

**News article stimuli**

To represent distorted news in Germany, in terms of their one-sided reporting style, their anti-elitist and immigration critical stance, we first selected an actual article from the far-right alternative news medium *Compact* entitled 'Merkel Inspects Immigrants: Haste Makes Waste' (Perlick, 2017). It describes chancellor Merkel’s visit to an asylum project, criticizes and ridicules her, and depicts refugees as threatening. Reports about the same event from the conservative legacy newspaper *Die Welt* (Hendrich, 2017) and a Protestant magazine (Kühl & Vogel, 2017) helped us to construct a parallel version without the use of inflammatory language or negative stereotyping. Because we were interested in attitudes toward unfamiliar political candidates, we replaced all references to Merkel with references to 'Simon Koch,' a fictional candidate of the Green party, which is one of the largest opposition parties in Germany and a frequent target of distorted news.
Perceived credibility
We measured perceived message credibility using Matthes and Kohring (2003) news trust subscales focusing on truthfulness (4 items, e.g., ‘The report recounts the facts truthfully’) and completeness (3 items, e.g., ‘the whole truth is reported’). Participants responded on a 7-point scale (1 = ‘fully disagree’ to 7 = ‘fully agree’). All responses were aggregated to form a single composite index (Cronbach’s α = .91).

Individual susceptibilities
Political ideology was measured using an 11-point Likert-type self-placement scale (1 = ‘left-wing’ to 11 = ‘right-wing’). We administered the conspiracy mentality scale by Bruder et al. (2013), which includes 5 items, such as ‘I think that . . . politicians don’t usually tell us their true motives’ and ‘government agencies closely monitor all citizens.’ Participants responded on a scale ranging from 1 (‘surely not’) to 7 (‘sure’), and responses were averaged to create a single score (Cronbach’s α = .84). We administered the short right-wing authoritarianism (RWA) scale by Beierlein et al. (2014), which measures each subdimension of RWA using three items (e.g., ‘Societal rules should be enforced without pity’ for measuring authoritarian aggression). Participants used a 7-point scale (1 = ‘fully disagree’ to 7 = ‘fully agree’) to respond, and a single RWA score was computed (Cronbach’s α = .84).

Outcome measures
To measure attitude formation, we asked participants to evaluate the candidate described in the article using a feeling thermometer (Alwin, 1997) that ranged from −5 (‘I think poorly of him’) to +5 (‘I think highly of him’). Threat perception was measured using seven items developed by Mansel (2006) such as ‘The refugees living here threaten . . . our security’ and ‘our culture’; the response scale ranged from 1 = ‘does not apply’ to 7 = ‘fully applies’. We measured self-estimated propensity to vote for the candidate’s party by asking, ‘If there were elections tomorrow, how likely is it that you would vote for the following parties?’ (1 = ‘very unlikely’ and 7 = ‘very likely’); this was followed by a list of the largest German parties, including the Greens (see also Zimmermann & Kohring, 2020).

Adjustment variables
Because political attitudes and behaviors are often correlated with socio-demographic variables such as age, gender, and educational level, we examined whether these variables were associated with our outcome variables. This helped us to determine whether to adjust statistically for these variables when estimating effects of exposure to distorted news on attitudes, threat perceptions, and voting intentions.

Results
Table 1 shows the zero-order Pearson correlations, means, and standard deviations of our variables of interest. In line with our expectations, exposure to the distorted news article was associated with lower levels of perceived credibility and less positive attitudes toward the candidate. Exposure was not associated to a statistically significant degree with threat perceptions of refugees or voting propensity. Therefore, we considered H6 to
Table 1. Descriptives and zero-order correlations. Study 1.

|        | M   | SD  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   |
|--------|-----|-----|------|------|------|------|------|------|------|------|------|------|
| 1      |     |     |      |      |      |      |      |      |      |      |      | Deceptive news | −0.47*** | −0.25*** | −0.11 | 0.05 | −0.01 | −0.06 | −0.07 | −0.09 | 0.07 | −0.02 |
| 2      | 2.65| 1.11|      |      |      |      |      |      |      |      |      | Perceived credibility | 2.3*** | −0.24*** | 0.22*** | −0.10 | −0.20*** | −0.23*** | −0.19*** | 0.11 | 0.02 |
| 3      | 5.93| 2.22|      |      |      |      |      |      |      |      |      | Attitudes toward candidate |      | 5.47*** | 0.45*** | 0.47*** | 0.13*** | −0.08 | 0.06 |      | −0.17** |
| 4      | 1.93| 1.14|      |      |      |      |      |      |      |      |      | Attitudes toward refugees |      | −0.32*** | −0.23*** | −0.36*** | −0.11 | 0.06 |      | −0.17** |
| 5      | 3.96| 1.92|      |      |      |      |      |      |      |      |      | Voting propensity |        |      |      |      |      |      |      | 0.10 | 0.06 |      | 0.17** |
| 6      | 4.13| 1.22|      |      |      |      |      |      |      |      |      | Conspiracy mentality |    |      |      |      |      |      |      |      |      |      |      |
| 7      | 2.94| 0.96|      |      |      |      |      |      |      |      |      | Right-wing authoritarianism |      |      |      |      |      |      |      | 0.15* | −0.11 |      | 0.18** |
| 8      | 4.32| 1.67|      |      |      |      |      |      |      |      |      | Political leaning |    |      |      |      |      |      |      | 0.15* |      |      | −0.59*** |
| 9      | 28.29| 9.63|      |      |      |      |      |      |      |      |      | Age |      |      |      |      |      |      |      |      |      |      |
| 10     | 0.49|      |      |      |      |      |      |      |      |      |      | Student |    |      |      |      |      |      |      |      |      |      |
| 11     | 0.38| 0.49|      |      |      |      |      |      |      |      |      | Male |      |      |      |      |      |      |      |      |      |      |

*** p < .001, ** p < .01, * p < .05. Significant results are marked in boldface.
be rejected, and RQ 1 to be answered, at least provisionally. Because the absence of an association between distorted news exposure and attitudes toward refugees and voting intentions violates a central assumption of mediation analysis (Kenny, 2014), we focused on attitudes toward the candidate in the analyses below. We observed weak and non-significant associations involving gender, student-status, perceived credibility of the article, and attitudes toward the candidate. Consequently, we saw no need to adjust for these variables in subsequent analyses (Field, 2018).

**Individual susceptibilities**

To investigate the role of individual differences in perceiving distorted news as credible (H2–H4), we conducted a hierarchical regression analysis. The dummy-coded exposure to distorted (versus journalist) news was entered in Block 1, political orientation, right-wing authoritarianism, and conspiracy mentality were entered in Block 2, and the interaction between exposure to distorted news and individual differences in Block 3. Perceived credibility of the message was the outcome variable. Each of the three blocks explained a significant amount of variance, all p < .001. The model explained nearly one-third of the total variance (see Table 2).

In Block 1, we observed the distorted news article (M = 2.13, SD = 0.94) was perceived as less credible than the journalist article (M = 3.17, SD = 1.02), B = −0.92, SE = 0.10, p < .001, as expected. In Block 2, we observed a significant main effect such that people who scored higher (vs. lower) on conspiracy mentality judged both articles to be slightly lower in credibility, B = −0.14, SE = 0.05, p < .001. In Block 3, there were two significant two-way interactions. Participants who were higher in conspiratorial thinking perceived distorted news as more credible (B = 0.32 SE = 0.10, p < .001) and journalist news as less credible (B = −0.32 SE = 0.07, p < .001), consistent with H3. In addition, participants with higher (vs. lower) levels of RWA were marginally more likely to perceive distorted news as more credible (B = 0.23 SE = 0.11, p = .050), consistent with H4. After adjusting for condition and unconditional effects involving conspiratorial thinking and RWA, no significant interaction between political orientation and exposure to distorted news was observed, consistent with the non-significant zero-order correlation observed before (see Table 1).

To interpret the significant interactions between exposure to distorted news and participants’ levels of right-wing authoritarianism and conspiracy mentality on perceived credibility, we compared participants with high (+1SD) and low (−1SD) scores on both individual difference variables (Aiken et al., 1991) using the simple slopes tests and plots embedded in the interactions package (Long, 2020).

The size of the slopes varied meaningfully between high and low authoritarians such that the difference in perceived credibility of distorted versus journalist news was substantially larger for low authoritarians (B = −1.20, SE = .14, t = −8.73, p < .001) compared to high authoritarians (B = −0.65, SE = .14, t = −4.70, p < .001). Figure 3 shows that high authoritarians evaluated journalist news as being slightly and distorted news as being substantially more credible than low authoritarians. The Johnson-Neyman technique (Johnson & Fay, 1950) was performed to explore the range of standardized authoritarianism scores on which distorted and journalist news were perceived as being differentially credible. This analysis showed that all individuals with a standardized authoritarian score below 1.87 perceived distorted news to be less credible than journalist news,
Table 2. Regression analysis perceived credibility, Study 1.

|                      | Block 1 | Block 2 | Block 3 |
|----------------------|---------|---------|---------|
|                      | b       | SE      | LL      | UL      |
| (Intercept)          | 0.47    | 0.07    | 0.33    | 0.61    |
|                      | 0.46    | 0.07    | 0.32    | 0.6     | ***    |
| Distorted news       | −0.94   | 0.1     | −1.14   | −0.74   | ***    |
|                      | −0.92   | 0.1     | −1.12   | −0.73   | ***    |
| Right-wing authoritarianism | 0.17   | 0.06    | 0.05    | 0.28    | ***    |
|                      | 0.05    | 0.08    | −0.1    | 0.21    |
| Conspiracy mentality | −0.14   | 0.05    | −0.24   | −0.04   | **     |
|                      | −0.32   | 0.07    | −0.46   | −0.18   | ***    |
| Political leaning    | 0.03    | 0.06    | −0.08   | 0.15    |
|                      | 0       | 0.08    | −0.15   | 0.15    |
| Right-wing authoritarianism × distorted news | 0.23   | 0.11    | 0       | 0.45    | *      |
| Conspiracy mentality × distorted news          | 0.32    | 0.1     | 0.13    | 0.52    | ***    |
| Political attitude × distorted news             | 0.09    | 0.11    | −0.13   | 0.31    |

\[ R^2 = .22^{***} \quad \text{or} \quad R^2 = .26^{***} \]

\[ R^2 = .31^{***} \]

***p < .001, **p < .01, *p ≤ .05. Significant results are marked in boldface.
whereby extreme authoritarians with scores >1.87 rated journalist and distorted news as being equally credible.

The difference in perceived credibility of distorted versus journalist news was also twice as large among participants scoring low ($B = -1.25, t = -9.05, SE = .14, p < .001$) versus high on conspiracy mentality ($B = -0.60, SE = .14, t = -0.60, p < .001$). Figure 4 shows that participants scoring high on conspiracy mentality perceived the journalist news as being less credible compared to those scoring low on conspiracy mentality, but both groups did not differ in their perception of the distorted news’ credibility. The Johnson-Neyman interval indicated that distorted news was perceived to be less credible than journalist news for all individuals with a standardized conspiracy mentality score below 1.70.

**Indirect effects**

To examine whether distorted news predicted attitudes toward the candidate through differences in perceived credibility and depending on participants’ level of conspiracy mentality and right-wing authoritarianism (H7a), we calculated a first stage moderated mediation model (Edwards & Lambert, 2007; Wu & Zumbo, 2008), using the lavaan package (Rosseel, 2012). The model hypothesized that right-wing authoritarianism and
conspiracy mentality would moderate the perceived credibility of the distorted article and that perceived credibility would predict participants’ attitudes toward the candidate. Following recommendations in the literature, all predictors were allowed to covary (Steinmetz, 2015). The model was estimated using the maximum-likelihood algorithm. Path coefficients and standard errors were based on 5,000 bootstrap-samples, and our interpretation was based on 95% confidence intervals. Following the recommendation by Weiber and Mühlhaus (2014), we evaluated the fit of path models using different fit indices and statistical thresholds. An initial check of the model revealed a partially acceptable fit with regard to the goodness-of-fit indicators, Comparative fit index (CFI) = .98, Tucker–Lewis index (TLI) = .91, but a suboptimal fit with regard to the model’s absolute fit, $\chi^2(5) = 18.2$, $p < .0001$, $\chi^2/df = 3.65$, and the root-mean-square error of approximation, RMSEA = .09. We thus revised the model taking participants’ political orientation into account. As described in the theoretical part of this paper, attitudes toward political candidates are generally formed on the basis of prior attitudes such as political orientation and situational input (Bartels, 2002; Schenck-Hamlin et al., 2000), making it likely that political orientation would predict attitudes toward the candidate, even though we did not find an

![Figure 4](image-url)

**Figure 4.** Simple slopes for the perceived credibility of distorted versus journalist news among participants scoring high (+1SD) versus low (-1SD) on conspiracy mentality in Study 1. CM = Conspiracy mentality. Perceived credibility and conspiracy mentality were z-standardized. Exposure to distorted news was dummy-coded (0 = “journalist news”, 1 = “distorted news”).
association between political orientation and perceived credibility. This assumption was supported by a strong correlation between political orientation and attitudes toward the candidate, suggesting that political orientation should be included as an adjustment variable (Field, 2018). In the revised model, we thus adjusted attitudes toward the candidate for political orientation. On all indices, this model showed an excellent fit to the data, \( \chi^2(8) = 9.9, p = .27, \chi^2/\text{df} = 1.24, \text{CFI} = 1.0, \text{TLI} = .99, \text{RMSEA} = .03 \), explaining 15% of the variance in attitudes toward the candidate.

Participants who had been exposed to the distorted news article reported fewer positive attitudes toward the candidate (\( M = 5.38, SD = 2.2 \)) than participants who had been exposed to the journalist news article (\( M = 6.48, SD = 2.15 \)), total effect \( c = -0.53, SE = .11, CI [-0.74, -0.32], p < .001 \). Assuming that participants had rather neutral attitudes toward the candidate before first reading about him (i.e., ratings would be close to the scale mean of 5.5), our results indicate first and foremost that exposure to journalist news had a positive effect on attitudes toward the candidate. Exposure to distorted news did not have such an effect but instead led to less favorable attitudes toward the candidate.

The association between exposure to distorted news and attitudes toward the candidate was partially mediated via perceived credibility (indirect effect \( ab = -0.16, SE = .07, CI [-0.32, 0.04], p = .02 \)) such that distorted news was perceived as being less credible than journalist news (\( B = -0.93, SE = 0.10, CI [-1.11, -0.73], p < .001 \)) and perceived credibility was positively associated with favorable attitudes toward the candidate (\( B = 0.17, SE = 0.07, CI [0.04, 0.32], p = .01 \)).

The strength of the indirect effect of distorted news on attitudes toward the candidate differed depending on participants’ level of right-wing authoritarianism (moderated mediation effect \( \omega = -0.26, SE = 0.09, CI [-0.45, -0.08], p = .01 \)) and conspiratorial thinking (\( \omega = -0.30, SE = 0.10, CI [-0.51, -0.11], p < .001 \)). To interpret the moderated mediation effects, we compared participants with high (+1SD) and low (−1SD) scores on right-wing authoritarianism or conspiracy mentality (for all estimates, see Supplementary Material B).

**Right-wing authoritarianism**

For high authoritarians, the exposure to the distorted (vs. journalist article) led to less favorable attitudes toward the candidate (total effect, \( c = -0.48, SE = .12, CI [-0.72, -0.26], p < .001 \)). This effect was partially mediated by the perceived credibility of the article, indirect effect, \( ab = -0.11, SE = .05, CI [-0.24, -0.03], p = .03 \). There was an even stronger direct negative effect of distorted news exposure, \( c' = -0.37, SE = .13, CI [-0.65, -0.11], p = .01 \), indicating that exposure to distorted news led to less favorable attitudes among high authoritarians not only because the distorted (versus journalist) news failed to have a positive effect on favorable attitudes toward the candidate but also because exposure to the distorted news led to less favorable attitudes toward him.

For low authoritarians, exposure to distorted news had no total negative effect on attitudes toward the candidate, \( c = 0.16, SE = .20, CI [-0.25, 0.55], p = .43 \). Instead, we observed a pattern of inconsistent mediation (Kenny, 2014), such that exposure to distorted news had a negative indirect effect on attitudes toward the candidate, \( ab = -0.21, SE = .09, CI [-0.42, -0.95], p = .03 \), but a positive direct effect, \( c' = 0.37, SE = .13, CI [0.12, 0.46], p = .01 \). Taken together, both journalist and distorted news led to
more favorable attitudes toward the candidate among low authoritarians. The effect was substantially stronger for journalist news.

Conspiracy mentality
For participants who scored high on conspiratorial thinking expressed less favorable attitudes toward the candidate after reading the distorted (vs. journalist) news article, total effect $c = -0.47$, $SE = .12$, CI $[-0.71, -0.25]$, $p < .001$. The indirect effect via perceived credibility was statistically significant, $ab = -0.10$, $SE = .05$, CI $[-0.23, -0.03]$, $p = .04$, albeit smaller than the direct effect, $c' = -0.37$, $SE = .13$, CI $[-0.65, -0.12]$, $p = .01$. Among those scoring high on conspiracy mentality, distorted news led to less favorable attitudes not only because the distorted news failed to have a positive effect on favorable attitudes like the journalist news, but also because exposure to the distorted news directly led to less favorable attitudes toward the candidate.

For participants who scored low on conspiracy mentality, an inconsistent mediation pattern was observed, total effect $c = 0.15$, $SE = .21$, CI $[-0.26, 0.56]$, $p = .46$. The indirect effect via perceived credibility was negative, $ab = -0.22$, $SE = .10$, CI $[-0.42, -0.51]$, $p = .03$, whereas the direct effect, $c' = 0.37$, $SE = .13$, CI $[-0.65, -0.12]$, $p = .01$, was positive. Both journalist and distorted news led to more favorable attitudes among those with low scores of conspiracy mentality. The effect was substantially stronger for journalist news.

Alternative models
Consistent with recommendations in the literature (Weiber & Mühlhaus, 2014), we tested whether our hypothesized moderated mediation model was faithfully represented the data by running two alternative models and comparing the fit indices of these alternative models with those of our hypothesized model. This procedure allows the researcher to test whether one’s model is not only fitting the data but is also the most parsimonious way of fitting the data. First, we investigated a simple mediation model, which showed an acceptable fit to the data with regard to the CFI = .98 and the absolute fit, $\chi^2(1) = 3.7, p > .05$, but a poor fit to the data ($\chi^2/df = 3.7, TLI = .89$). As such, the more complex model including right-wing authoritarianism and conspiracy mentality increased model fit was justified. Second, we conducted a reversed model in which the attitude toward the candidate served as the mediator and perceived message credibility as the outcome to test the direction of the postulated relationships. This model showed a worse fit to the data, suggesting that the postulated order of the variables in our model

Table 3. Model fit alternative models, Study 1.

|                | $x^2$  | df | $p$  | $x^2/df$ | CFI | TLI | RMSEA | AIC | BIC |
|----------------|--------|----|------|----------|-----|-----|-------|-----|-----|
| Acceptable fit |        |    |      |          |     |     |       |     |     |
| Excellent fit  |        |    | >.90 | >.90     | <.08|     |       |     |     |
|                | >.95   | >.95| >.95 | >.95     | <.05|     |       |     |     |
| 1 Tested model | 9.89   | 8  | .27  | 1.24     | 1.00| .99 | .03   | 5341| 5444|
| 2 Alternative mediation only | 3.65 | 1  | .06  | 3.65     | .98 | .89 | .09   | 2891| 2924|
| 3 Alternative not adjusted for political leaning | 18.2  | 5  | <.001| 3.65     | .98 | .91 | .09   | 4588| 4674|
| 4 Alternative reversed model | 47    | 8  | <.001| 5.87     | .94 | .80 | .13   | 5378| 5481|

CFI = comparative fit index, TLI = Tucker–Lewis index, RMSEA = root-mean square error. AIC = Akaike’s Information Criterion, BIC = Bayes information criterion.
does indeed represent the causal direction (Wu & Zumbo, 2008). Table 3 summarizes the fit indices across models.

**Discussion**

In general, distorted news was perceived as being less credible than journalist news (H1), and perceptions of credibility predicted positive attitudes toward the candidate. Although this positive relationship between credibility and positive attitudes seems surprising with regard to distorted news, the pattern is highly compatible with uncertainty reduction theory (Berger, 1993). Uncertainty reduction theory postulates that individuals aim at reducing uncertainty when confronted with strangers because the near-infinite number of things others can say or do creates a sense of apprehension. Uncertainty then motivates information seeking and more information reduces the aversive state of uncertainty and increases liking (Douglas, 1990). From this point of view, it seems plausible that reading a news article about a so-far unknown candidate reduces the uncertainty about this person and thus is associated with more positive attitudes toward said candidate.

Credibility perceptions varied according to participants’ ideological orientations. High authoritarians perceived the distorted news article as being more credible than low authoritarians; meanwhile, participants with higher levels of conspiracy mentality perceived the journalist news article as being less credible than those with lower levels of conspiracy mentality. For participants with higher levels of right-wing authoritarianism or conspiracy mentality distorted news exposure led to less favorable attitudes toward the candidate as compared to journalist news exposure. For participants with lower levels of either of the individual differences exposure to distorted news also led to less favorable attitudes compared to the exposure to journalist news. This was due to these participants reporting particularly favorable attitudes after reading the journalist news – an effect that was substantially smaller after reading the distorted news.

**Study 2**

We designed Study 2 to address three limitations of our first study. First, in Study 1 we used an authentic distorted news article but constructed a journalist article ourselves. To enhance external validity, in Study 2 we used an authentic journalist news article from legacy media about the same event as the distorted article. Second, because alternative news organizations attempt to mirror the presentation of established journalistic outlets (Frischlich et al., 2020), we tested whether embedding a distorted news article in the context of a regional journalistic website would lead to people to perceive the distorted article as credible. Finally, in Study 1 we measured our key variable of interest – attitude formation – using a single item. To improve upon the reliability and validity of our dependent variable, we included a multi-item measure of candidate perception in Study 2.
**Methods**

**Participants**
We collected and analyzed data from 249 participants ($M_{age} = 28.28$ years, $SD = 8.85$). No respondents were excluded. Most were female ($n = 153$), and three identified as non-binary. Of the total number of participants, 34% were students, while the remainder were in the workforce. Socio-demographics did not vary depending on condition (all $p>.80$). The sample was large enough to include more than 10 individuals per path, consistent with recommendations in the literature (Weiber & Mühlhaus, 2014) and sensitive enough to detect effects larger than $r > .04$ in a multivariate regression with seven predictors and a power of .95 (via G*power, Faul et al., 2007).

**Procedure and measures**
Participants completed the same measures of conspiracy mentality (Cronbach’s $\alpha = .82$), right-wing authoritarianism (Cronbach’s $\alpha = .82$), political orientation, perceived credibility of the article (Cronbach’s $\alpha = .96$), attitudes toward the candidate, attitudes toward refugees (Cronbach’s $\alpha = .95$), and voting propensity for the Green Party. Participants were also exposed to the same distorted news article used in Study 1. The journalist article was taken from a local newspaper Ostsee-Zeitung (Mattern, 2017). Half of the participants saw the two articles in the same format as in Study 1 (i.e., plain black letters on a white background), whereas the other half saw them embedded in a mock newspaper design with headlines, photographic images, and so on. Finally, we included an eight-item measure of candidate perception modeled after Rössler (2011), asking participants to state their agreement with statements such as ‘I think Simon Koch is trustworthy.’ These items were measured on 7-point scales, with higher values indicating more positive perceptions of the candidate (Cronbach’s $\alpha = .96$).

**Results**
Table 4 shows descriptives, including correlations. We observed no significant association between article design and perceived credibility, $r = .05$, $p = .43$, so we combined the data from the two design conditions. Nor did we observe meaningful associations between distorted news exposure and (a) threat perceptions of refugees, or (b) voting intentions. Therefore, we focused on attitude formation and candidate perceptions in subsequent analyses. Because attitudes toward the candidate (single item) and candidate perceptions were very highly correlated ($r = .81$, $p < .001$), we focused on the more reliable multi-item measure. Results for the single item were largely the same as what is reported below (see Supplementary material C).

**Individual susceptibilities**
As in Study 1, the dummy-coded exposure to distorted (versus balanced) news was entered in Block 1, political orientation, right-wing authoritarianism, and conspiracy mentality in Block 2, and the interaction between participants’ attitudes and exposure to distorted news in Block 3. Perceived credibility of the news article served as an outcome variable in this initial analysis. The model explained half of the variance in perceived credibility (see Table 5).
### Table 4. Descriptives and zero-order correlations. Study 2.

|       | M   | SD  |   2  |   3  |   4  |   5  |   6  |   7  |   8  |   9  |   10 |   11 |   12 |   13 |
|-------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | Deceptive news | .00  | -.05 | -.61| -.34| -.36| -.02 | -.03 | -.04 | -.08 | .01  | .03  | -.04 | .04  |
| 2     | Journalistic design | -15*| -21***| .27***| .58***| .46***| -12 | -.02 | -.01 | .09  | .14* | .09  | .14* | .08  |
| 3     | Perceived credibility | 2.71 | 1.34 | .55| .64| .19| -.23| .14*| .03  | -.19**| .11  | .04  |
| 4     | Attitudes toward candidate | 5.99 | 1.97 | -.15| -.31| -.20| .00  | -.07 | .00  | .14* | .08  |
| 5     | Candidate perception | 3.69 | 1.14 | -.05| .24| -.23| .12  | -.02 | -.01 | .09  | .14* | .07  |
| 6     | Attitudes toward refugees | 1.90 | 1.10 | -.21| .27| .58| .46| -.09 | -.01 | .07  |
| 7     | Voting propensity | 4.38 | 1.93 | -.13| -.16| -.23| -.07 | .18**| -.19**|
| 8     | Conspiracy mentality | 4.30 | 1.19 | -.25***| .05  | -.08 | -.02 | -.27****|
| 9     | Right-wing authoritarianism | 2.86 | 0.94 | .49***| -.08 | .00  | .10  |
| 10    | Political leaning | 3.59 | 1.51 | -.04 | .04  | .11  |
| 11    | Age | 28.28 | 8.85 | -.32***| .25***| -.14*|

**p ≤ .001, ***p ≤ .01, *p ≤ .05 Significant results are marked in boldface.**

Higher scores on attitude formation indicate a more favorable attitude towards the candidate. Higher scores on political orientation indicate right-wing orientation. Higher values on perceived credibility, threat perception, propensity to vote, conspiracy mentality or right-wing authoritarianism indicate a stronger expression of the respective construct. Exposure to distorted news, student status, and male gender were dummy-coded (i.e., the absence of the respective characteristic was coded as “0” and the presence as “1”)
### Table 5. Regression analysis perceived credibility, Study 2.

|                      | Block 1          | Block 2          | Block 3          |
|----------------------|------------------|------------------|------------------|
|                      | b     | SE   | LL    | UL    | b     | SE   | LL    | UL    | b     | SE   | LL    | UL    |
| (Intercept)          | 0.64  | 0.07 | 0.49  | 0.79  | ***   | 0.64  | 0.07 | 0.5   | 0.77  | ***   | 0.65  | 0.07 | 0.52  | 0.78  | ***   |
| Distorted news       | −1.29 | 0.11 | −1.5  | −1.08 | ***   | −1.28 | 0.1  | −1.48 | −1.09 | ***   | −1.28 | 0.09 | −1.46 | −1.09 | ***   |
| Right-wing authoritarianism | 0.19 | 0.06 | 0.08  | 0.31  | ***   | 0.01  | 0.07 | −0.13 | 0.15  |       |       |       |       |       |       |
| Conspiracy mentality  | −0.29 | 0.05 | −0.39 | −0.2  | ***   | −0.53 | 0.06 | −0.66 | −0.41 | ***   |       |       |       |       |       |       |
| Right political leaning | −0.05 | 0.06 | −0.16 | 0.06  |       | 0.02  | 0.07 | −0.13 | 0.16  |       |       |       |       |       |       |
| Right-wing authoritarianism \times distorted news |       |       |       |       | **   | 0.33  | 0.11 | 0.11  | 0.55  | ***   |       |       |       |       |       |       |
| Conspiracy mentality \times distorted news |       |       |       |       | **   | 0.43  | 0.09 | 0.25  | 0.61  | ***   |       |       |       |       |       |       |
| Right political leaning \times distorted news |       |       |       |       |       | −0.16 | 0.11 | −0.38 | 0.06  |       |       |       |       |       |       |

\[ R_{adj}^2 = .37^{***} \quad R_{adj}^2 = .45^{***} \quad R_{adj}^2 = .53^{***} \]

*** p < .001, ** p < .01, * p ≤ .05. Significant results are marked in boldface.

Higher scores on conspiracy mentality or right-wing authoritarianism indicate a stronger expression of the respective construct. Higher scores on political orientation indicate right-wing orientation. Parametric variables were z-transformed before the analysis. Exposure to distorted news was dummy-coded (i.e., exposure to journalistic news was coded as "0" and exposure to distorted news as "1"). The conditional effects (i.e., the interaction terms) accordingly express the standardized association between right-wing authoritarianism, conspiracy mentality, or political orientation amongst participants who were exposed to distorted news, whereas the unconditional effects represent the standardized association amongst those exposed to journalistic news.
Participants rated the distorted article ($M = 1.88$, $SD = 0.87$) as being generally less credible than the journalist one ($M = 3.52$, $SD = 1.22$), $B = -1.28$, $SE = .09$, $p < .001$. Participants who scored higher on conspiracy mentality perceived distorted news as more credible ($B = 0.43$, $SE = 0.09$, $p < .001$) and journalist news as less credible ($B = -0.53$, $SE = 0.06$, $p < .001$). Participants with higher levels of authoritarianism perceived the distorted news to be more credible ($B = 33$, $SE = .11$, $p < .001$). We inspected the significant interactions by means of a simple slope analysis (Aiken et al., 1991).

The size of the slopes varied meaningfully between high (+1$SD$) and low (−1$SD$) authoritarians with a larger difference in perceived credibility among the low authoritarians ($B = -1.53$, $SE = .13$, $t = -11.42$, $p < 001$) than among the high authoritarians ($B = -1.05$, $SE = .13$, $t = -7.91$, $p < 001$). Figure 5 shows that high authoritarians perceived the journalist but particularly the distorted news to be more credible than low authoritarians. The Johnson-Neyman technique indicated that individuals with standardized authoritarianism scores below 2.98 perceived the distorted news to be less credible than the journalist news.

The difference in perceived credibility of distorted versus journalist news was also larger among participants scoring low on conspiracy mentality ($B = -1.77$, $SE = .13$, $t = -13.16$, $p < 001$) than among those scoring high on conspiracy mentality ($B = -0.80$, $t = -12.78$, $p < 001$).
\( SE = .13, t = -6.09, p < .001 \). Figure 6 shows that participants scoring high on conspiracy mentality perceived the journalist and the distorted news as being less credible than participants with low scores on conspiracy mentality. These individuals were particularly skeptical with regard to the perceived credibility of the journalist news (Figure 6). The Johnson-Neyman technique indicated that distorted news was perceived to be less credible than journalist news for all individuals with a standardized conspiracy mentality score below 1.95.

**Indirect effects**

We conducted the same moderated mediation model as in Study 1 using candidate perception as the outcome variable. We hypothesized that participants with higher (vs. lower) levels of right-wing authoritarianism and conspiracy mentality would be more susceptible to distorted news. Model fit was excellent, \( \chi^2 (8) = 5.45, p = .71, CFI = 1.0, TLI = 1.0, RMSEA < .001 \) and the model explained 45% of the variance (the full estimate table is provided in Supplementary Material B). Participants who had been exposed to the distorted news article formed less favorable attitudes toward the candidate less \( (M = 3.27, SD = 1.13) \) than participants who had been exposed to the journalist news article \( (M = 4.10, SD = 1.00) \), total effect \( c = -0.76, SE = .12, CI [-1.00, -0.53], p < .001 \). This effect was fully mediated via perceived credibility, indirect effect \( ab = -0.86, SE = .10, CI \)

![Figure 6. Simple slopes for the perceived credibility of distorted versus journalist news among participants scoring high (+1SD) versus low (-1SD) on conspiracy mentality in Study 2. CM = Conspiracy mentality. Perceived credibility and conspiracy mentality were z-standardized. Exposure to distorted news was dummy-coded (0 = “journalist news”, 1 = “distorted news”).](image-url)
[-1.06, -0.69], \( p < .001 \). The strength of the indirect effect depended on participants’ levels of right-wing authoritarianism, moderated mediation effect \( \omega = -0.30, SE = 0.09 \), CI \([-0.55, -0.07]\), \( p < .001 \), and conspiracy mentality, \( \omega = -0.58, SE = 0.13 \), CI \([-0.84, -0.35]\), \( p < .001 \). To interpret these conditional indirect effects, we compared participants with high (+1SD) and low (−1SD) scores on either of the two individual difference variables (Aiken et al., 1991).

**Right-wing authoritarianism**

High authoritarians reported less favorable attitudes toward the candidate after reading the distorted (vs. journalist) article, total effect \( c = -0.61, SE = .15 \), CI \([-0.88, -0.32]\), \( p < .001 \). The effect was also fully mediated by perceived credibility, indirect effect \( ab = -0.71, SE = .11 \), CI \([-0.94, -0.50] \), \( p < .001 \). Low authoritarians also reported less favorable attitudes toward the candidate after reading the distorted article, total effect, \( c = -1.14, SE = .21 \), CI \([-1.56, -0.77]\), \( p < .001 \), and the effect was also fully mediated via perceived credibility, indirect effect, \( ab = -1.03, SE = .12 \), CI \([-1.29, -0.81]\), \( p < .001 \). Taken together, for both, high and low authoritarians, reading journalist news had a positive effect on favorable attitudes toward the candidate, which was absent after reading the distorted news. This indirect effect was smaller among high authoritarians because they perceived the distorted news as being more credible than low authoritarians.

**Conspiracy mentality**

For conspiracy mentality, the pattern was very similar. Participants scoring high on conspiracy mentality reported less favorable attitudes toward the candidate after reading the distorted (vs. journalist) article, total effect \( c = -0.61, SE = .15 \), CI \([-0.88, -0.32]\), \( p < .001 \), and the effect was fully mediated by perceived credibility of the article, \( ab = -0.71, SE = .11 \), CI \([-0.94, -0.50]\), \( p < .001 \). Participants scoring low on conspiracy mentality, the pattern was similar, but the relationship was even stronger, total effect \( c = -1.03, SE = .22 \), CI \([-1.74, -0.88]\), \( p < .001 \), indirect effect \( ab = -1.19, SE = .14 \), CI \([-1.74, -0.93]\), \( p < .001 \). Taken together, exposure to journalist (vs. distorted) news led to more favorable attitudes toward the candidate among participants with high and low levels of conspiracy mentality. This effect was stronger among participants with low levels of conspiracy mentality because they perceived the journalist news to be more credible.

**Discussion**

Study 2 largely replicated the findings from Study 1, showing that the distorted news was generally perceived as less credible compared to journalistic news. This difference was larger for participants scoring lower (as compared to higher) on either right-wing authoritarianism or conspiracy mentality. High (vs. low) authoritarians thereby perceived the distorted news to be comparably more credible; meanwhile, participants scoring high (vs. low) on conspiracy mentality perceived the journalist news to be comparably incredible. In consequence, the positive effect of reading journalist news on candidate perception as compared to distorted news was stronger among participants scoring low on either of the two susceptibility variables.
Study 3

In Study 3, we further investigated the susceptibility to distorted news on the part of people who were high in right-wing authoritarianism or conspiracy mentality while addressing another limitation of the first two studies, namely the focus on a single type of distorted news article. Although the article we used in the first two studies was prototypical of the German alternative news media landscape at that time (Frischlich et al., 2020; Heft et al., 2020; Humprecht, 2019), we cannot rule out the possibility that the observed relationships were specific to an article with a right-wing editorial stance that specifically attacked a candidate of the Green Party and depicted refugees as threatening. To address this limitation, the third study sought to broaden the scope of our research to include exposure to distorted news with a left-wing editorial stance in which a conservative politician was attacked and refugees were portrayed not as threatening perpetrators but as victims of malevolent conservatives.

Because both distorted articles used in Study 3 employed the same opinionated language, we expected that distorted news articles would be rated as less credible than journalist news irrespective of their editorial line. We further hypothesized that participants with a higher conspiracy mentality would be more susceptible to distorted news and would see it as more credible – irrespective of whether the article targeted someone from the Green Party or the Conservative Party. Because right-wing authoritarianism is obviously correlated with right-wing (vs. left-wing) orientation (Cohrs & Asbrock, 2009; Fuchs, 2003) – and authoritarianism is correlated with right-wing orientation even when it is measured abstractly (for an overview, see Nilsson & Jost, 2020) – we expected that right-wing authoritarianism would be associated with susceptibility to distorted news that was critical (but not supportive) of immigrants. We also anticipated that participants would form more positive attitudes toward candidates that shared their political orientation (i.e., leftists would form more positive attitudes toward the Green Party candidate and rightists would form more positive attitudes toward the Conservative Party candidate). The moderated mediation model was pre-registered (see https://osf.io/ng7jq).

Methods

Study 3 utilized a 2 (article type: distorted vs. journalist) × 2 (editorial stance: left-wing vs. right-wing) design.

Sample

Data from 89 participants were excluded because their participation was unreasonably fast (n = 37 based on the relative speed index > 2; see Leiner, 2013), because they retracted their data consistent with the European General Data Protection Rule (n = 37), or because they did not finish the questionnaire (n = 23). We therefore analyzed data from 474 participants (M_age = 41.64 years, SD = 1.70). Slightly more than half of the sample was female (n = 246), and five were nonbinary. One-third of the participants were composed of university students, and the others were in the workforce. The sample was large enough to detect effect sizes larger than r > .06 in a multivariate regression, considering participants who saw either the right-wing leaning (n = 236) or the left-wing leaning articles (n = 238) with seven predictors in a regression, and a power of .95.
| Table 6: Descriptives and Zero-Order Correlations, Study 3. |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                  | M                 | SD               | 1                  | 2                  | 3                  | 4                  | 5                  | 6                  | 7                  |
|                  |                  |                  | Distorted versus balanced |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | article             |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Perceived credibility |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Attitudes toward candidate |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Candidate perception |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Threat ascribed to toward |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | party               |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Voting propensity green |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Right-wing authoritarianism |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Political orientation |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | East-German residence |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Right-leaning attitude |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Perceived credibility |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Attitudes toward candidate |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Candidate perception |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Threat ascribed to toward |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | party               |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Voting propensity green |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Right-wing authoritarianism |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Political orientation |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | East-German residence |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Left-leaning attitude |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Perceived credibility |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Attitudes toward candidate |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Candidate perception |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Threat ascribed to toward |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | party               |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Voting propensity green |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Right-wing authoritarianism |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | Political orientation |                  |                  |                  |                  |                  |                  |
|                  |                  |                  | East-German residence |                  |                  |                  |                  |                  |                  |

**p ≤ .001, *p ≤ .01, **p ≤ .05. Significant results are marked in boldface. Higher scores on attitude formation indicate a more favorable attitude towards the respective candidate. Higher values on perceived credibility, threat perception, personality trait, right-wing authoritarianism indicate a stronger expression of the respective construct. Exposure to distorted news, student status, male gender, and residence in Eastern Germany were dummy-coded (i.e., the absence of the respective characteristic was coded as “0” and the presence as “1”).
Table 7. Regression analysis perceived credibility, study 3.

|                          | Credibility per article type | Block 1 | Block 2 | Block 3 |
|--------------------------|-----------------------------|---------|---------|---------|
|                          |                             | b       | SE      | UL      | LL      | b       | SE      | UL      | LL      | b       | SE      | UL      | LL      |
| Right-wing editorial line| (Intercept)                 | 0.56    | 0.08    | 0.41    | 0.71    | ***     | 0.56    | 0.08    | 0.41    | 0.72    | ***     | 0.56    | 0.08    | 0.41    | 0.71    | ***     |
|                          | Distorted news              | −1.15   | 0.12    | −1.37   | −0.92   | ***     | −1.15   | 0.12    | −1.38   | −0.92   | ***     | −1.13   | 0.12    | −1.36   | −0.90   | −0.13   | −0.88   | ***     |
|                          | Right-wing authoritarianism  | 0.13    | 0.08    | −0.02   | 0.29    |         | 0.14    | 0.08    | −0.01   | 0.29    | 0.14    | −0.13   | 0.08    | 0.41    | 0.14    | −0.13   | 0.41    | *       |
|                          | Conspiracy mentality         | 0.01    | 0.07    | −0.12   | 0.14    |         | 0.02    | 0.07    | −0.11   | 0.15    | 0.15    | 0.15    | 0.08    | 0.28    | 0.15    | 0.28    | 0.31    |
|                          | Political leaning           | −0.02   | 0.07    | −0.16   | 0.12    |         | −0.03   | 0.07    | −0.17   | 0.10    | 0.11    | −0.25   | 0.06    | 0.34    | 0.10    | 0.35    |         |
|                          | Right-wing authoritarianism ×|         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | distorted news              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | Conspiracy mentality ×      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | distorted news              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | Political leaning ×        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | distorted news              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Left-wing editorial line | (Intercept)                 | 0.36    | 0.08    | 0.20    | 0.52    | ***     | 0.38    | 0.08    | 0.22    | 0.55    | ***     | 0.36    | 0.08    | 0.20    | 0.52    | 0.20    | 0.52    | ***     |
|                          | Distorted news              | −0.7    | 0.12    | −0.93   | −0.48   | ***     | −0.74   | 0.11    | −0.96   | −0.52   | ***     | −0.74   | 0.11    | −0.96   | −0.52   | 0.12    | −0.98   | −0.50   | ***     |
|                          | Right-wing authoritarianism  | 0.17    | 0.07    | 0.03    | 0.31    | *       | 0.18    | 0.07    | 0.04    | 0.32    | 0.14    | −0.10   | 0.04    | 0.32    | 0.14    | −0.10   | 0.46    | **      |
|                          | Conspiracy mentality         | −0.05   | 0.06    | −0.17   | 0.08    |         | −0.05   | 0.06    | −0.18   | 0.07    | 0.14    | −0.32   | 0.06    | −0.18   | 0.07    | 0.14    | −0.32   | 0.21    |
|                          | Political leaning           | −0.14   | 0.07    | −0.29   | 0.00    | †       | −0.15   | 0.07    | −0.29   | 0.01    | 0.11    | −0.36   | 0.00    | 0.35    | 0.06    | 0.15    | 0.40    | *       |
|                          | Right-wing authoritarianism ×|         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | distorted news              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | Conspiracy mentality ×      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | distorted news              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | Political leaning ×        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                          | distorted news              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |

Weights and standard errors are based on heteroskedasticity robust variance covariance matrices, bootstrapped standard errors (SE_boot) are based on 5000 bootstrap samples. Significant results are marked in boldface.

*** p < .001, ** p < .01, * p < .05, † p < .08.
(G*power, Faul et al., 2007). For effect sizes as small as those observed in Studies 1 and 2, Knock and Haday (2018) recommended recruiting at least 150 participants to test a path model; therefore, our final sample was considered to be large enough to test the hypothesized moderated mediation model.

**Procedure and measures**
As in Studies 1 and 2, participants completed right-wing authoritarianism (Cronbach’s \( \alpha = .88 \)) and conspiracy mentality scales (Cronbach’s \( \alpha = .87 \)) before reading either a distorted or journalist news article. The distorted news article was either the same as in the previous studies or a parallel version in which the politician attacked was a member of the German conservative party (the Christian Democratic Union, or CDU)\(^3\) and refugees were described not as threatening but as victims of conservative policies that allowed asylum seekers to drown in the Mediterranean Sea. Participants rated the perceived credibility of the article (Cronbach’s \( \alpha = .95 \)) and reported their attitudes toward and perceptions of the candidate (Cronbach’s \( \alpha = .97 \)) using the same scales as in Study 2. To examine the effects of exposure to distorted news on perceptions of refugees more closely, we included a 9-item measure of threat perceptions with regard to refugees (Landmann et al., 2019), which resembles narratives promoted by German right-wing alternative news (e.g., ‘As a result of the immigration of refugees, the number of violent deeds in Germany increased’). All items were answered on a 5-point scale with higher values indicating higher levels of threat (Cronbach’s \( \alpha = .96 \)).

**Results and discussion**
Table 6 shows descriptives, including zero-order correlations split by the ideological slant of the article. An inspection of the assumptions for regression-type analyses using candidate perception as an outcome variable identified five cases with standardized residuals >3 as potential outliers. However, none of them was influential based on Cooks distance, all <1. Consequently, we did not remove them from the dataset. The studentized Breusch–Pagan Test (Koenker, 1981) indicated heteroscedasticity in the data, \( \chi(7) = 20.00, p < .001 \), so we used robust standard errors.

**Individual susceptibilities**
Dummy-coded exposure to distorted (versus journalist) news was entered in Block 1, political orientation, right-wing authoritarianism, and conspiracy mentality were entered in Block 2, and the interaction between participants’ attitudes and exposure to distorted news in Block 3. Perceived credibility of either the right-wing leaning or the left-wing leaning article served as an outcome variable in this analysis. We used the vcovHC() function from the sandwich package (Zeileis et al., 2020) to calculate heteroskedasticity consistent (HC) variance covariance matrices and used robust HC3 standard errors in the simple slope analyses. Furthermore, we calculated bootstrapped standard errors for the final model using 5,000 samples and the modelr package (Wickham, 2020). Table 7 shows the results.
**Distorted news with right-leaning editorial stance**

For the article about the Green-leaning candidate, the variables in Blocks 1 and 3 accounted for a significant amount of variance, explaining about one-third of the variance in perceived credibility (see Table 7). As before, distorted news ($M = 2.33, SD = 1.45$) was perceived as less credible than journalist news ($M = 4.14, SD = 1.31$). Unexpectedly, participants with higher levels of authoritarianism perceived the journalist news to be marginally more credible ($B = .14, SE = .08, p = .08, CI_{boot} [−0.13, 0.41]$). However, the bootstrapped confidence interval entailed zero, suggesting caution when interpreting this effect. Divergences between robust estimates and bootstrapped confidence intervals are not uncommon because both use different approaches to the estimation of the standard errors. As bootstrapped intervals should be preferred in such instances (Campbell, 2006), we based our interpretation mainly on these in cases of deviances. Participants with higher levels of conspiracy mentality perceived the distorted news to be marginally more credible ($B = .23, SE = .13, p = .08, CI_{boot} [0.09, 0.36]$). Participants with higher levels of authoritarianism also perceived the distorted news to be more credible ($B = .23, SE = .16, CI [0.10, 0.35], p = .15$), although the specific $p$-value indicated that this estimate failed to reach significance in this specific analysis. Based on the bootstrapped confidence-intervals, we inspected the simple slopes for high (+1SD) versus low (−1SD) authoritarianism and conspiracy mentality in the next step.

**Right-wing authoritarianism**

The difference in perceived credibility of journalist versus distorted news was larger amongst low authoritarians ($B = −1.36, SE = .17, t = −8.20, p < .001$) than among high authoritarians ($B = −0.90, SE = .20, t = −4.51, p < .001$). As can be seen in Figure 7, high authoritarians rated the distorted news with the right-wing editorial stance as being more credible than low authoritarians. High and low authoritarians did not differ substantially in their perception of the journalist news’ credibility. The Johnson-Neyman interval indicated that individuals with standardized authoritarianism scores below 2.04 perceived the distorted news about the Green candidate to be less credible than the journalist news.

**Conspiracy mentality**

Nevertheless, the difference in perceived credibility was larger among participants scoring low on conspiracy mentality ($B = −1.37, SE = .17, t = −8.13, p < .001$) than among those scoring high on conspiracy mentality ($B = −0.91, SE = .18, t = −0.91, p < .001$). As can be seen in Figure 8, those scoring high on conspiracy mentality rated the distorted news with the right-wing editorial stance as being more credible and the journalist news as being less credible than those scoring low on conspiracy mentality. The Johnson-Neyman technique indicated that individuals with standardized conspiracy mentality scores below 2.19 perceived the distorted news about the Green candidate to be less credible than the journalist news.

**Distorted news with the left-leaning editorial stance**

For the article about the conservative candidate, all three Blocks reached statistical significance, jointly explaining 17% of the variance (see Table 7). Distorted news ($M = 2.71, SD = 1.40$) was perceived as less credible than journalist news ($M = 3.82,$
Unexpectedly, participants with a more right-leaning political orientation rated the journalist news about the conservative candidates’ visit to the asylum center as less credible ($B = -0.10$, $SE = .11$, CI$_{boot}[-0.10, 0.46]$, $p = .046$). As the bootstrapped confidence interval for this association entailed zero, this association should be interpreted with caution. Participants with higher levels of right-wing authoritarianism also evaluated the journalist news as being more credible ($B = 0.18$, $SE = 0.07$, CI$_{boot}[-0.10, 0.46]$, $p = .01$) although the bootstrapped confidence interval again implied caution when interpreting this relationship. Participants with higher levels of authoritarianism perceived the distorted news about the conservative politician to be more credible ($B = 0.27$, $SE = 0.14$, CI$_{boot}[0.15, 0.40]$, $p = .049$). We found no significant association between conspiracy mentality and perceived credibility of the distorted news with the left-wing editorial slant ($B = 0.12$, $SE = 0.13$, CI$_{boot}[-0.02, 0.25]$, $p = .37$). We thus inspected only the simple slopes for high (+1SD) versus low (−1SD) authoritarianism.

The difference was larger among low authoritarians ($B = -0.87$, $SE = .16$, $t = 5.30$, $p < .001$) than among high authoritarians ($B = -0.57$, $SE = .19$, $t = -3.02$, $p < .001$). Figure 9 shows that high authoritarians perceived journalist but particularly distorted news to be more credible than low authoritarians. The Johnson-Neyman technique

**Figure 7.** Simple slopes for the perceived credibility of the right-wing leaning distorted versus journalist news among high (+1SD) versus low (−1SD) authoritarians in Study 3. RWA = Right-wing authoritarianism. Perceived credibility and authoritarianism were z-standardized. Exposure to distorted news was dummy-coded (0 = “journalist news”, 1 = “distorted news”).

**Figure 9.**
indicated that distorted news was perceived to be less credible than distorted news for participants with standardized authoritarianism scores below 1.56.

**Indirect effects**

We examined indirect effects by means of a *multi-group analysis* (Weiber & Mühlhaus, 2014) in which editorial stance of the article served as a between-group factor, allowing us to inspect how editorial stance affected the relationships among the variables. To account for the heteroscedasticity of the data, we used the robust maximum-likelihood estimator (MLR) which calculates Huber-White robust standard errors (Huber, 1967; White, 1980), providing trustworthy standard errors and confidence intervals (Lai, 2018). Multigroup analyses typically employ multiple steps (Weiber & Mühlhaus, 2014). First, an unconstrained baseline model is estimated, allowing all relationships between variables to differ depending on the grouping factor (in this case, the editorial stance). Second, a fully constrained model that postulates no differences depending on the grouping variable is estimated. When this model shows a worse fit to the data, some of the paths interact with the grouping variable, and further inspections are justified. In our

![Figure 8](image-url). Simple slopes for the perceived credibility of the right-wing leaning distorted versus journalist news among participants scoring high (+1SD) versus low (-1SD) on conspiracy mentality in Study 3. CM = conspiracy mentality. Perceived credibility and conspiracy mentality were z-standardized. Exposure to distorted news was dummy-coded (0 = “journalist news”, 1 = “distorted news”).
study, the fully constrained model showed a significantly worse fit, $\chi^2_{\text{diff}}(1) = 53.50$, $p < .001$.

We thus formulated a partially constrained model, which postulated the following three differences between distorted news with a right-wing editorial leaning versus left-wing editorial leaning. (1) The descriptive data already indicated that the distorted news article with the left-wing editorial line (i.e., attacking the conservative politician) was perceived to be more credible than the distorted news article with the right-wing editorial line attacking the candidate from the Green party. (2) We expected that authoritarianism would be associated with a larger susceptibility to distorted news with a right-leaning editorial slant but might not increase the susceptibility to distorted news with a left-leaning editorial slant. (3) As in the first two studies, we adjusted candidate perception for participants political orientation to account for the influence of participants political orientation on the perceptions of candidates of certain political parties. We expected that participants would perceive candidates of parties with an opposing political orientation more negatively (i.e., right-leaning participants would perceive the candidate of the Green party more negatively and left-leaning candidates the conservative candidate). These three paths were set free in the final model. All other paths were constrained to be equal for distorted news with a
Table 8. Model fit depending on constrains, Study 3.

| Candidate perception | $\chi^2$ df | $p$ | $\chi^2$/df | CFI | TLI | RMSEA | AIC | BIC |
|----------------------|-------------|-----|-------------|-----|-----|-------|-----|-----|
| threshold for acceptable fit | < 2.5 | >.90 | >.90 | < .08 |
| threshold for excellent fit | >.95 | >.95 | < .05 |
| 1 unconstrained baseline model | 19 | 16 | .26 | 1.19 | .99 | .98 | .03 | 8298 | 8597 |
| 2 fully constrained model | 33 | 17 | .01 | 1.94 | .98 | .92 | .06 | 8229 | 8515 |
| 3 partially constrained model | 300 | 26 | .29 | 1.15 | .99 | .99 | .03 | 8198 | 8456 |

Notes. CFI = Comparative fit index, TLI = Tucker-Lewis index, RMSEA = Root-mean square error. AIC = Akaike information Criterion, BIC = Bayes information criterion. The unconstrained baseline model allowed all path to vary as a function of the articles editorial line, the fully constrained model allowed none of the path to vary. The partially constrained model set the path between distorted news and perceived credibility, the paths from authoritarianism to perceived credibility, and the path between political orientation of the participant and candidate perception free.

right-wing versus left-wing editorial line. The partially constrained model no longer differed from the unconstrained model $- \chi_{\text{diff}}^2(10) = 10.4, p = .40$ (see Table 8), confirming that we had successfully identified all relationships affected by the two editorial slant conditions. The final model explained .46% of the variance in candidate perception. Table 8 shows the fit indices across models.

Participants who had been exposed to the distorted news article with the right-wing editorial slant perceived the candidate less positively ($M = 3.15, SD = 1.46$) than participants who had been exposed to the journalist news article about the same candidate ($M = 4.47, SD = 1.25$), total effect $c = -.85, SE = .08, CI [−1.02, −.69], p < .001$. The same was true for participants exposed to the distorted news with the left-wing editorial slant that also perceived the conservative candidate less favorably after reading the distorted ($M = 3.03, SD = 1.40$) versus journalist news ($M = 4.39, SD = 1.23$), total effect $c = -0.96, SE = .09, CI [−1.13, −.79], p < .001$. The effects of exposure to distorted news for both news with a right-wing and a left-wing editorial slant were partially mediated via differences in perceived credibility, indirect effect of exposure to right-leaning distorted news, $ab = −0.42, SE = .07, CI [−0.54, −0.29], p < .001$, indirect effect of exposure to left-leaning distorted news, $ab = −0.52, SE = .07, CI [−0.66, −0.38], p < .001$.

For the distorted news with the left-leaning editorial stance, the strength of the indirect effects depended on participants’ levels of right-wing authoritarianism (moderated indirect effect $\omega = −0.27, SE = 0.13, CI [−0.53, −0.001], p < .05$). For the distorted news with the right-wing editorial line, the mediated moderation effect of authoritarianism did not reach statistical significance ($\omega = −0.11, SE = 0.10, CI [−0.31, 0.10], p = .31$). The moderated indirect effect for conspiracy mentality did not reach statistical significance for the distorted news with the left-leaning editorial stance ($\omega = −0.17, SE = 0.09, CI [−0.34, 0.004], p = .07$), nor for distorted news with the right-leaning editorial stance ($\omega = −0.14, SE = 0.08, CI [−0.29, 0.09], p = .06$). In the next step, we thus inspected only the effects of distorted news with a left-leaning editorial stance on participants with high (+1SD) and low (−1SD) scores of authoritarianisms, the table with all estimates is provided in Supplementary Material B.

**Right-wing authoritarianism**

High authoritarians reported less favorable attitudes toward the conservative candidate after reading the distorted (vs. journalist) article, total effect $c = −0.83, SE = .12, CI [−1.06,
−0.59], $p < .001$. The effect was partially mediated by perceived credibility, indirect effect, $ab = −0.39, SE = .10, CI [−0.58, −0.20], p < .001$, and partially direct, $c' = −0.44, SE = .09, CI [−0.62, −0.25], p < .001$. Among high authoritarians, exposure to distorted news led to less favorable attitudes toward the candidate not only because the distorted news failed to have the same positive effect journalist news had on favorable attitudes toward the candidate, but also because distorted news directly led to less favorable attitudes toward the candidate.

For low authoritarians, exposure to distorted news had no total negative effect on attitudes toward the candidate ($c = −0.22, SE = .16, CI [−0.53, 0.09], p = .17$). Instead, we observed a pattern of inconsistent mediation (Kenny, 2014), such that exposure to distorted news had a negative indirect effect on attitudes toward the candidate, $ab = −0.65, SE = .10, CI [−0.84, −0.45], p < .001$, but a positive direct effect, $c' = 0.43, SE = .09, CI [0.25, 0.61], p < .001$. Among low authoritarians, journalist and distorted news both led to more favorable attitudes toward the candidate. This effect was stronger for journalist news.

**General discussion**

**Individual susceptibility to distorted news**

In all three studies, distorted news was perceived as being substantially less credible than journalist news (H1). This finding is consistent with prior work showing that laypersons can distinguish untrustworthy from trustworthy news outlets (Pennycook & Rand, 2019). It also shows that they are quite good in evaluating the perceived credibility of single articles. Yet, we also observed substantial interindividual differences with regard to this difference in perceived credibility depending on participants’ level of right-wing authoritarianism and conspiracy mentality.

Across studies, high (vs. low) authoritarians perceived distorted news with a right-wing editorial line to be more credible (H4), matching prior research on the strong association between right-wing authoritarianism and out-group prejudice (Cohrs & Asbrock, 2009; Duckitt & Sibley, 2010), and a larger susceptibility toward right-wing content (Frischlich et al., 2015; Rieger et al., 2017). Slightly unexpectedly, high (vs. low) authoritarians also perceived a distorted news article with a left-leaning editorial stance as being more credible. Albeit unexpected, this finding is in line with studies, in which high authoritarians showed a preference for one-sided messages (Lavine et al., 2005) including strongly biased propagandist material transmitting different extremist world-views (Rieger et al., 2013).

In contrast to our expectations, we did not find a larger propensity to fall for distorted news depending on participants’ political orientation, wherefore we rejected H2. Although this contradicts prior research on the association between political leaning and the evaluation of distorted news (Arendt et al., 2019; Faragó et al., 2020), the association between right-wing authoritarianism and political orientation ($r = .44$ to .51 across studies) suggests that the relevant share of the variance of political attitudes might already have been captured by our authoritarianism measure. As such, our findings are nevertheless comparable with studies arguing that cognitive styles, which are typical for individuals with a conservative or right-wing political ideology (such as a
lower tolerance for ambiguity) are positively associated with the belief in distorted news (for a review, see Jost et al., 2018). The same cognitive styles are also typically associated with right-wing authoritarianism (Jost, 2017).

We found evidence for a larger susceptibility for individuals with higher scores of conspiracy mentality to distorted news with a right-leaning but not with a left-leaning editorial stance (H3). In all three studies, conspiracy mentality was associated with a larger credibility ascribed to distorted new. Yet, this was largely due to a devaluation of journalist news. Hence, although our findings are in line with prior research suggesting that conspiracy mentality is a potential susceptibility factor for ‘fake news’ (Halpern et al., 2019) and increases distrust in power and expert sources (Imhoff & Bruder, 2014; Imhoff et al., 2018), and ideological asymmetries with regard to the susceptibility for conspiracy beliefs among right-leaning compared to left-leaning individuals (Lamberty et al., 2018; Van Der Linden et al., 2020), future research on the interplay between conspiracy mentality and the evaluation of both journalist and distorted news is needed.

**Effects of distorted news**

Across studies, exposure to distorted news led to less favorable attitudes toward the unknown political candidate (irrespective of whether the candidate belonged to the Green or the conservative party). This effect was partially explained through the differences in perceived credibility of the journalist versus the distorted news such that journalist news was perceived as more credible and thus led to more favorable attitudes toward the candidate. This effect was absent after participants read the distorted news. This finding is compatible with uncertainty reduction theory (Berger, 1993) which suggests that uncertainty with regard to strangers (such as the unknown candidate in our study) is always aversive and knowing more about someone reduces uncertainty and thus increases liking (Douglas, 1990). Furthermore, this results pattern suggests that distorted news could impact the larger information ecosystem indirectly by depleting citizens from access to trustworthy sources for attitude formation.

The indirect effect of exposure varied depending on participants’ level of authoritarianism. For high authoritarians, exposure to distorted news led to less favorable attitudes toward the candidate as compared to journalist news both because the positive effect of journalist news on favorable attitudes was missing and because distorted news had a negative effect in two out of three studies. For low authoritarians, distorted news exposure did not lead to less favorable attitudes – in two studies, they even reported more favorable attitudes toward the candidate after reading the distorted news article, although the positive effect of exposure was substantially larger for journalist news. Noteworthy, study 3 failed to replicate the notion that the indirect effect of exposure to right-wing leaning news indirectly led to less favorable effects, wherefore future research on the stability of the effect and its boundary conditions is needed.

Partially, the indirect effect of exposure to distorted news also varied depending on participants’ level of conspiracy mentality. In Study 1 those with high levels of conspiracy mentality also reported less favorable attitudes toward the candidate after exposure to distorted (vs. journalist) news. This direct effect did not replicate in the other two studies, suggesting that conspiracy mentality mainly increases susceptibility to distorted news by preventing that participants relied on journalist news when forming their attitudes.
In none of the studies did exposure to distorted news increase threat ascribed to refugees or voting intentions. As such, our findings contribute to the growing call for a more nuanced understanding with regard to the threat from distorted news and related phenomena (Jungherr & Schroeder, 2021; Nyhan, 2020). Former findings on the effects of legacy news (Igartua et al., 2011; De Vreese & Semetko, 2004) cannot be directly transferred to distorted news effects. The observed effects were also restricted to areas participants had no strong prior attitudes toward (in contrast to familiar topics such as refugees and political parties). At the same time, our results do add to suggestions that ‘disinformation is a limited problem with limited reach among the public’ (Jungherr & Schroeder, 2021, p. 1) by showing that distorted news can have a two-sided effect: the lack of a positive effect journalist news has on low susceptibility individuals and an additional direct biasing effect among susceptible audiences.

**Limitations and conclusion**

Our studies are not without limitations. First, our samples were rather young, educated and rated their propensity to vote for the Green party as relatively high. Although Study 3 showed that the effects of distorted news on attitude formation were similar when the candidate was presented as a member of the conservative party, extending our findings to less educated and more right-leaning samples as well as including news about candidates from other parties would be desirable. Second, participants read only one article. Repeated exposure can increase media effects over time (Matthes & Schmuck, 2017). Future research employing long-term designs seems thus desirable. Finally, our research relied on self-reported attitudes and should be accompanied by behavioral data in future studies.

Nevertheless, our studies provide consistent evidence for the effects of reading even a single distorted news article on the perception of a so-far unknown political candidate – particularly among susceptible audiences who perceive such news as being credible.

**Notes**

1. Pilot testing with another group of participants showed that the journalist news article was rated as less ‘biased’ and more ‘balanced’ than the distorted article (see Supplementary Material A).
2. Initially, we also administered a measure for website likability using six items by Thielisch and Hirschfeld (2019), such as ‘the text is vividly presented’ (Cronbach’s $\alpha = .88$) to account for these design effects but as design had no effect we do not describe this scale here in detail.
3. A pretest with $N = 20$ individuals showed that the left-leaning distorted article was perceived as being less professional, and more biased and distorted than the journalist article. A comparison of the pretests for studies 2 und 3 showed that the left-leaning and the right-leaning distorted news article were largely comparable on the examined dimensions such as distortedness or bias (see Supplementary Material A).
4. Robust maximum-likelihood estimators do not allow for bootstrapping, thus we calculated additional models using the maximum likelihood estimator and 5000 bootstrap samples. The results did not differ from those reported here, wherefore we only report the recommended robust results.
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Data availability statement

All raw data, analysis scripts are available via the open science framework under the following link https://osf.io/xj7tm/

References

Aiken, L. S., West, S. G., & Reno, R. R. (1991). Multiple regression: Testing and interpreting interactions. SAGE.
Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. Journal of Economic Perspectives, 31(2), 211–236. https://doi.org/10.1257/jep.31.2.211
Altemeyer, B. (1988). Enemies of Freedom. San Francisco, California: Jossey-Bass Inc.
Alwin, D. F. (1997). Feeling thermometers versus 7-point scales. Which are better? Sociological Methods and Research, 25(3), 318–340. https://doi.org/10.1177/0049124197025003003
Arendt, F. (2013). Dose-dependent media priming effects of stereotypic newspaper articles on implicit and explicit stereotypes. Journal of Communication, 63(5), 830–851. DOI:10.1111/jcom.12056
Arendt, F., Haim, M., & Beck, J. (2019). Fake News, Warnhinweise und perzipierter Wahrheitsgehalt: Zur unterschiedlichen Anfälligkeit für Falschmeldungen in Abhängigkeit von der politischen Orientierung. [Fake news, warnings and perceptual truth: On the differential susceptibility for fake news depending on recipients’ political orientations]. Publizistik, 64 (2), 181–204. https://doi.org/10/gfw6gt
Bader, K., Jansen, C., & Rinsdorf, L. (2020). Jenseits der Fakten: Deutschsprachige Fake News aus Sicht der Journalistik [Beyond facts: Journalist perspectives on fake news in German language]. In M. Steinebach, K. Bader, L. Rinsdorf, N. Krämer, & A. Roßnagel Eds., Desinformationen aufdecken und bekämpfen. Interdisziplinäre Ansätze gegen Desinformationskampagnen und für Meinungsppluralität [Detecting and combating disinformation: Interdisciplinary approaches against disinformation campaigns and for the plurality of opinions]. (Vol. 45, pp. 33–76). Nomos Verlag. https://doi.org/10.5771/9783748904816
Bartels, L. M. (2002). Beyond the running tally: Partisan bias in political perceptions. Political Behavior, 24(2), 117–150. https://doi.org/10.1023/A:101226224601
Beierlein, C., Asbrock, F., Kauff, M., & Schmidt, P. (2014). Die Kurzskala Autoritarismus (KSA-3). [The short-scale authoritarianism (KSA-3). GESIS- Working Papers, 35. Gesis. https://doi.org/10.4232/1.11753
Berger, C. R. (1993). Uncertainty and social interaction. Annals of the International Communication Association, 16(1), 491–502. https://doi.org/10.1080/23808985.1993.1167865
Boberg, S., Quandt, T., Schatto-Eckrodt, T., & Frischlich, L. (2020). Pandemic populism: Facebook pages of alternative news media and the corona crisis—A computational content analysis. ArXiv Preprint. https://arxiv.org/abs/2004.02566

Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy mentality questionnaire. Frontiers in Psychology, 4(April), 1–15. https://doi.org/10.3389/fpsyg.2013.00225

Campbell, M. J. (2006). Appendix 3: Bootstrapping and variance robust standard errors. In Statistics at square two (pp. 109–116). John Wiley & Sons, Ltd. https://doi.org/10.1002/9780470755839.app3

Cohrs, J. C., & Asbrock, F. (2009). Right-wing authoritarianism, social dominance orientation and prejudice against threatening and competitive ethnic groups. European Journal of Social Psychology, 39(4), 699–722. https://doi.org/10.1002/ejsp.545

De Vreese, C. H., & Semetko, H. A. (2004). News matters: Influences on the vote in the Danish 2000 Euro referendum campaign. European Journal of Political Research, 43(5), 699–722. https://doi.org/10.1111/j.1467-2454.2004.00672.x

Douglas, W. (1990). Uncertainty, information-seeking, and liking during initial interaction. Western Journal of Speech Communication: WJSC, 54(1), 66–81. https://doi.org/10.1080/10570319009374325

Duckitt, J. (2015). Authoritarian Personality. In J. D. Wright (Ed.), International encyclopedia of the social and behavioral sciences (2nd, pp. 255–261). Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.24042-7

Duckitt, J., & Sibley, C. G. (2010). Personality, ideology, prejudice, and politics: A dual-process motivational model. Journal of Personality, 78(6), 1861–1893. https://doi.org/10.1111/j.1467-6494.2010.00672.x

Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. Psychological Methods, 12(1), 1–22. https://doi.org/10.1037/1082-989X.12.1.1

Faragó, L., Kende, A., & Krekő, P. (2020). We only believe in news that we doctored ourselves: The connection between partisanship and political fake news. Social Psychology, 51(2), 77–90. https://doi.org/10.1027/1864-9335/a000391

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behavior Research Methods, 39(2), 175–191. https://doi.org/10.3758/BF03193146

Field, A. (2018). Discovering statistics using IBM SPSS statistics (5th ed.). Sage Publications, Ltd.

Flanagan, A. J., Winter, S., & Metzger, M. J. (2020). Making sense of credibility in complex information environments: The role of message sidedness, information source, and thinking styles in credibility evaluation online. Information, Communication & Society, 23(7), 1038–1105. https://doi.org/10.1080/1369118X.2018.1547411

Frischlich, L., Klapproth, J., & Brinkshulte, F. (2020). Between mainstream and alternative – Co-orientation in right- wing populist alternative news media. In C. Grimme, M. Preuß, F. W. Takes, & A. Waldherr (Eds.), Disinformation in open online media (pp. 150–167). Springer. https://doi.org/10.1007/978-3-030-39627-5_12

Frischlich, L., Rieger, D., Hein, M., & Bente, G. (2015). Dying the right-way? Interest in and perceived persuasiveness of parochial extremist propaganda increases after mortality salience. Frontiers in Psychology: Evolutionary Psychology and Neuroscience, 6(1222), 1–11. https://doi.org/10.3389/fpsyg.2015.01222

Fuchs, M. (2003). Rechtsextremismus von Jugendlichen: Zur Erklärungskraft verschiedener theoretischer Konzepte [Right-wing extremism of young adults: Explanatory power of different theoretical concepts]. Kölner Zeitschrift Für Soziologie Und Sozialpsychologie, 55(4), 654–678. https://doi.org/10.1002/s11577-003-0116-3

Guess, A., Nyhan, B., & Reifler, J. (2020). Exposure to untrustworthy websites in the 2016 U.S. election. Nature Human Behaviour, 4(March). 472–480. https://doi.org/10.1038/s41562-020-0833-x
Gunther, R., Beck, P. A., & Nisbet, E. C. (2018). “Fake news” and the defection of 2012 Obama voters in the 2016 presidential election. Electoral Studies, 61(October), 1–8. https://doi.org/10.1016/j.electstud.2019.03.006

Halpern, D., Valenzuela, S., Katz, J., & Miranda, J. P. (2019). From belief in conspiracy theories to trust in others: Which factors influence exposure, believing and sharing fake news. In G. Meiselwitz (Ed.), Social computing and social media. Design, human behavior and analytics (Vol. 11578, pp. 217–232). Springer International Publishing. https://doi.org/10.1007/978-3-030-21902-4_16

Hamilton, M. A. (1998). Message variables that mediate and moderate the effect of equivocal language on source credibility. Journal of Language and Social Psychology, 17(1), 109–143. https://doi.org/10.1177/0261927X980171006

Heft, A., Mayerhöffer, E., Reinhardt, S., & Knüpfer, C. (2020). Beyond Breitbart: Comparing right-wing digital news infrastructures in six Western democracies. Policy & Internet, 12(1), 20–45. https://doi.org/10.1002/poi3.219

Hendrich, C. K. (2017, May 10). “Ich weiß nicht, ob sie das verstehen“ [“I don’t know, wether you understand this“]. Welt Online. https://www.welt.de/politik/deutschland/article164440546/Ich-weiss-nicht-ob-sie-das-verstehen.html

Holt, K., Ustad Figenschou, T., & Frischlich, L. (2019). Key-dimensions of alternative news media. Digital Journalism, 7(7), 860–869. https://doi.org/10.1080/21670811.2019.1625715

Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). Communication and persuasion. Yale University Press.

Huber, P. J. (1967). The behavior of maximum likelihood estimates under nonstandard conditions. Proceedings of the Fifth Berkeley Symposium on Mathematics, 5(1), 221–233. https://projecteuclid.org/ebooks/berkeley-symposium-on-mathematical-statistics-and-probability-ProceedingsoftheFifthBerkeleySymposiumonMathematicalStatisticsandProbabilityVolume1-Statistics/chapter/Thebehaviorofmaximumlikelihoodestimatesundernonstandardconditions/bsmsp/1200512988

Humphrechts, E. (2019). Where ‘fake news’ flourishes: A comparison across four Western democracies. Information Communication and Society, 22(13), 1973–1988. https://doi.org/10.1080/1369118X.2018.1474241

Igartua, J. J., Moral-Toranzo, F., & Fernández, I. (2011). Cognitive, attitudinal, and emotional effects of news frame and group cues, on processing news about immigration. Journal of Media Psychology, 23(4), 174–185. https://doi.org/10.1027/1864-1105/a000050

Imhoff, R., & Bruder, M. (2014). Speaking (un-)truth to power: Conspiracy mentality as a generalised political attitude. European Journal of Personality, 28(1), 25–43. https://doi.org/10.1002/per.1930

Imhoff, R., Lamberty, P., & Klein, O. (2018). Using power as a negative cue: How conspiracy mentality affects epistemic trust in sources of historical knowledge. Personality and Social Psychology Bulletin, 44(9), 1364–1379. https://doi.org/10.1177/0146167218768779

Johnson, P. O., & Fay, L. C. (1950). The Johnson-Neyman technique, its theory and application. Psychometrika, 15(4), 349–367. https://doi.org/10.1007/BF02288864

Jost, J. T. (2017). Ideological asymmetries and the essence of political psychology. Political Psychology, 38(2), 167–208. https://doi.org/10.1111/pps4.12407

Jost, J. T., Van Der Linden, S., Panagopoulos, C., & Hardin, C. D. (2018). Ideological asymmetries in conformity, desire for shared reality, and the spread of misinformation. Current Opinion in Psychology, 23(October), 77–83. https://doi.org/10.1016/j.copsyc.2018.01.003

Jungherr, A., & Schroeder, R. (2021). Disinformation and the structural transformations of the public arena: Addressing the actual challenges to democracy. Social Media + Society, 7(1), 1–13. https://doi.org/10.1177/2056305121988928

Kenny, D. A. (2014). Mediation. http://davidakenny.net/cm/mediate.htm

Knock, N., & Haday, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. Information Systems Journal, 28(1), 227–261. https://doi.org/10.1111/isj.12131
Koenker, R. (1981). A note on studentizing a test for heteroscedasticity. *Journal of Econometrics, 17*(1), 107–112. https://doi.org/10.1016/0304-4076(81)90062-2

Kühl, S., & Vogel, D. (2017, May). Treffen mit Kirche und Diakonie [Meeting with church and diaconia]. http://www.kirche-mv.de/Merkel-besucht-Stralsunder-Nachbarschaftszentrum-G.85180.html

Lai, K. (2018). Estimating standardized SEM parameters given nonnormal data and incorrect model: Methods and comparison. *Structural Equation Modeling: A Multidisciplinary Journal, 25*(4), 600–620. https://doi.org/10.1080/10705511.2017.1392248

Lamberty, P. K., Hellmann, J. H., & Oeberst, A. (2018). The winner knew it all? Conspiracy beliefs and hindsight perspective after the 2016 US general election. *Personality and Individual Differences, 123*(November), 236–240. https://doi.org/10.1016/j.paid.2017.11.033

Landmann, H., Gaschler, R., & Rohmann, A. (2019). What is threatening about refugees? Identifying different types of threat and their association with emotional responses and attitudes towards refugee migration. *European Journal of Social Psychology, 49*(7), 1401–1420. https://doi.org/10.1002/ejsp.2593

Lavine, H., Lodge, M., & Freitas, K. (2005). Threat, authoritarianism, and selective exposure to information. *Political Psychology, 26*(2), 219–244. https://doi.org/10.1111/j.1467-9221.2005.00416.x

Lazer, D. M. J., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., Metzger, M. J., Nyhan, B., Pennycook, G., Rothschild, D., Schudson, M., Sloman, S. A., Sunstein, C. R., Thorson, E. A., Watts, D. J., & Zittrain, J. L. (2018). The science of fake news. *Science, 359*(6380), 1094–1096. https://doi.org/10.1126/science.aaq2998

Leiner, D. J. (2013). Too fast, too straight, too weird: Post hoc identification of meaningless data in Internet surveys. *Survey Research Methods, 13*(3), 229–248. https://doi.org/10/gf3pqq

Long, J. A. (2020). *Interactions* (1.13) [R]. https://cran.r-project.org/web/packages/interactions/interactions.pdf

Mansel, J. (2006). Emotionale Verarbeitung der Interaktionen mit Zuwanderern und fremdenfeindliche Einstellungen [Emotional processing of interactions with immigrants and xenophobic attitudes]. *Soziale Probleme, 17*(1), 90–114. https://www.ssoar.info/ssoar/handle/document/24615

Mattern, J. (2017). *Integration braucht Begegnung und Geduld* [Integration needs time and patience]. *Ostsee Zeitung.* http://www.ostsee-zeitung.de/Vorpommern/Ribnitz-Damgarten/Integration-braucht-Begegnung-und-Geduld

Matthes, J., & Kohring, M. (2003). Operationalisierung von Vertrauen in Journalismus [Operationalisation of trust in journalism]. *Medien & Kommunikationswissenschaft, 51*(1), 5–23. https://doi.org/10.5771/1615-634x-2003-1-5

Matthes, J., & Schmuck, D. (2017). The effects of anti-immigrant right-wing populist ads on implicit and explicit attitudes: A moderated mediation model. *Communication Research, 44*(4), 556–581. https://doi.org/10.1177/0093650215577859

Media Convergence and Social Media (Unit I.4)’. (2020, July 7). *Tackling online disinformation*. European Commission. https://ec.europa.eu/digital-single-market/en/tackling-online-disinformation

Metzger, M. J., Flanagan, A. J., Eyal, K., Lemus, D. R., & Mccann, R. M. (2003). Credibility for the 21st century: Integrating perspectives on source, message, and media credibility in the contemporary media environment. *Annals of the International Communication Association, 27*(1), 293–335. https://doi.org/10.1080/23808985.2003.11679029

Mourão, R. R., & Robertson, C. T. (2019). Fake news as discursive integration: An analysis of sites that publish false, misleading, hyperpartisan and sensational information. *Journalism Studies, 20*(14), 2077–2095. https://doi.org/10.1080/1461670X.2019.1566871

Müller, P., & Schulz, A. (2021). Alternative media for a populist audience? Exploring political and media use predictors of exposure to Breitbart, Sputnik, and Co. *Information, Communication & Society, 24*(2), 1–17. https://doi.org/10/gf6rsr
Musil, C. M., Warner, C. B., Yobas, P. K., & Jones, S. L. (2002). Research techniques for handling missing data. *Western Journal of Nursing Research, 24*(7), 815. https://doi.org/10.1177/019394502762477004

Newman, N., Fletcher, R., Kalogeropoulos, A., & Nielsen, R. K. (2019). *Reuter institute digital news report 2019*. Reuters Institute for the Study of Journalism. https://doi.org/10.2139/ssrn.2619576

Nilsson, A., & Jost, J. T. (2020). The authoritarian-conservatism nexus. *Current Opinion in Behavioral Sciences, 34*(April), 148–154. https://doi.org/10.1016/j.cobeha.2020.03.003

Nyhan, B. (2020). Facts and myths about misperceptions. *Journal of Economic Perspectives, 34*(3), 220–236. https://doi.org/10.1257/jep.34.3.220

Pennycook, G., & Rand, D. G. (2019). Fighting misinformation on social media using crowd-sourced judgments of news source quality. *Proceedings of the National Academy of Sciences, 116*(7), 2521–2526. https://doi.org/10.1073/pnas.1806781116

Perlitz, T. (2017, May). Merkel besichtigt Zuwanderer: “Gut Ding will Weile haben” [Merkel inspects immigrants: “Haste makes waste”]. *Compact Online*. https://www.compact-online.de/merkel-besichtigt-zuwanderer-gut-ding-will-weile-haben/

Pornpitakpan, C. (2004). The persuasiveness of source credibility: A critical review of five decades’ evidence. *Journal of Applied Social Psychology, 34*(2), 243–281. https://doi.org/10.1111/j.1559-1816.2004.tb02547.x

Quandt, T., Frischlich, L., Boberg, S., & Schatto-Eckrodt, T. (2019). Fake news. In T. P. Vos, F. Hansuch, D. Dimitrakopolous, M. Geertmsa-Sligh, & A. Sehl (Eds.), *The international encyclopaedia of journalism studies*, (pp. 1–6). Wiley.

Rapp, D. N. (2016). The consequences of reading inaccurate information. *Current Directions in Psychological Science, 25*(4), 281–285. https://doi.org/10.1177/0963721416649347

Rieger, D., Frischlich, L., & Bente, G. (2013). *Propaganda 2.0: Psychological effects of right-wing and Islamic extremist internet videos* (Vol. 44). Wolters Kluwer Deutschland.

Rieger, D., Frischlich, L., & Bente, G. (2017). Propaganda in an insecure, unstructured world: How psychological uncertainty and authoritarian attitudes shape the evaluation of right-wing extremist internet propaganda. *Journal for Deradicalization, 10*.

Rosseel, Y. (2012). *Lavaan: An R package for structural equation modeling*. *Journal of Statistical Software, 48*(2), 1–36. https://doi.org/10.18637/jss.v048.i02

Rössler, P. (2011). *Skalenhandbuch Kommunikationswissenschaft* [Scale handbook Communication Science]. Springer.

Schenk-Hamlin, W. J., Procter, D. E., & Rumsey, D. J. (2000). The influence of negative advertising frames on political cynicism and politician accountability. *Human Communication Research, 26*(1), 53–74. https://doi.org/10.1111/j.1468-2958.2000.tb00749.x

Sherif, C. W., Sherif, M., & Nebergall, R. E. (1982). *Attitude and attitude change: The social judgment-involvement approach* (Revised ed.). Greenwood Press.

Starbird, K. (2017). Examining the alternative media ecosystem through the production of alternative narratives of mass shooting events on Twitter. *International AAAI Conference on Web and Social Media, 1–10*. Montréal, Québec, Canada: ICWSM.

Steinmetz, H. (2015). *Lineare strukturgleichungsmodelle: Eine Einführung mit R* [Linear structural equation modelling: An introduction using R]. Rainer Hampp Verlag.

Stekhoven, D. J., & Buhlmann, P. (2012). MissForest—Non-parametric missing value imputation for mixed-type data. *Bioinformatics, 28*(1), 112–118. https://doi.org/10.1093/bioinformatics/btr597

Thielisch, M. T., & Hirschfeld, G. (2019). Facets of website content. *Human-Computer Interaction, 34*(4), 279–327. https://doi.org/10.1080/07370024.2017.1421954

Torabi Asr, F. (2019, August 16). One potential route to flagging fake news at scale: Linguistic analysis. *Nieman Lab*. https://www.niemanlab.org/2019/08/one-potential-route-to-flagging-fake-news-at-scale-linguistic-analysis/

Ustadt Figenschou, T., & Ihlbaek, K. A. (2019). Challenging journalistic authority. *Journalism Studies, 20*(9), 1–17. https://doi.org/10/gfj4cm
Valkenburg, P. M., & Peter, J. (2013). The differential susceptibility to media effects model. *Journal of Communication, 63*(2), 221–243. https://doi.org/10.1111/jcom.12024

Van Der Linden, S., Panagopoulos, C., Azevedo, F., & Jost, J. T. (2020). The paranoid style in American politics revisited: An ideological asymmetry in conspiratorial thinking. *Political Psychology, 42*(1), 23–51. https://doi.org/10.1111/pops.12681

van der Linden, S., Panagopoulos, S., Azevedo, F., & Jost, John T. (2021). The paranoid style in American politics revisited: An ideological asymmetry in conspiratorial thinking. *Political Psychology, 42*(1), 23–51. https://doi.org/10.1111/pops.12681

van Prooijen, J.-W., & van Vugt, M. (2018). Conspiracy theories: Evolved functions and psychological mechanisms. *Perspectives on Psychological Science, 13*(6), 770–788. https://doi.org/10.1177/1745691618774270

Wardle, C. (2018). The need for smarter definitions and practical, timely empirical research on the information disorder. *Digital Journalism, 6*(8), 951–963. https://doi.org/10.1080/21670811.2018.1502047

Weiber, R., & Mühlhaus, D. (2014). *Strukturgleichungsmodellierung [Structural-equation modeling]*. Springer Gabler.

White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica, 48*(4), 4. https://doi.org/10.2307/1912934

Wickham, H. (2020). *Modelr (0.1.8) [R]*. https://CRAN.R-project.org/package=modelr.

Wu, A. D., & Zumbo, B. D. (2008). Understanding and using mediators and moderators. *Social Indicators Research, 87*(3), 367–392. https://doi.org/10.1007/s11205-007-9143-1

Zeileis, A., Lumley, T., Graham, N., & Koell, S. (2020). Various versatile variances: An object-oriented implementation of clustered covariances in R. *Journal of Statistical Software, 95*(1), 1–17. https://doi.org/10.18637/jss.v011.i10

Zick, A., Küpper, B., & Berghan, W. (2019). *Verlorene Mitte—Feindselige Zustände Rechtsextreme Einstellungen in Deutschland 2018/19 [Lost center – hostile states. Right-wing extremism in Germany]*. Friedrich Ebert Foundation.

Zimmermann, F., & Kohring, M. (2020). Mistrust, disinforming news, and vote choice: A panel survey on the origins and consequences of believing disinformation in the 2017 German parliamentary election. *Political Communication, 37*(2), 215–237. https://doi.org/10.1080/10584609.2019.1686095