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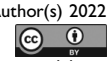
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Conspiracy thinking and the role of media use: Exploring the antecedents of conspiratorial predispositions

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Abstract
In contrast to beliefs in specific conspiracy theories, conspiratorial predispositions refer to people's propensity to view the world in conspiratorial terms. As such, they are one of the most important antecedents of beliefs in specific conspiracy theories. Understanding the antecedents of conspiratorial predispositions is hence important. Despite this, there is still only limited research on the antecedents of conspiratorial predispositions. Previous research has also not taken the role of media use into account, even though media constitute the most important source of politically and societally information. To remedy this, in the current study we use a large-scale panel study in Sweden to investigate the antecedents of conspiratorial predispositions, with a particular focus on the role of media use. Among other things, the results show that use of right-wing political alternative media is one of the most important antecedents of conspiratorial predispositions, even when accounting for ideological leaning and ideological extremity.

Keywords
conspiracy theories, conspiratorial predispositions, media use, ideological leaning, media effects

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Introduction

While conspiracy theories (CTs) have been around for centuries, there are indications that they have become a more pressing problem. Some examples are widely circulated CTs that the 2020 US election was rigged, that there is a plan to replace white Christians in Europe with Muslim immigrants, and a host of CTs related to the outbreak of and vaccines against Covid-19. The presence of CTs also seems universal, although the specifics of CTs reflect national contexts (Önnerfors and Krouwel, 2021).

This development has intensified scholarly efforts to understand the antecedents, nature, and effects of conspiracy theorizing. Thus far, most research has however focused on beliefs in specific CTs, with less research on what is variously labelled "conspiratorial predispositions" (Uscinski et al., 2016), "conspiracy thinking" (Walter and Drochon, 2020), "conspiracist ideation" (Swami et al., 2011), "generic conspiracist beliefs" (Brotherton et al., 2013), or a "conspiracy mindset" (Sutton and Douglas, 2020). Although the terminology varies, all these concepts refer to a "general tendency to engage with conspiracist explanations" (Brotherton et al., 2013: 1). Here we will use the term *conspiratorial predispositions* to refer to this tendency, which may be more or less strong.

For several reasons, the relative lack of research on the antecedents of conspiracy predispositions is problematic. First, research shows that conspiratorial predispositions are one of the most important factors predicting beliefs in specific CTs (Bruder et al., 2013; Enders et al., 2021b; Swami et al., 2011). Understanding the antecedents of conspiratorial predispositions is hence important both in itself and for a fuller understanding of beliefs in specific CTs. Second, the antecedents of conspiratorial predispositions and beliefs in specific CTs are not necessarily the same. For example, conspiratorial predispositions are less likely to be affected by partisan cheerleading (Bullock and Lenz, 2019) and partisan motivated reasoning (Miller et al., 2016) than beliefs in specific CTs. Findings related to conspiratorial predispositions are also more generalizable than research on beliefs in specific CTs, which are more embedded in specific national and political contexts.

As conspiratorial predispositions should be understood as a tendency, they may also be influenced media use. A vast literature has shown that media may have an impact on a range of attitudes, beliefs, and emotions (McCombs and Valenzuela, 2020; Nabi and Oliver, 2009), suggesting that they may also be related with conspiratorial predispositions. Thus far, most research linking media use and conspiracy theorizing has however focused on media use and beliefs in specific CTs (Allington *et al*., 2021; Stempel et al., 2007) or how conspiratorial predispositions moderate the impact of media use on beliefs in specific CTs (Enders et al., 2021b; Mancosu and Vegetti, 2021). Whether and how media use is related with conspiratorial predispositions is however largely unexplored.

Against this background, the purpose of this study is to investigate the antecedents of conspiratorial predispositions, with a particular focus on media use. Empirically we will focus on the case of Sweden, for reasons to be explained later.

Conceptualizing generic conspiracist beliefs

Although different definitions of conspiracy theories (CTs) can be found in the literature, a common definition states that a CT "is a proposed explanation of some historical event

(or events) in terms of the significant causal agency of a relatively small group of persons – the conspirators – acting in secret" (Keeley, 1999: 116). CTs are thus "attempts to explain the ultimate causes of significant social and political events and circumstances with claims of secret plots by two or more powerful actors" (Douglas et al., 2019: 4), "acting for their own benefit and against the common good" (Uscinski, 2019b: 49). Like any theory, CTs may be right or wrong, but are usually considered unwarranted in the sense that they run counter to established or official accounts (Douglas et al., 2019). As such, they are sometimes seen as "a species of a broader genus of political misinformation" (Miller et al., 2016: 825). Other hallmarks of CTs are that they make unrealistic assumptions about conspirators" power to keep secrets, the construction of Manichean binary in- and outgroups, and attacks on institutions and processes of epistemic validation (Douglas et al., 2019).

In contrast to CTs, terms such as "conspiratorial predispositions", "conspiracist ideation" and "conspiracy mindset" (Brotherton et al., 2013; Bruder et al., 2013; Douglas et al., 2019; Sutton and Douglas, 2020; Swami et al., 2011; Uscinski, 2020; Uscinski et al., 2016) refer to an underlying mindset or latent disposition that can explain why some people are more likely than others to endorse specific CTs. Uscinski (2019b: 50) thus define conspiratorial predispositions as "an underlying worldview or disposition, similar to political ideology, toward viewing events and circumstances as the product of conspiracies".

The first empirical evidence that some people may be predisposed toward believing in conspiracy theories was provided by Goertzel (1994), who found that people who believe in one conspiracy theory are likely to also believe in others. Since then, this finding has been confirmed many times (Bruder et al., 2013; Imhoff and Bruder, 2014; Swami et al., 2011; Wood et al., 2012). In fact, some research suggests that this may apply even to CTs that are mutually exclusive (Wood et al., 2012; see also Bessi et al., 2015).

Towards understanding conspiratorial predispositions

In terms of the antecedents of conspiracy thinking in a broad sense, most research has used beliefs in specific CTs rather than conspiratorial predispositions as the dependent variable (Brotherton and French, 2014; Nisbet et al., 2015; Swami et al., 2016; Van Prooijen and Acker, 2015; van Prooijen and Jostmann 2013). That said, three psychological motives seem to be of prime importance: *epistemic* (need for understanding and subjective certainty), *existential* (need and desire for control) and *social* (desire to maintain a positive image of the self or the in-group) (Douglas et al., 2017; Douglas et al., 2020). The role of epistemic motives may be explained by the fact that CTs serve to reduce uncertainty when information is scarce, conflicting, or when events have no apparent simple explanation or appear random. This explanation is supported by research demonstrating heightened belief in CTs among people with a strong inclination towards pattern perception (Bruder et al. 2013; van Prooijen, 2018). Similarly, need for cognitive closure has also been linked to conspiracy beliefs (Leman and Cinnirella, 2013; Marchlewska et al., 2018). CTs additionally generally flourish during times of social crisis (Van Prooijen and Douglas, 2017).

In terms of existential motives, need for control has often been linked to conspiracy beliefs (Van Prooijen and Acker, 2015; Van Prooijen, 2018). Generally, research

shows that individuals have an inherent need to exert some degree of control over themselves and their environment. If this control is perceived to be lost due to, for instance, a societal crisis, CTs may offer a means to regain that control (but see Stojanov & Halberstadt, 2019). Some studies also show that perceptions of powerlessness (Abalakina-Papp et al., 1999; van Prooijen and Jostmann, 2013) are linked with conspiracy beliefs. In light of such findings, van Prooijen and Douglas (2018) point to the importance of affect which is stressed by research demonstrating that anxiety and fear are related to conspiracy beliefs (Grzesiak-Feldman, 2013).

Also important is that beliefs in conspiracy theories are social and depend on group dynamics and group identities. In general, groups that are characterized by a strong ingroup identity and a perceived threat from an outgroup are more likely to hold conspiracy beliefs (Cichocka et al., 2016; Jolley et al., 2018; Van Prooijen and Douglas, 2018). Such groups often form and are maintained around ideological leaning or partisanship (Oscarsson and Holmberg, 2020; Krouwel et al., 2017). Research has consequently found that political ideology or partisanship predict which specific CTs people endorse (Enders and Smallpage, 2019; Krouwel et al., 2017; Nisbet et al., 2015; Oliver and Wood, 2014; Uscinski and Parent, 2014). Beyond that, some studies suggest that right-wing ideological leaning is associated with greater inclination towards conspiratorial thinking (Walter and Drochon, 2020), while other studies show that ideological extremism drives conspiratorial beliefs among individuals to both the left and the right (Krouwel et al., 2017; Van Prooijen et al., 2015). Research also suggests that populism and anti-establishment orientation is positively related to conspiracy beliefs (Bergmann, 2018; Van Prooijen, 2018; Uscinski et al., 2021). That may be particularly true for right-wing populism, as CTs and right-wing populism "unite in a Manichean worldview" (Bergmann, 2018: 12) in which societies are seen as being divided between the corrupt elite and the pure or common people.

Moving toward the importance of sociodemographic factors, there is only limited research using conspiratorial predispositions as the dependent variable. Hence, there is little consensus regarding the correlates with conspiratorial predispositions. Furthermore, most studies have been done in a limited set of countries – in particular the United States – meaning that it is unclear how far the results can be generalized. A nine-country comparative study by Walter and Drochon (2020), including Sweden and the United States, serves as an important exception. According to their findings, there was a positive association between being male and older on the one hand and conspiratorial predispositions on the other. In some models, they also found that tertiary education was negatively associated with conspiracy beliefs.

Beyond these findings, there are theoretical reasons to expect education and political interest to be negatively related to conspiratorial predispositions. With respect to education, higher levels of education should foster greater skills in analytical thinking, which should be negatively related to conspiracy theorizing. Highly educated individuals are also more likely to feel that they are in control over their situation, thereby reducing feelings of helplessness that may foster conspiracy theorizing (Smallpage et al., 2020; Walter and Drochon, 2020). Political interest is similarly related to greater knowledge of and attention to current affairs as well as political sophistication (Prior, 2019), which should foster a greater integration into mainstream thinking.

Based on these findings and theoretical considerations, we thus hypothesize that *there will be a positive effect of being male (H1), of older age (H2), ideologically leaning to the right (H3), ideological extremity (H4), and economic insecurity (H5) on conspiratorial predispositions*. We also hypothesize that *there will be a negative effect of education (H6) and political interest (H7) on conspiratorial predispositions*.

Media use and conspiratorial predispositions

Although extant research has generated many insights, the scarcity of research on what role the media might play in the context of conspiratorial predispositions is problematic. After all, news and other media are essential for the dissemination of information related to conspiracy theories, and they offer opportunities for geographically dispersed people inclined towards conspiracy theorizing to find each other, interact, and organize (Benkler et al., 2018). Research has also found that media use might impact beliefs in specific CTs (Enders et al., 2021a; Jolley and Douglas, 2014; Mancosu and Vegetti, 2021; Walter and Drochon, 2020). Whether that also holds for conspiratorial predispositions is largely unexplored.

One exception is the comparative study by Walter and Drochon (2020) mentioned earlier. They investigated the linkage between conspiratorial predispositions and the use of TV, radio, social media, non-mainstream media, magazines, podcasts, and email newsletters/RSS feeds. Their findings show that using newspapers was negatively related while using non-mainstream media and social media use was positively related to conspiratorial predispositions. Using the other types of media did not correlate with conspiracist beliefs. These results partly mirror those found by Hollander (2018), although he focused on beliefs in specific CTs. His findings suggest that most mainstream media use had no or limited effects (depending on which CT was used), but that using Fox news was positively related to CTs involving Democrats and negatively related to CTs involving Republicans. Based on that, Hollander (2018) argues that generic news exposure might offer little explanatory power. However, several studies suggest that using non-mainstream media is linked to conspiracy beliefs. In particular, exposure to conservative media have been shown to be associated with specific conspiracy beliefs (Hollander, 2018; Jamieson and Albarracin, 2020; Meirick, 2013; Motta et al., 2020; Romer and Jamieson, 2021). The effects of political alternative media might sometimes even override the effects of political predispositions and influence individuals regardless of their prior attitudes and beliefs (Hollander, 2018; Meirick, 2013). Similarly, the use of specific social media platforms for news consumption seems to be related to conspiracy beliefs. Theocharis and colleagues" study, including 17 countries, found that following news on social media such as Facebook and Youtube was positively related to conspiracy beliefs pertaining to COVID-19, in contrast to the use of Twitter (Theocharis et al., 2021).

However, the effect of social media use on conspiracy beliefs may to be dependent on conspiratorial predispositions. As an example, Enders et al. (2021a) investigated the relationship between media use and beliefs in a large number of specific CTs and the moderating role of conspiratorial predispositions. Their findings showed that using social media as a primary source of news and the frequency of social media use was "positively related to conspiracy beliefs" (Enders et al., 2021a: 9). Even more important in this

context, they also found that the relationship between media use and beliefs in CTs was moderated by conspiratorial predispositions.

Other studies suggest that conspiracy predispositions may foster more active social media use, including engagement in online discussions about conspiracy theories. Chadwick et al. (2021:1), for example, found that conspiracy-minded individuals are more likely "to be associated with online discouragement of vaccination".

Whether the above findings hold also with respect to conspiratorial predispositions remains to be investigated. Based on the above review, we nevertheless hypothesize that *there will be a positive effect of using social media (H8) and political alternative media (H9) on conspiratorial predispositions*. With respect to the use of mainstream media, research suggests a limited explanatory power. Instead of posing hypotheses, we thus ask (RQ1): *What is the relationship between using mainstream news media and conspiratorial predispositions?*

Case selection, data, and method

To investigate the above hypotheses and research question, we use a large-scale two-wave panel survey done in Sweden. A key reason for selecting Sweden is that it constitutes a highly different case compared to the US, where most research in the area has been done. First, Sweden is characterized by high levels of institutional and interpersonal trust, which has been identified as factors mitigating CTs (Astapova et al., 2021). Whether it also mitigates conspiratorial predispositions is less clear. Second, Sweden and the United States can be considered highly different cases in terms of the media-political system (Hallin and Mancini, 2004). Similar to most other countries, the use of traditional news sources has declined over the years, but mainstream news media are still the most important sources of news (Shehata and Strömbäck, 2021). All major news media are furthermore non-partisan in their news coverage (Johansson and Strömbäck, 2019), although there are many political alternative media online. That holds in particular for right-wing alternative media (Heft et al., 2020; Holt, 2018).

Data for the web-based panel survey was collected by the Laboratory of Opinion Research (LORE), a research infrastructure at the University of Gothenburg. For the first wave (W1), a probability sample with the net sample size of 5523 residents aged 18+, stratified by gender, age, and education, was invited to participate. Of these, 2337 participated in both waves, resulting in a 42,3 percent total cooperation rate. W1 was in the field between February 24 and March 25, 2020, and W2 between February 25 and March 30, 2021. The sample is largely representative of the Swedish population in terms of age, gender, and education (for a breakdown of respondents, see Online Appendix). All analyses are based on respondents who participated in both waves.

As this study focuses on the antecedents of conspiratorial predispositions, our dependent variable was measured in W2 while all other variables were measured in W1.

Measure – dependent Variable

Building on previous research (Brotherton et al., 2013; Bruder et al., 2013; Goreis and Voracek, 2019), we measured conspiratorial predispositions by asking respondents to what extent they agree with the following statements: "Many important things happen

in the world which the public is never informed about", "The official version of events given by the authorities often hides the truth", "Scientists only reveal evidence that supports their predetermined conclusions", and "There are secret organizations that greatly influence political decisions". The original response scale ranged from 1 (do not agree at all) to 7 (agree completely). A principal components analysis shows that these items load on one factor, explaining 75.4 percent of the variance. Based on this, the items were added and rescaled to form an index of conspiratorial predispositions, ranging from 0–1 ($M = .43$, $SD = .23$) (Cronbach's alpha = .78).

Measures – independent variables

Turning to our independent variables, sex is a dichotomous variable (1 = female, 2 = male). Age was measured by asking respondents what year they were born. Responses were re-coded into the following dummy variables: 30–39 years, 40–49 years, 50–59 years, 60–69 years, and 70 years or older, with younger than 30 as the reference category. *Education* was measured through nine items ranging between (1) not completed elementary school and (9) PhD degree. Two dummies were created, corresponding to "Medium education" (post-high school studies, not university) and "High education" (University studies), with "Low education" (high school studies or less) as the reference category. *Political interest* was measured by asking "Generally speaking, how interested are you in politics", with the response options (reversed) being "not at all interested" (1), "not particularly interested" (2), "quite interested" (3) and "very interested" (4). The variable was normalized to run between 0 and 1 ($M = .67$, $SD = .25$).

Ideological leaning was measured by asking respondents where they would place themselves on a scale ranging from 0 (far to the left) to 10 (far to the right), which was rescaled to run between 0 and 1 ($M = .49$, $SD = .25$). Because previous research has found an additional effect of leaning towards the extremes on the left-right dimension (Krouwel et al., 2017), we tested for non-linearity (Ramsey RESET test: $F_{5, 1525} = 2.79$, $P = .016$). Since the test indicated significant non-linearity, we calculated the product of the left-right variable with itself after mean centering it and included this variable in all models involving ideology.

Economic insecurity was measured by asking "which of the following descriptions comes closest to how you feel about your household's income", with the response options "living comfortably on present income" (1), "coping on present income" (2), "finding it somewhat difficult on present income" (3) and "finding it very difficult on present income" (4). Those who chose not to answer were re-coded as missing. For the analyses, the measure was re-coded into a dummy variable, where 1 = "Low security" (value 3 and 4 in the original version) and 0 = "High security" (value 1 and 2 in the original version) (For frequency distributions of all variables, see Appendix).

Turning to our media variables, "mainstream media use" was measured by asking participants how frequently they use a variety of outlets in their traditional or online formats, including all the leading national media in Sweden. The frequency of use ranged between (1) "less than once per week" and (8) "7 days per week" (reversed). Due to the heterogeneity of different types of mainstream media, mainstream media use was broken down into broadsheet, tabloid, and TV news use (for a list of outlets, see Online

Appendix). Corresponding indices were created, running from 0–1 (broadsheet: $M = .24$, $SD = .22$; tabloid: $M = .33$, $SD = .29$; TV news: $M = .45$, $SD = .30$).

"Social media use" was measured by asking participants how often per week they come across news or discussions about politics and society on Facebook, Twitter, Instagram, and Youtube. For each social media, response options ranged from (1) "Never" to (7) "Several times a day" (reversed). Responses were used to form an additive index, ranging from 0–1 ($M = .32$, $SD = .20$). Finally, "political alternative media use" was measured by asking about respondents" frequency of use per week of a range of alternative media outlets, including political alternative media to both the left and the right (see Online Appendix). The response options were the same as for mainstream media. Since there might be differences between left and right leaning political alternative media, we constructed one index for "alternative left media use" and one for "alternative right media use". Both range between 0 and 1 (Left index: $M = .04$, $SD = .09$; Right index: $M = .05$, $SD = .12$).[1]

Analytical strategy

To assess the statistical impact of our hypothesized correlates and conspiratorial predispositions, we employ hierarchical regression, adding independent variables in steps. This strategy is useful for evaluating the contributions of predictors beyond previously entered predictors, as a means of statistical control, and for examining incremental validity. For these analyses, we used data from W1 to predict conspiratorial predispositions in W2. Predictors were subsequently added in three blocks based on our theoretical assumptions. In Model 1, we included a block with sociodemographic variables, specifically sex, age, economic security, and education. In Model 2, we added a block with political antecedents to Model 1, including ideological left-right leaning, ideological extremity, and political interest Finally, in Model 3, we added a block with media use variables. The models are assessed in terms of their explained variance, comparing changes (Δ) in R2. To delineate whether the subsequent additions of predictors improve model fit, we include the F statistics. When the F values are statistically significant, the addition of a new block of predictor variables can be concluded to significantly improve the model fit.

Results

The analysis was run on 1516 observations out of the original sample, due to non-responses on our dependent variable. An examination of correlations shows significant relationships between predictors and our dependent variable (see Online Appendix). Multicollinearity was not detected for any of our models (for VIF scores see Appendix).[2]

Turning to the results, Model 1 in Table 1 shows a significant positive coefficient for "low economic security" ($B = .09$, CI (.05, .13), $p < .001$), indicating that those with a low degree of economic security score higher in conspiratorial predispositions than those with a higher degree. The coefficient for "High education", on the other hand, was negative ($B = -.08$, CI ($-.11$, $-.06$), $p < .001$), indicating that higher education reduces tendencies to hold conspiratorial predispositions. With respect to age, only two age groups differ significantly from the reference category (under 30 years), namely *60–69 years* ($B = .06$, CI (.01, .11), $p < .05$) and *70 years or older* ($B = .06$, CI (.01, .10), $p < .05$).

Table 1. Effects of individual characteristics on generic conspiracist beliefs.

Conspiracist Beliefs	Model 1	Model 2	Model 3
Economic Insecurity	0.09*** (0.02)	0.10*** (0.02)	0.09*** (0.02)
Education High	−0.08*** (0.01)	−0.07*** (0.02)	−0.06*** (0.01)
Education Medium	0.01 (0.02)	0.01 (0.02)	0.01 (0.02)
Age 30–39	0.04 (0.03)	0.03 (0.03)	0.04 (0.02)
Age 40–49	0.03 (0.02)	0.01 (0.02)	0.01 (0.02)
Age 50–59	0.04 (0.02)	0.02 (0.02)	0.03 (0.02)
Age 60–69	0.06* (0.02)	0.05* (0.02)	0.06* (0.02)
Age 70 or older	0.06* (0.02)	0.04 (0.02)	0.06* (0.03)
Sex	0.01 (0.01)	−0.0 (0.01)	−0.00 (0.01)
Ideological Leaning		0.25*** (0.02)	0.20*** (0.02)
Ideological Extremity		0.30*** (0.09)	0.26** (0.08)
Political Interest		−0.06* (0.02)	−0.08*** (0.03)
Broadsheet			−0.12*** (0.02)
Tabloid			−0.00 (0.02)
Commercial TV			−0.00 (0.02)
Social Media			0.08* (0.04)
Alternative Media left			−0.07 (0.06)
Alternative Media right			0.27*** (0.04)
Constant	0.40*** (0.03)	0.45*** (0.03)	0.45*** (0.04)
R^2 *(in %)*	6	14	18
F(df)	10.234(9,1506)***	20.243(12,1503)***	18.463(18,1497)***

N = 1516. Table shows Model 1–3 normalized regression coefficients, standard errors are in parentheses. For age under 30 is the reference category. For Education "low" is the reference category. For Sex "female" is the reference category, therefore results show effect of being male.
$p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$.

The impact of these age groups is however quite small. Sex is not significant. The overall model (Model 1) is statistically significant ($R^2 = 0.6$, $F(9, 1506) = 10.23$, $p < .001$) and accounts for 6% of the variation in respondents" scores on conspiratorial predispositions.

Adding the political predictors "ideological leaning", "ideological extremity" and "political interest" to the model (see Model 2 in Table 1) improves the predictive power of the model ($R^2 = .14$, $F(12, 1503) = 20.24$, $p < .001$). As evidenced by the F-test, this improvement is significant ($F(3, 1503) = 47.430$ $p < .001$). More specifically, the results of Model 2 show a small negative impact of "Political Interest" ($B = -.06$, CI (−.11, 0.01), $p < .05$), whereas "Low economic security", "High education" and one of the age groups (60–69) remain significant predictors. We also found an effect of ideological left-right predisposition ($B = .25$, CI (.20, .29), $p < .001$) as well as of ideological extremity ($B = .30$, CI (.13, .46), $p < .001$) on conspiratorial predispositions. These results show that leaning towards the right is positively related to conspiratorial predispositions, and that this effect increases with extremity. Adjusted predictions of conspiratorial predispositions at different values on the squared left-right variable are visualized in Figure 1. This figure reveals only very marginal effects on the left side of the scale,

whereas it shows that conspiratorial predispositions are increasing when moving from the mean towards the right. The figure also shows that the effects of ideological right orientation accumulate as people move further to the extremes of the scale.

In Model 3, the media use variables were added. This turned out to improve the explanatory power of the model ($R^2 = .18$, $F(18, 1497) = 18.46$, $p < .001$), and significantly improve model fit ($F(6, 1497) = 12.968$, $p < .001$). Also in Model 3, "High education" and "Low economic security", "Political interest" as well as two age groups (60–69; 70 and older) remain significant predictors with slightly different effect sizes (see Table 1). As illustrated by the adjusted predictions of conspiratorial predispositions at different values of ideological left and right extremity (Figure 2), the effects of "ideological leaning" and "ideological extremity" remain stable, although the effect sizes are slightly smaller.

With respect to the mainstream media, only the broadsheet variable significantly predicts conspiratorial predispositions, in the anticipated negative direction ($B = -.12$, CI ($-.17$, $-.07$), $p < .001$). Use of leftist political alternative media is not significant. In contrast, the results show that use of right-wing alternative media is *the overall strongest* predictor of scoring high on conspiratorial predispositions ($B = .27$, CI (.19, .35), $p < .001$), followed by ideological leaning ($B = .20$, CI (.15, .25), $p < .001$) and ideological extremity ($B = .26$, CI (.09, .42), $p < .01$). Finally, the results show that social media use positively

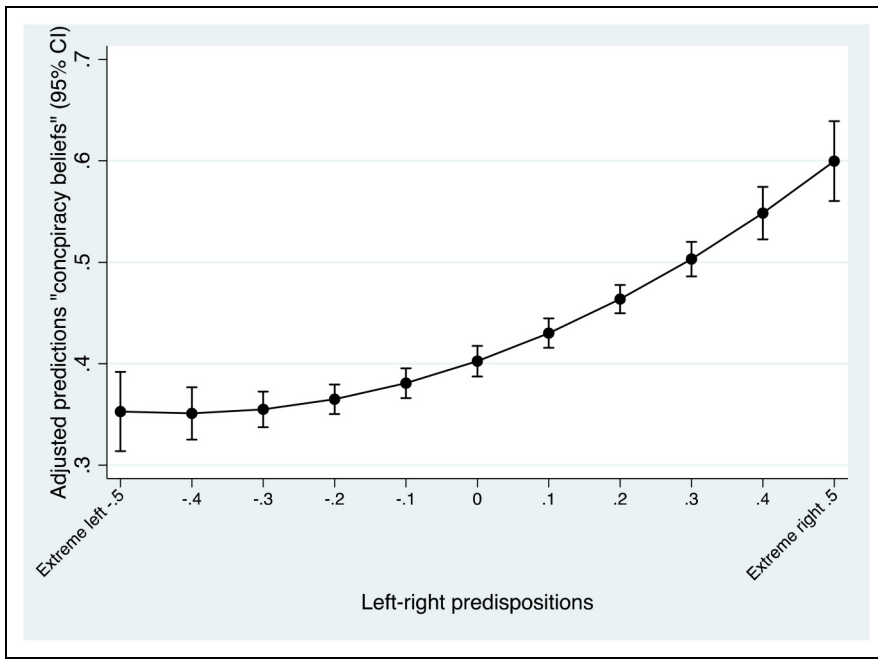

Figure 1. Adjusted predictions of conspiracy beliefs at different levels of left and right extremity (estimates are based on Model 2 in Table 1).

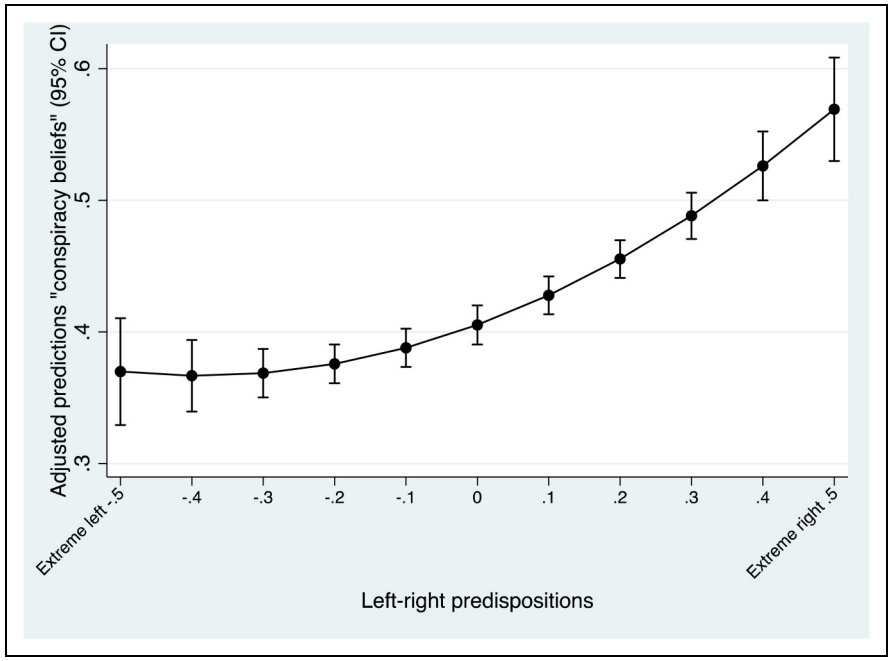

Figure 2. Adjusted predictions of conspiracy beliefs at different levels of left and right extremity (estimates are based on Model 3 in Table 1).

predicts conspiratorial predispositions ($B = .08$, *CI* (.01, 15), $p < .05$), although not to the same extent as right-wing alternative media use does.

Robustness check

In the analyses above, all independent variables were measured in W1, given our focus on the antecedents of conspiratorial predispositions. With respect to media use, the appropriate time-lag is however unclear. To check the robustness of the findings pertaining to media use, we therefore ran Model 3 again, using the media variables from wave 2. This shows that the results are largely stable in terms of the overall patterns, although the effect sizes change. More specifically, the results show that right-wing alternative media use has a larger impact ($B = .36$, *CI* (.27, .45), $p < .001$) while ideological leaning ($B = .21$, *CI* (.17, .25), $p < .001$) and ideological extremity ($B = .19$, *CI* (.04, .35), $p < .05$) has a smaller impact. Ideological leaning furthermore shows a stronger relation than ideological extremity, as opposed to the model using variables from wave one, and social media use is no longer significant.

Discussion and conclusions

Conspiracy theories are not peripheral views of the world that only thrive on the fringes of society. Instead, research suggests that beliefs in CTs are quite widespread and

consequential (Oliver and Wood, 2014; Walter and Drochon, 2020). Research also shows that those who score high on conspiratorial predispositions are more likely to believe in specific CTs. Understanding the antecedents of conspiratorial predispositions is hence important from both a societal and academic perspective, yet thus far, research using conspiratorial predispositions as the dependent variable has been limited. With this study, we sought to fill some of this void by investigating the antecedents of conspiratorial predispositions, focusing particularly on the impact of media use.

Based on the findings, the current study offers several key take-aways. To begin with, one take-away is that conspiratorial predispositions are better explained by political than by sociodemographic factors. This is noteworthy considering that the current study focused on conspiratorial predispositions, where partisan cheerleading and motivated reasoning (Bullock and Lenz, 2019; Miller et al., 2016) are less likely to occur than when focusing on beliefs in specific CTs. A second take-away is the impact of ideological leaning and ideological extremity to the right. While Krouwel et al. (2017) found that ideological leaning to the left is associated with conspiracy beliefs in Sweden, our findings resonate with research showing that conspiracy thinking is more widespread among those that are leaning to the right ideologically (Walter and Drochon, 2020). The difference may be explained by the fact that Krouwel et al. (2017) focused on beliefs in a set of specific CTs rather than conspiratorial predispositions. Specifically, measures of beliefs in specific CTs are more vulnerable to bias as results vary depending on what CTs are included (Enders et al., 2021a). A third take-away is hence the importance of both conceptually and empirically differentiating between conspiratorial predispositions and beliefs in specific CTs.

A fourth and final take-away is related to the importance of media use when understanding conspiratorial predispositions. Not only do the results show that the explanatory value increases significantly when including measures of media use, but also that the use of right-wing political media strongly predicts conspiratorial predispositions. This suggests that the "alternativeness" of right-wing alternative media is greater than that of left-wing alternative media. Despite all the differences across countries, this resonates with findings from the US showing that right-wing alternative media are more separated from mainstream news media than left-wing alternative media (Benkler et al., 2018). Our results suggest that the same may hold true in Sweden as well.

Admittedly, it is also possible that the causal arrow runs in the opposite direction, so that conspiratorial predispositions influence media use rather than the other way around, or that the relationship is reciprocal. Even so, the overall effects of right-wing alternative media use were stable regardless of whether we applied media use measures from W1 or W2, which indicates that the use of such media indeed influences conspiratorial predispositions.

Although we believe that the current study represents a significant contribution to the literature, some limitations and avenues for further research should be noted. To begin with, this is a single-country study, meaning that it is unclear how far the results can be generalized. Second, we relied on a two-wave panel study where conspiratorial predispositions were only measured in one wave. This precluded the possibility to investigate the opposite causal direction. To address this, future research is encouraged to utilize panel surveys with more waves. That would allow for analyses of the extent to which

conspiratorial predispositions predict political alternative media use and whether reinforcing spirals are at work (Slater, 2015; Slater et al., 2020). It would also open up for research on the long-term effects of media use on conspiratorial predispositions. Third, to explain the linkages between media use and conspiratorial predispositions, there is a need for content analyses investigating the extent to which different media are characterized by features that encourage conspiratorial thinking. Finally, there is a need for further research to explore the optimal time-lag for investigating the impact of media use on conspiratorial predispositions.

These caveats notwithstanding, we hope this study will serve as a stepping-stone for further research on the antecedents and effects of conspiratorial predispositions. As CTs continue to spread and have an impact on the individual as well as the society-wide level of analysis, understanding conspiratorial predispositions and the role of different media in combatting or reinforcing them seems more important than ever.

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Supplemental material

Supplemental material for this article is available online.

Notes

1. For the creation of the media use indices, participants that did not provide an answer to one or more of the media use items were allocated a zero based on the rationale that these people do not use the media in question.

2. The age dummies exhibit VIF scores between 2.3 and 4.2. Since the proportions of cases in the respective dummy categories are smaller, VIF scores will necessarily be higher, even if they are not associated with other variables in the model. There are also no hypotheses pertaining to these variables. Since both the performance of the age dummies as control variables and the other predictors" coefficients are not affected by this, the scores are not deemed to be an issue.

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