

Vom Promotionsausschuss des Fachbereichs 8: Psychologie der Rheinland-Pfälzischen Technischen Universität Kaiserslautern-Landau (RPTU) zur Verleihung des akademischen Grades Doktor der Philosophie (Dr. phil.) genehmigte Dissertation.

FROM SELECTIVE EXPOSURE TO SELECTIVE SHARING
THE INFLUENCE OF THREAT AND RIGHT-WING IDEOLOGY
ON SELECTING AND SHARING (DIS)INFORMATION IN CRISIS SITUATIONS

Lea-Johanna Klebba

Vorsitzender des Promotionsausschusses:

Prof. Dr. Lukas Otto (Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau)

Berichterstatter:

1. Jun. -Prof. Dr. Christian von Sikorski (Freie Universität Berlin)
2. Prof. Dr. Gerhard Reese (Te Herenga Waka - Victoria University Wellington in Aotearoa / New Zealand)

Datum der wissenschaftlichen Aussprache: 04.07.2025

Acknowledgements

„In der Mitte der Schwierigkeiten liegt die Gelegenheit.“

— Albert Einstein

Wie Albert Einstein in diesem Zitat so treffend formulierte, fand sich auch inmitten der Schwierigkeiten, die meine Promotionszeit prägten, eine besondere Gelegenheit. Das Thema meiner Dissertation, das Informationsverhalten von Menschen in Krisenzeiten, entwickelte ich im Jahr 2018 während meiner einjährigen Promotionszeit an der Universität Erfurt. 2019 konnte ich dieses Thema an der damaligen Universität Koblenz-Landau (heute Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau) gemeinsam mit meinem Doktorvater Prof. Dr. Stephan Winter weiterentwickeln und den Fokus auf die Auswahl und Verbreitung von Informationen in Krisensituationen richten. Angesichts der immer näher rückenden globalen Krisen erschien mir dieses Thema äußerst relevant.

2019 begann ich nach einer aktuellen Krise zu suchen, die sich für meine Forschung eignen könnte – idealerweise eine Situation, in der ich Daten in Echtzeit erheben könnte. 2020 brach dann die COVID-19-Pandemie aus und brachte der Welt eine schwere Krise – und mir persönlich, trotz aller Herausforderungen, eine Gelegenheit zur Forschung inmitten dieser Schwierigkeiten.

Gleichzeitig rücken Menschen in Zeiten von Schwierigkeiten oft näher zusammen und unterstützen sich umso mehr. Diese Verbundenheit durfte ich in meiner gesamten Promotionszeit erleben, wofür ich mich hiermit bei allen Personen von Herzen bedanken möchte.

An erster Stelle dir, Stephan. Du hast stets – unabhängig davon, wie sehr ich manchmal selbst zweifelte – an mich und mein Forschungsprojekt geglaubt. Immer wieder hast du mir bestätigt, dass ich auf dem richtigen Weg bin, und hast meine Vorhaben in jeder Hinsicht unterstützt. Gemeinsam, ob online oder persönlich, haben wir an den Ideen dieser Dissertation gearbeitet und so manch unklare Spur in einen gangbaren Weg verwandelt. In dieser Zeit hätte ich mir keinen

besseren Doktorvater wünschen können. Deine ehrliche, konstruktive und wertschätzende Kommunikation sowie deine Cleverness haben mich enorm bereichert. *Don't stop believin* hast du wörtlich genommen und das ist alles, was zählt.

Hinter einer Promotion und wissenschaftlichen Arbeit steht ein ganzes Team, dessen reibungslose Zusammenarbeit für diese Dissertation unverzichtbar war. Ich hatte das große Glück, Teil eines solchen Teams zu sein, und möchte allen herzlich für die großartige Zusammenarbeit danken. Ein so starker Zusammenhalt im Team ist alles andere als selbstverständlich und für mich ein großes Geschenk. Allen voran danke ich dir, Vanessa. Was mit einer kollegialen Verbundenheit begann, hat sich zu einer meiner wertvollsten Freundschaften entwickelt. Ich kann immer auf dich zählen, beruflich wie privat, und freue mich auf all die wunderbaren Erlebnisse, die noch auf uns warten. Petra, dir gilt mein tiefer Dank – du bist nicht nur die organisatorische Schaltzentrale des Teams, sondern auch eine aufmerksame ZuhörerIn. Für die vielen organisatorischen Herausforderungen, die du oft geduldig und beharrlich für mich gemeistert hast, sowie für deine mütterlichen Ratschläge, bin ich dir sehr dankbar. Sie kamen immer genau dann, wenn ich sie am meisten gebraucht habe. Uli, dir danke ich, dass du als „Uni-Urgestein“ mit deinem Pragmatismus jede meiner Fragen beantwortet hast und dem Team damit Ruhe und Gelassenheit schenkst. Und dir, Roland, danke ich für deine kreativen und (musikalischen) Impulse.

Da die universitäre Zeit oft ein Abschnitt ist, in der Menschen kommen und gehen, hatte ich die Gelegenheit, mit einigen Kolleg:innen nur für eine kurze Zeit zu arbeiten und andere neu im willkommen zu heißen. Dir, Dominic, danke ich herzlich für deine wertvolle Präsenz im Team in den ersten Jahren meiner Promotionszeit – für deine inspirierende Arbeit sowie deine angenehme und tiefgründige Art. Gereon, Rasmus und Tobias, euch danke ich für eure engagierte Unterstützung und die gemeinsame Zeit; ihr seid einfach die besten Hiwis aller Zeiten. Lena, dir danke ich für deine zugewandte und herzliche Art, für dein offenes Ohr und unsere wertvollen Gespräche. Du bist eine Bereicherung für das Team und für mich als Freundin.

Hinter diesem Team stehen Menschen am IKM und aus weiteren Forschungsbereichen, denen ich ebenfalls danken möchte. Vor allem dir, Gerhard, danke ich für die wertvolle Zusammenarbeit an meiner dritten Dissertationsstudie und für dein Einverständnis, meine Dissertation zu

begutachten. Mein Dank gilt auch dir, Christian, für die Begutachtung dieser Arbeit und dein aufrichtiges Interesse, das ich immer in unseren Gesprächen gespürt habe. Und auch dir, Michaela, für dein ebenso großes Interesse nach meinen Kolloquiumsvorträgen. Fabian und Pascal, euch danke ich für die sorgfältige Durchsicht dieses Manuskripts, eure wertvollen Anregungen und Kommentare sowie unsere Freundschaft. Und ich danke euch, Ines, Lea, und Clara für die wirklich guten Gespräche im Büro und wichtige Erkenntnisse zur Arbeit in der Wissenschaft.

Neben einem großartigen Doktorvater, einem wunderbaren Team und unterstützenden Kolleg:innen ist für die Arbeit an einer Dissertation ein stabiles soziales Netzwerk aus Freund:innen und Familie von unschätzbarem Wert. In den letzten Jahren durfte ich auf viele wundervolle Menschen zählen, denen ich an dieser Stelle meinen tiefen Dank aussprechen möchte. Austin, danke, dass du mir zeigst, dass man Familie wählen kann. Lisa, dir danke ich für deine Unterstützung in dieser Zeit, die für dich immer selbstverständlich war. Resi, seit Erfurt wachsen wir gemeinsam, und ich bin froh, dass du immer für mich da bist. Kira, ich danke dir, dass du einen wichtigen Teil des Weges mit mir gegangen bist und stets bedingungslos für mich da warst. Mein Dank gilt auch euch, Mama und Papa, dafür, dass ihr mich immer gefördert und unterstützt habt. Ihr habt Vertrauen in mich und glaubt daran, dass ich meinen Weg gehe. Omi, dir danke ich für deinen festen Glauben daran, dass ich das Richtige tue, und für die Liebe, die du mir immer gezeigt hast.

Zum Schluss möchte ich den größten Dank dir, Manu, widmen. Seit wir uns kennen, ist mein Leben leichter. Unsere Beziehung, die auf einem Fundament aus Liebe, Sicherheit, Offenheit und Wertschätzung gebaut ist, lässt mich wachsen und gleichzeitig ruhig werden. Diese Ruhe und Gelassenheit hat dazu beigetragen, dass mir die Arbeit an dieser Dissertation zum Ende hin leichter fiel – wohl nur, weil ich wusste, dass ich, wenn ich falle, bei dir sanft lande.

Table of Contents

Summary	7
Introduction	8
Why Is Competent Online Information Usage Essential For Dealing With Crises?	9
The Current Research	10
Cognitive Biases and Disinformation in Information Usage	14
Selective Exposure vs. Selective Sharing	15
Disinformation	17
Risk Factors: Right-Wing Ideology (x) Threat	20
Interaction Model #1: The Threat-RWA Activation Hypothesis	21
Interaction Model #2: The Dual Process Motivational Model of Ideology and Prejudice	23
The Dissertation's Interaction Model	25
Manuscript 1	29
Manuscript 2	31
Manuscript 3	33
Discussion	37
Theoretical Implications	37
Practical Implications	52
Future Directions	56
Implications for Threat x Right-Wing Ideology Research	56
Implications for Selective Exposure and Sharing Research	58
Implications for Disinformation Research	59
Conclusion	62
References	63
Appendix	78
Curriculum Vitae	204
Statutory Declaration	207

Summary

Cognitive biases like selective exposure and selective sharing are well-studied phenomena. However, their dynamics during crises, characterized by abundant information and disinformation, remain less explored. Research shows that political ideology, especially political conservatism, significantly influences cognitive biases and disinformation susceptibility. Additionally, underlying constructs such as Right-Wing Authoritarianism (RWA) and Social Dominance Orientation (SDO) impact information behavior, with evidence suggesting that the interaction between RWA and perceived threat intensifies selective information processing. This assumption is based on interaction models in political psychology, notably the Threat-RWA Activation Hypothesis and the Dual Motivational Model of Ideology and Prejudice (DPM).

This dissertation transfers these frameworks to communication research. In three studies, it develops and empirically tests an interaction model focusing on susceptibility to cognitive biases (selective exposure and sharing) and disinformation. The first manuscript examines the effects of selective exposure and sharing behaviors on COVID-19-related (dis)information under COVID-19 threat, with RWA and SDO as predictors. The second manuscript revisits the Threat-RWA Activation Hypothesis within (dis)information selection, while the third manuscript applies the DPM to (dis)information sharing.

The findings across all manuscripts indicate no observable threat activation effects of RWA and SDO on selective exposure to and sharing of (dis)information. However, RWA consistently emerges as a significant risk factor for disinformation susceptibility. These results challenge the validity of both interaction models within communication research and shed light on groups particularly vulnerable to disinformation.

Introduction

In recent decades, communication research has extensively explored how individuals perceive, select, and share information, often focusing on non-threatening contexts. Central to this process are cognitive biases, such as confirmation bias, which drive individuals to select and share information that aligns with preexisting attitudes (e.g., Knobloch-Westerwick et al., 2015; Liang, 2018). Various factors, including personality traits, situational contexts, and political ideology, shape these behaviors (Hart et al., 2009), with both conservatives and liberals demonstrating tendencies toward partisan selective exposure by typically preferring to engage with content that reinforces their perspectives (Stroud, 2010).

The rise of social media has introduced further complexities to this landscape, particularly regarding disseminating disinformation during crises or critical events, such as elections. Distinct from misinformation, which spreads unintentionally, disinformation is characterized by intentionally disseminating misleading claims that contradict empirical facts (Wittenberg & Berinsky, 2020) with the potential to influence public opinion, individual behaviors, and even democratic processes (e.g., Allcott & Gentzkow, 2017; Zimmermann & Kohring, 2020). Like partisan selective exposure, research suggests that political ideology, especially conservatism, influences disinformation engagement, with conservatives being more likely to select, believe, and share content that aligns with their views (Sindermann et al., 2020). However, most studies have primarily examined selective exposure to verified information in non-crisis settings, leaving a notable gap in understanding how individuals' susceptibility to cognitive biases and disinformation might intensify during crises, where accurate and misleading information coexist.

The unfolding COVID-19 pandemic during the preparation of this dissertation highlights the need to deepen our understanding of the impacts and dynamics within this unique

information environment. On December 23, 2020, the World Health Organization (WHO) and its partners called for immediate action to address an “infodemic,” highlighting the need to combat disinformation, promote reliable information, and leverage digital technologies to manage the crisis (WHO et al., 2020). This situation marked a novel subcrisis within the pandemic, in which digital technology served as a source of public health information and a channel for disseminating disinformation. It illustrates how information profoundly shapes individuals’ decisions, behaviors, and emotional responses while threatening public health initiatives with targeted disinformation.

Beyond relatively short-term crises like the COVID-19 pandemic, which have been resolved within a few years, ongoing global challenges such as the climate crisis, where immediate solutions are often elusive, create a persistent atmosphere of threat and uncertainty. These prolonged high-stress situations could distort individuals’ information processing, making them particularly vulnerable to disinformation reinforcing their fears or preexisting beliefs. This continuous state of crisis requires reliable information and the competency to navigate it effectively during acute and sustained crises. Therefore, competent information usage is essential to mitigate the spread of disinformation and foster resilient information ecosystems to prevent confusion, mistrust, and polarization that can undermine democracy, human rights, and social cohesion.

Why Is Competent Online Information Usage Essential For Dealing With Crises?

The COVID-19 pandemic underscored the internet’s central role, especially social media, in rapidly disseminating information on a global scale. On the supply side, media outlets extensively covered crises, mainly through online platforms, due to its high news value. On the demand side, the public’s heightened need for timely information has driven increased consumption and news sharing, amplifying the spread of information through both interpersonal and

online networks (e.g., Carey, 2002; Singh et al., 2020). Thus, competent online information usage has become essential for effectively navigating this influx of information.

Competent information usage could involve critically evaluating sources' credibility and content's accuracy before acting on them. A thoughtful behavior is vital during crises when decisions based on false or misleading information can lead to harmful outcomes. Therefore, competent usage of crisis information may include being cautious about what is shared and ensuring that only accurate, verified information is disseminated. This behavior can help curb the spread of disinformation, which can complicate crisis management and cause unnecessary fear or confusion. Besides, crises can be polarizing, especially when disinformation is involved. Competent information usage could reduce division by promoting understanding and unity rather than conflict and public mistrust. Furthermore, responsible consumption and information sharing may maintain clarity and consistency in public messaging, ensuring that people are informed about the situation and understand how to respond adequately.

In sum, competent information usage could foster careful consideration, accuracy, and responsibility in consuming and disseminating information. It may support informed decision-making, prevent the spread of disinformation, enhance effective communication, and strengthen social cohesion. Such an approach can empower individuals and communities to respond to crises rationally and coordinatedly, reinforcing resilience in the face of immediate and long-term challenges.

The Current Research

Given these considerations, the present dissertation investigates cognitive biases in selecting and sharing verified information, extending the analysis to disinformation usage. A comprehensive understanding of individuals' selective exposure and sharing behaviors, their

susceptibility to disinformation, and the factors exacerbating these tendencies is critical for fostering competent information usage, particularly in crisis contexts. The primary goal of this research is to identify the determinants that increase the likelihood of individuals selectively engaging with and disseminating like-minded (dis)information. Additionally, it seeks to examine whether situational factors commonly associated with crises, such as perceived threats, uncertainty, time pressure, and disorientation, amplify their susceptibility to cognitive biases and disinformation in information usage.

Grounded in the interdisciplinary domains of political psychology, communication research, and media psychology, this research specifically focuses on the interplay between right-wing ideology, perceived threats, and biased information usage based on two interaction models proposing that threat perceptions activate constructs of right-wing ideology. To gain a deeper understanding of how cognitive biases (selective exposure and sharing behaviors) and susceptibility to disinformation, as related to right-wing ideology, operate in crisis contexts, this dissertation aims to address the following four central research questions:

- a) Are selective exposure and sharing effects more pronounced in threatening compared to non-threatening situations?
- b) Can selective exposure and sharing effects be observed in the context of disinformation usage?
- c) What specific predictors of right-wing ideology influence cognitive biases and susceptibility to disinformation, and how do they interact with perceived threat?
- d) What types of threats activate these factors?

The following sections concentrate on these variables (perceived threat, variables of right-wing ideology, selective exposure and sharing behavior, and susceptibility to

disinformation) to systemically answer the dissertation's research questions. Their relationships are tested in three studies, which are part of the present dissertation, structured as follows:

First, I provide an overview of the role of cognitive biases and disinformation in information usage. Building on the prominent confirmation bias, I concentrate on findings on the selective exposure and selective sharing approaches pertinent to the current research. I highlight the similarities between these constructs while distinguishing them by systematically categorizing their key differences and the resulting implications. Then, I explore the role of disinformation in information usage and the factors influencing susceptibility to it based on the current state of research.

Second, I delve into potential risk factors that could promote or increase cognitive biases or susceptibility to disinformation. I focus on Right-Wing Authoritarianism (RWA) and Social Dominance Orientation (SDO) as underlying constructs of right-wing ideology and the situational factor of threat. Since previous research has shown a connection between these factors and the outcome variables discussed, I introduce the two interaction models that provide the theoretical basis of this dissertation.

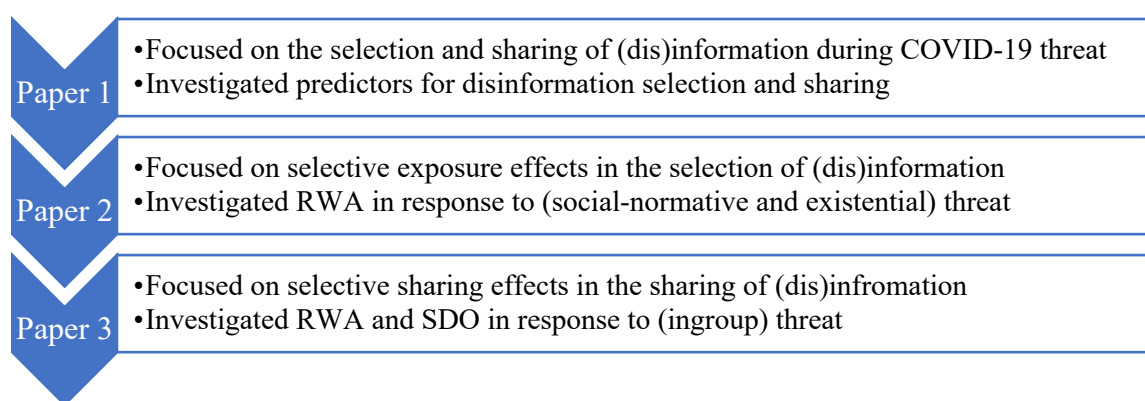
Third, I explore the significance of these interaction models within the field of communication research and synthesize the findings from previous studies based on these models. Drawing on these insights, I develop the interaction model of this dissertation, which I empirically test through three studies.

Fourth, the following three sections summarize the three dissertation studies (see Figure 1). Manuscript 1 (Klebba & Winter, 2024, see Appendix) evaluates fundamental risk factors for selective exposure and sharing behavior, as well as the selection and sharing of, and belief in disinformation under real-time crisis conditions (data collected at the beginning of the COVID-19

pandemic). Manuscript 2 (Klebba & Winter, 2025, see Appendix) reexamines and expands on the relationship between different types of threat and RWA on selective exposure to verified news and disinformation. Manuscript 3 explores the relationship between a threat (specifically ingroup threat), RWA, and SDO on selective sharing behavior to verified news and disinformation with specific content cues (Klebba et al., under review, see Appendix).

Figure 1

Overview of manuscripts



Fifth, I summarize the three studies' findings, discuss their theoretical implications for the dissertation's interaction model and research questions, and address several limitations. Then, I provide practical implications regarding the findings' impact on society. I also outline future study directions for the different fields of political psychology, media psychology, and communication research, thereby underlining the significance of the research.

The last section concludes this dissertation. The Appendix includes the full version of each manuscript and provides detailed information on the stimuli and supplementary analyses.

Cognitive Biases and Disinformation in Information Usage

The term *confirmation bias* was first described in 1960 after several studies by psychologist Peter Wason demonstrated that people seek confirming evidence to validate their hypotheses (Wason, 1960). Nickerson (1998) referred to confirmation bias as a ubiquitous phenomenon and viewed it as partially unconscious information processing in which individuals seek, select, or interpret information to confirm their existing beliefs or values, including the tendency to ignore information that presents opposing views. Festinger's (1957) theory of cognitive dissonance is a central explanatory approach underpinning this theory. Cognitive dissonance refers to mental discomfort experienced when encountering information that conflicts with prior preconceptions. In other words, for individuals, it is an unpleasant emotional state that arises when a person holds conflicting cognitions (e.g., thoughts, attitudes) that contradict or exclude each other. Since people strive for cognitive balance, this uncomfortable feeling motivates them to reduce the dissonance (Festinger, 1957). For instance, individuals might selectively engage with information that confirms their preexisting attitudes and avoid information that contradicts them, thereby preventing the emergence of dissonance. This desire to avoid cognitive dissonance can lead to confirmation bias and more attitude-consistent information processing, respectively, selective exposure behavior (Knobloch-Westerwick et al., 2020). Although research on selective exposure behavior has not always been unanimous, the confirmation bias in line with the theory of cognitive dissonance has predominantly been supported by meta-analyses showing attitude-consistent selection behavior (e.g., D'Alessio & Allen, 2002; Hart et al., 2009).

Furthermore, research particularly highlighted the significance of partisanship, political ideology, and political attitudes in shaping individuals' information selection (e.g., Garrett, 2009; Iyengar & Hahn, 2009). The relationship between political ideology and partisan selective

exposure is primarily shaped by Stroud's (2010) work, which introduced the concept of partisan selective exposure within the context of polarization. Partisan selective exposure describes the tendency of individuals to seek out and engage with information that aligns with their political beliefs and underscores the reciprocal relationship between partisan selective exposure and polarization (Stroud, 2010). In this light, studies demonstrated that political conservatives show a more significant increase in partisan selective exposure over time than liberal individuals (e.g., Rodriguez et al., 2017; Burghartswieser & Rothmund, 2021), and leads to political ideology maintenance rather than reinforcement (Shehata et al., 2024). Thus, right-wing ideology appears to encourage individuals' selective exposure to information, which helps them maintain their ideological beliefs.

Selective Exposure vs. Selective Sharing

In addition to selective exposure behavior, which involves favorably selecting attitude-consistent information, communication research also explored selective sharing behavior, where individuals prefer to share attitude-consistent information with their network. The distinction between selective exposure and the closely related concept of selective sharing offers a clearer understanding of online content dissemination, as these constructs differ in their definitions, underlying motives, and consequences (Liang, 2018). As mentioned above, selective exposure refers to the tendency of individuals to seek out and consume content that aligns with their existing attitudes and beliefs, whereas selective sharing involves the act of disseminating content consistent with one's attitudes and beliefs to others (e.g., Garrett, 2009; Himmelboim et al., 2013). These two constructs complement each other because information must first be encountered through selective exposure before sharing it (Shin & Thorson, 2017).

The motivations behind both behaviors stem from a desire to avoid cognitive dissonance triggered by exposure to attitude-inconsistent information (e.g., Garrett, 2009; Liang, 2018). However, selective sharing is not only motivated by cognitive consistency but also by social considerations, such as influencing others or reinforcing group identity. It is inherently a social activity driven by the presence of an audience for whom the shared content is tailored (Marwick & Boyd, 2011), while selective exposure occurs independently of social interaction (Shin & Thorson, 2017). Consequently, selective exposure primarily involves passive content consumption, whereas selective sharing requires a more active role, requiring a deliberate decision to share content with others (Liang, 2018). Reflecting this distinction, research indicates that individuals may consume content that diverges from their attitudes (e.g., Brundidge, 2010; Knobloch-Westernick & Kleinman, 2012; Valentino et al., 2009) but are less likely to share such content due to its social nature and public visibility (e.g., Coppini et al., 2017; Shin & Thorson, 2017).

The outcomes of these behaviors vary depending on their underlying motives. Selective exposure's consequences primarily affects the individual, shaping their perceptions, beliefs, and knowledge, and are individual, involving personal choices regarding content consumption. In contrast, selective sharing affects both the sender and the broader audience, influencing public discourse and potentially shaping collective perceptions (Liang, 2018). This discrepancy arises because selective exposure focuses on the recipient, while research on selective sharing also considers the implications for the sender (Pingree, 2007). In other words, while information processing by the recipient is private and not visible to others, selective sharing is publicly visible, as it occurs within a social context where others can see and react to the content. Consequently, the impact of selective exposure is primarily on the individual consuming the information. In

contrast, selective sharing directly affects others by disseminating content that can shape public opinion and contribute to phenomena such as echo chambers and polarization.

Disinformation

The presence of disinformation in high-choice media environments, coupled with nearly unconscious cognitive biases in content selection and sharing, intensifies vulnerabilities in how individuals engage with information. Disinformation, like accurate information, significantly alters how individuals consume, share, and interpret content and has been a significant focus of research over the past decade. The spread of disinformation is typically strategic, aimed at influencing political, economic, or social agendas by targeting specific groups or individuals. On a content level, it often appears credible by mimicking legitimate news sources, using partial truths, or exploiting existing biases. Since these characteristics make it difficult for individuals to distinguish between accurate information and disinformation, communication research has investigated factors contributing to individuals being more vulnerable to disinformation and more likely to believe it.

Beyond personality factors (e.g., lower levels of agreeableness, conscientiousness, open-mindedness, and higher levels of extraversion; Calvillo et al., 2021) and individuals' news consumption (more hours of news consumption; Sindermann et al., 2020), studies supported the assumption of partisan bias in selecting and believing disinformation. They demonstrated that individuals tend to overestimate the accuracy of verified news and disinformation headlines that align with their political beliefs and attitudes compared to those that do not (e.g., Anthony & Moulding, 2019; Bago et al., 2020). However, other studies highlighted a crucial distinction: the impact of political alignment was generally much smaller than the effect of the actual veracity of the news (Pennycook & Rand, 2019). In other words, individuals believed accurate, politically

attitude-consistent news more than false news that aligns with their political views. Additionally, a greater belief in politically like-minded news did not necessarily signify politically motivated reasoning. Instead, a weak ability to distinguish between accurate and false news was associated with a lack of careful reasoning, relevant knowledge, and reliance on heuristics like familiarity (Pennycook & Rand, 2019). In this context, individuals' susceptibility to false news linked to a greater receptiveness to pseudo-profound statements, a tendency to overstate their knowledge, and lower scores on analytic thinking. Along with a general tendency to perceive motivational statements as profound, these factors converged on a single factor reflecting reflexive open-mindedness (Pennycook & Rand, 2020). Distinct from reflective open-mindedness, which involves deliberate questioning and critical evaluation of one's intuitions (Baron, 2019), reflexive open-mindedness is characterized by an uncritical acceptance of a broad range of claims, regardless of their epistemic value (Pennycook et al., 2015).¹ While recent research, therefore, advises caution in overstating the influence of political ideology on individuals' susceptibility to misleading content, the variables seem closely related, particularly when examining the selection and sharing of, rather than the belief in, disinformation. Right-wing ideology, in particular, seems to increase individuals' susceptibility to select disinformation, especially when the content fits with their political views (Calvillo et al., 2020). A recent systematic literature review spanning from 2017 to 2021 consistently found that conservative or right-wing audiences are more susceptible to disinformation. In contrast, no analyzed study linked left-wing individuals or liberals to a higher tendency to engage with political disinformation (Baptista & Gradim, 2022). Similarly, findings on sharing disinformation indicated that intense partisanship and political

¹ Given the ongoing ambiguity surrounding the terms fake news, misinformation, and disinformation in research, it is essential to clarify that Pennycook and colleagues (2019, 2021) focused on individual instances of misinformation rather than disinformation deliberately spread with malicious intent. This distinction is crucial for accurately interpreting their findings.

ideology significantly influenced individuals' sharing behavior (Weeks & Holbert, 2013). In the U.S. context, Guess and Lyons (2020) found that conservatives are likelier than liberals or moderates to share articles from disinformation domains. Osmundsen et al. (2021) also identified partisan polarization as the critical psychological driver behind sharing disinformation on Twitter (now X). By linking Twitter news-sharing activities to individual-level survey data from over 2,300 American citizens, their results revealed that partisans primarily share politically aligned news content due to hostile feelings toward outgroups or political opponents. These findings align with a recent hypothesis distinguishing between believing and sharing false news.

Contrary to the intuitive assumption that people only share what they believe, individuals rated verified political headlines significantly more accurate than false ones. However, when asked whether they would share these headlines, the truthfulness had little influence on their intentions. In other words, the intention to share false headlines was much higher than their perceived accuracy, suggesting that individuals were willing to share content they could have recognized as inaccurate (Pennycook et al., 2021). In addition to a confusion-based account (where individuals genuinely but mistakenly believe the false claims they share are likely true) and an inattention-based account (where people prefer to share accurate content but are distracted by the social media context), the authors highlighted the preference-based account that suggested that individuals prioritize political identity over truth, accounting for 16% of shared headlines previously identified as false (Pennycook et al., 2021). In this vein, while political identity is not the primary factor compared to the other two accounts, it still somehow influences the sharing of disinformation. Consequently, political ideology tends to increase the likelihood of information sharing, regardless of its accuracy, with political conservatism emerging as a particularly significant risk factor that heightens individuals' susceptibility to disinformation.

Risk Factors: Right-Wing Ideology (x) Threat

The research above highlights the crucial role of right-wing ideology (with a focus on political conservatism) in understanding individuals' cognitive biases and susceptibility to disinformation. However, since political conservatism can be conceptualized as a latent factor encompassing various underlying psychological variables (e.g., right-wing ideological attitudes, uncertainty avoidance, need for order and structure, and need for cognitive closure; Jost et al., 2003), it may be worthwhile to explore the impact of more fundamental factors on cognitive biases and disinformation susceptibility. In exploring these phenomena under crisis conditions, I will introduce two critical constructs, Right-Wing Authoritarianism (RWA) and Social Dominance Orientation (SDO), within political conservatism, embedded in two theoretical models, theoretically and empirically linked to the situational factor of threat. These models provide a foundational framework suggesting that the contextual factor of perceived threat may intensify the relationship between right-wing ideology and susceptibility to cognitive biases and disinformation. Investigating this interaction (right-wing ideology x threat) appears promising for advancing the understanding of potential risk factors that could make people vulnerable and undermine their competent information usage, especially under crisis conditions.

RWA and SDO, critical facets of political conservatism, are well-researched predictors of prejudice and intolerance (Duckitt & Sibley, 2009). RWA arises from socialization experiences emphasizing danger and threat, comprising extreme conservatism, submission to authority, and aggression toward perceived deviants (Altemeyer, 1998). In contrast, SDO reflects a competitive worldview driven by dominance and a preference for group hierarchies to justify inequality (Sidanius & Pratto, 2004). Both RWA and SDO are linked to heightened prejudice and intolerance toward others. Perceived threats further influence these relationships. RWA, in particular, is

activated by perceived threats as “an ideological response to reduce high levels of perceived threat and anxiety” (Lavine et al., 2005, p. 220). The Threat-RWA Activation Hypothesis suggests that perceived threats trigger RWA, resulting in increased intolerance and prejudice (Stenner, 2005). Without threats, these tendencies remain dormant. Meanwhile, the Dual Process Motivational Model of Ideology and Prejudice (DPM) posits that both RWA and SDO can be activated by threats, linking right-wing ideology to prejudice against outgroups (Duckitt & Sibley, 2009). Thus, RWA and SDO interact with perceived threats, leading to intolerance and prejudice.

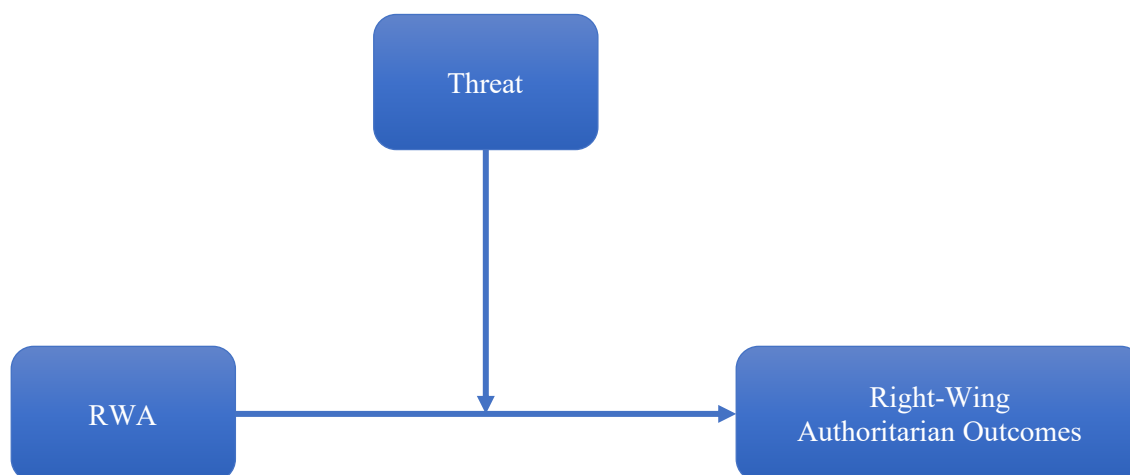
Interaction Model #1: The Threat-RWA Activation Hypothesis

Recent empirical research has shown that while RWA is typically considered a stable psychological disposition, it remains notably responsive to contextual influences. The Threat-RWA activation hypothesis posits that perceived threats activate RWA, prompting individuals to adjust their attitudinal preferences as compensation. According to this hypothesis, RWA is frequently associated with threats across various theoretical assumptions. For instance, Duckitt (2001) linked RWA activation to a worldview shaped by threat and fear. Oesterreich (2005) described RWA’s activation through threat as a mechanism for addressing feelings of fear and insecurity. Stenner’s (2005) theory of authoritarian dynamics also views RWA through situational stimuli, suggesting that individuals exhibit varying degrees of RWA and adopt related values and behaviors in response to external threats. Against this background, an ongoing debate exists about the specific threats interacting with RWA. Stenner (2005) argues that right-wing authoritarian predispositions are exceptionally responsive to social-normative threats related to conformity (e.g., threats to social cohesion, the status quo, or established norms), eliciting more extreme manifestations of RWA. Studies supported the assumption, demonstrating that social

security and cohesion threats significantly impact individuals with high RWA scores (e.g., Feldman, 2003; Roccato & Russo, 2017). For instance, the interaction between RWA and perceived social threats was associated with greater support for authoritarian policies, such as national surveillance measures at the expense of human rights (e.g., Cohrs et al., 2007; Kossowska et al., 2011). Simultaneously, additional research indicated existential threats (e.g., terrorist attacks or threats to livelihood) that interact with RWA (e.g., Cohrs et al., 2005; Lavine et al., 2002). A field study conducted during the COVID-19 pandemic revealed that the association between RWA and nationalism and anti-immigrant attitudes was influenced by the perceived severity of the COVID-19 threat (Hartman et al., 2021). Additionally, studies in Germany and the United Kingdom demonstrated that emphasizing the threat of climate change increased authoritarian attitudes (Fritzsche et al., 2012). However, regardless of what threat type triggers RWA, research on the consequences of this interaction consistently demonstrated that RWA x perceived threats amplify right-wing authoritarian outcomes (see Figure 2), including the legitimization of prejudice, intolerance, ethnocentrism, and adherence to myths (Duckitt & Sibley, 2009).

Figure 2

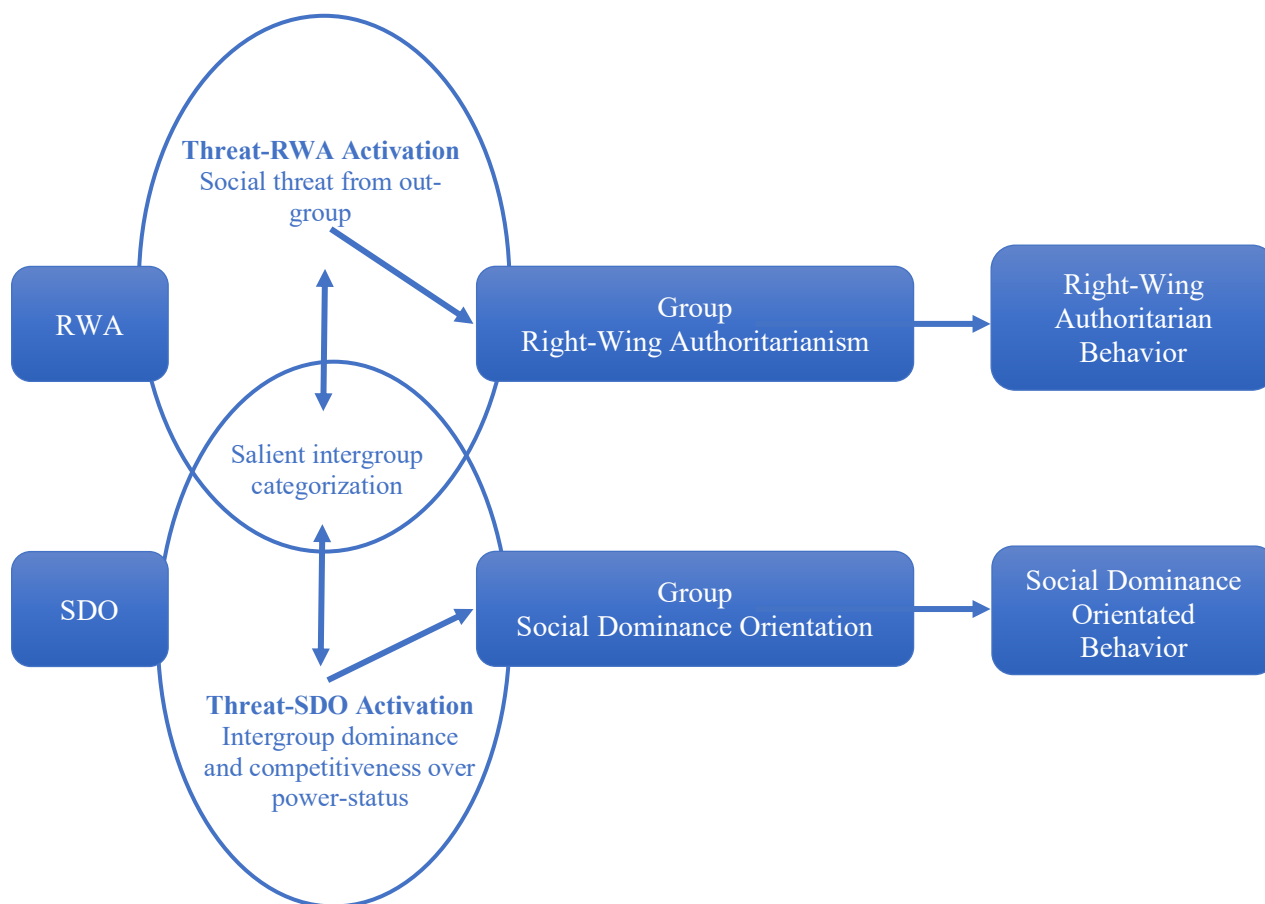
A simplified version of the Threat-RWA Activation Hypothesis



Interaction Model #2: The Dual Process Motivational Model of Ideology and Prejudice

According to Duckitt (1989), the activation of RWA and SDO is closely linked to ingroup identification. This identification is characterized by the significance of one's ingroup to one's self-concept (Rios et al., 2018). RWA is associated with adopting dangerous worldviews, where the social environment is perceived as unsafe and threatened by outgroups. Conversely, SDO foster dominance-related goals within a competitive worldview, characterized by threat perceptions related to intergroup dominance. Consequently, strong ingroup identification heightens sensitivity to threats posed by disruptive societal changes that may undermine personal and collective security or social status, thereby contributing to the emergence of right-wing ideological responses (Duckitt, 2022).

The DPM integrates RWA and SDO with ingroup threat through two parallel processes to elucidate the development of prejudice against outgroups. The first process involves RWA responding to ingroup threats posed by outgroups when intergroup categorization is salient (threat-RWA activation). This activation leads to a collective security motivation against outgroups, making individuals with high RWA scores more hostile toward threatening outgroups. This hostility is manifested through authoritarian behaviors as a reaction to perceived threats to group security and cohesion. Similarly, SDO responds to threats related to intergroup dominance (threat-SDO activation), activating a competitive motivation to maintain superiority over outgroups. Individuals with high SDO scores exhibit greater hostility towards competing groups as a reaction to perceived challenges to their social dominance, resulting in derogation of the outgroup through social dominance-oriented behaviors (for a simplified overview of the DPM, see Figure 3).

Figure 3*A simplified version of the DPM*

When comparing the two interaction models, it is striking that although the models' processes stem from slightly different theoretical underpinnings, one focusing on ingroup identification and threat, while the other emphasizes threats to social norms or the social status quo as the primary drivers of right-wing ideological activation, the Threat-RWA Activation Hypothesis and the threat-RWA activation process in the DPM are quite similar. Despite a few differences, both are based on the same core assumption that a perceived threat triggers the activation of RWA.

The Dissertation's Interaction Model

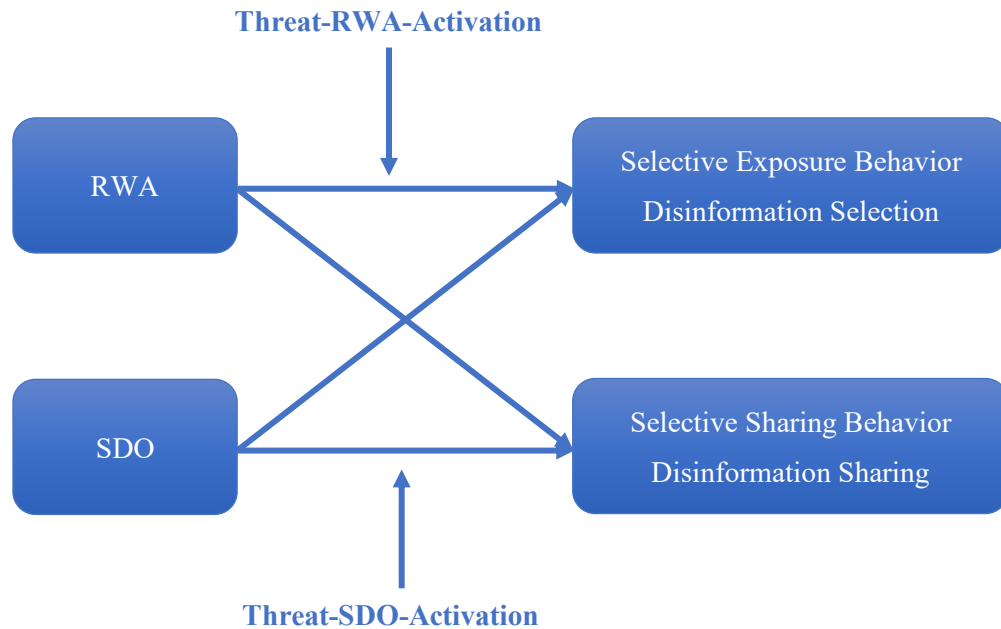
In line with these assumptions, studies indicate that perceived threat and RWA significantly influence information processing. Threats like terrorism or financial crises amplify confirmation bias and selective exposure, particularly when contextually relevant (e.g., Fischer et al., 2011; Kim et al., 2014). Hinckley and Harell (2020) found that RWA predicts selective exposure, with high-RWA individuals avoiding pro-free speech messages in favor of non-political content. Lavine et al. (2005) demonstrated that right-wing authoritarians show stronger confirmation bias, preferring information aligned with their preexisting attitudes under threat. This finding supports the Threat-RWA Activation Hypothesis (interaction model #1) in communication research, where perceived threats trigger RWA-driven selective exposure, not RWA alone. At the same time, research on RWA and perceived threat's role in disinformation susceptibility is limited. A few recent studies conducted during the COVID-19 pandemic, when disinformation highly circulated, showed that alignment with extreme conservatism and a bias toward believing disinformation can make individuals more susceptible to it (e.g., Bauer & Clemm von Hohenberg, 2020; Hopp et al., 2020). Another research indicated that RWA increases individuals' vulnerability to selecting and believing disinformation (Frischlich et al., 2021). However, further research is needed to thoroughly examine how RWA, SDO, and perceived threats shape cognitive biases and susceptibility to disinformation, particularly within crisis contexts. Moreover, recent societal crises (e.g., the COVID-19 pandemic, climate crisis, or the refugee crisis) have amplified the conditions under which these interaction models may operate, including heightened threat levels, the growing prevalence of right-wing ideology, and the increased spread of disinformation. Revisiting Lavine et al. (2005) findings in a crisis setting (when accurate news is accompanied by disinformation) and transferring the DPM in the context of communication research

could enhance understanding of how threat and right-wing ideology interact to influence selective exposure and susceptibility to disinformation. This investigation could clarify whether threats and right-wing ideology drive biased information usage independently or if their interaction amplifies these effects. Initial evidence from interaction models #1 and #2 supports this investigation. Hartman et al. (2021) tested RWA, SDO, and COVID-19-related threats (interaction model #2), finding that threats increased nationalism and anti-immigrant sentiments in high-RWA individuals, but SDO showed no such effect. Lavine et al. (2005) confirmed the Threat-RWA Activation Hypothesis (interaction model #1), showing that threats intensified selective exposure among high-RWA individuals while low-RWA individuals were unaffected. Although Lavine et al. (2005) found a strong interaction between threat and RWA, further research is needed to test this dynamic in contemporary crises. Substantial adjustments to the measurements and methodologies of this study (e.g., ensuring higher statistical power with greater sample size and more sophisticated data analysis) would be beneficial to effectively retest these critical predictions and better capture the threat-RWA activation mechanism in today's complex information environment. Additionally, the influence of RWA and SDO on selective sharing and disinformation susceptibility still needs to be explored, warranting further investigation.

To address these research gaps, I developed an interaction model grounded in insights from both interaction models and the threat-RWA/SDO activation processes in the context of communication research. It concentrates on individuals' susceptibility to cognitive biases and disinformation in information selection and sharing rather than focusing on dependent variables like intolerance or prejudice. Tracing its pathways, the model examines critical relationships to answer the dissertation's overarching research questions (see Figure 4).

Figure 4

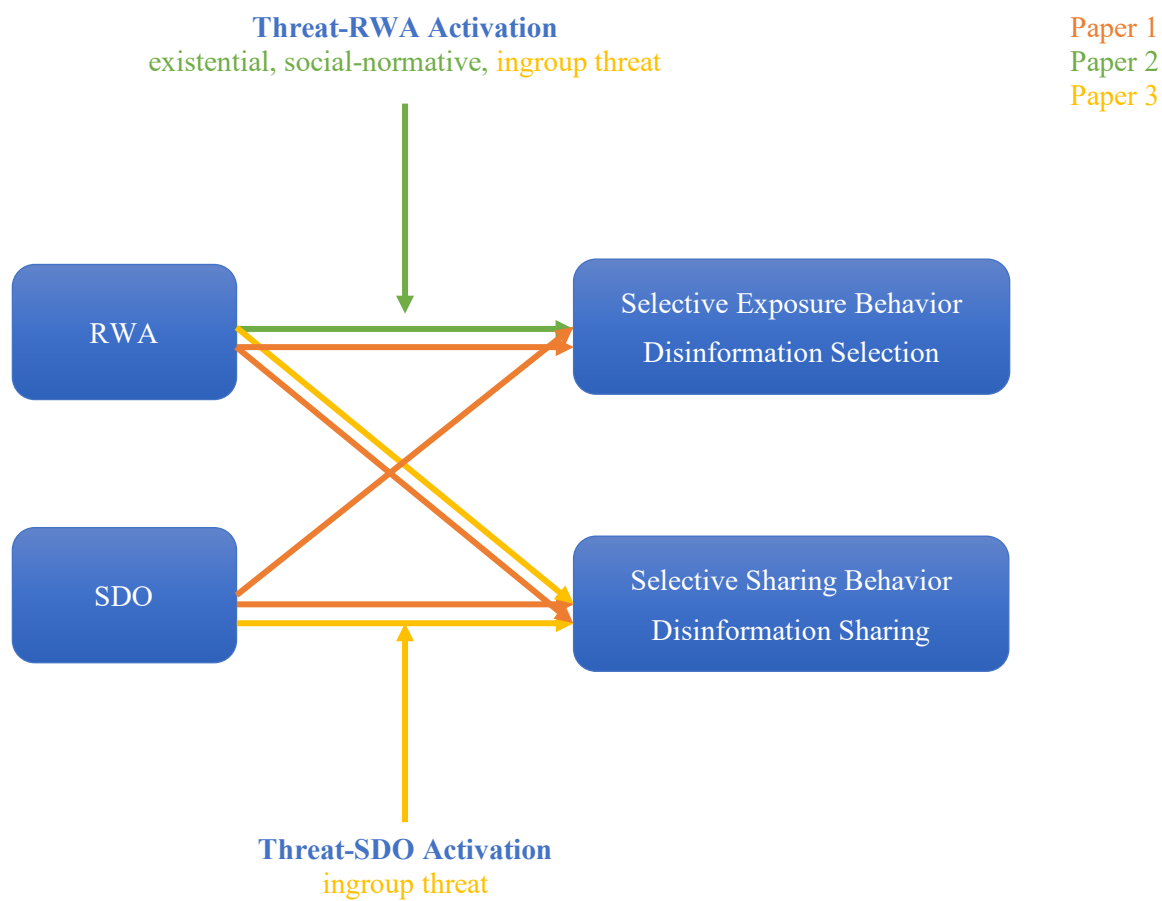
The dissertation's research model with its central relationships



The empirical testing of this model is divided into three studies, each addressing distinct relationships presumed in the model (see Figure 5). Manuscript 1 (the orange pathways) assume that RWA and SDO influence selective exposure to and sharing of verified news and disinformation. Manuscript 2 (the green pathways), in line with the Threat-RWA Activation Hypothesis, hypothesize the activation of RWA by existential and social-normative threats, examining how these interactions influence selective exposure behavior and susceptibility to disinformation. Manuscript 3 (the yellow pathways), based on the DPM, posit that ingroup threats activate RWA and SDO, affecting selective sharing behavior and disinformation vulnerability. For the dissertation, this interaction model offers a structured framework for understanding the relationships between RWA, SDO, perceived threats, and susceptibility to cognitive biases and disinformation across three manuscripts. The following sections will summarize these manuscripts.

Figure 5

The dissertation's research model (divided into three studies)



Manuscript 1

Klebba, L.-J., & Winter, S. (2024). Crisis alert: (Dis)information selection and sharing in the COVID-19 pandemic. *Communications*, 49(2), 318–338. <https://doi.org/10.1515/com-mun-2022-0020>

SUMMARY

I will now summarize the first manuscript of this dissertation (Klebba & Winter, 2024, see Appendix), following the orange pathways of the dissertation's interaction model. In Manuscript 1, we examined the selection and sharing of verified news and disinformation during the COVID-19 crisis. The study conducted at the onset of the pandemic assessed real-time survey data to explore participants' selective exposure and sharing behaviors related to crisis news and disinformation. It also investigated how right-wing ideologies (such as RWA and SDO), trust, and science-related beliefs may influence how individuals select, share, and perceive disinformation as credible. In this summary, the impact of trust and scientific beliefs is addressed to a lesser extent, as it is a supplementary investigation within this study's broader research framework (for more details, see Manuscript 1 in the Appendix).

The study contained a news selection procedure with an experimental within-subject design to investigate the hypotheses and corresponding research questions ($N = 1101$). After evaluating their perception of the COVID-19 threat and the effectiveness of the German government's crisis response, participants were presented with twelve randomized COVID-19 news headlines, including seven disinformation items and five accurate or opinion-based headlines, to measure selective exposure. Participants rated whether they recalled the news, considered it credible, and how likely they would be to read or share the article. Afterward, they were informed about which headlines were disinformation, and fact-checked explanations were provided. They also

completed assessments of RWA, SDO, trust in institutions (politics, media, and science), and demographic details.

Key findings

Our findings revealed that participants generally sought information about COVID-19 that aligned with their existing attitudes, demonstrating confirmation bias in both selection and sharing behaviors, consistent with previous research conducted in non-crisis contexts (e.g., Knobloch-Westerwick et al., 2015; Liang, 2018). Moreover, RWA significantly influenced the selection of disinformation, particularly for content with right-wing or conspiracy themes, supporting findings from prior studies (e.g., Imhoff and Lamberty, 2020; Frischlich et al., 2021). Interestingly, RWA did not significantly affect the selection of attitude-consistent content. In contrast, SDO emerged as a crucial predictor for both the sharing of disinformation and the attribution of credibility, highlighting the distinct roles that RWA and SDO play in shaping information behavior. Thus, both constructs heighten susceptibility to disinformation, even when controlling for political orientation in our analyses.

Take Home Message

Manuscript 1 demonstrates that the well-established confirmation bias in selecting and sharing news content persists during times of crisis (here, at the onset of the COVID-19 pandemic). In contrast, RWA nor SDO amplified the cognitive biases. However, among the beliefs explored, RWA and SDO emerged as risk factors of individuals' susceptibility to COVID-19 disinformation, RWA for selecting, and SDO for believing and sharing disinformation. Thus, this investigation sheds light on individuals particularly vulnerable to disinformation.

Manuscript 2

Klebba, L.-J., & Winter, S. (2025). The influence of threat and right-wing authoritarianism on the selection of online (dis)information – a conceptual replication and extension of Lavine et al. (2005). *Human Communication Research*, 51(1), 52–56.
<https://doi.org/10.1093/hcr/hqae016>

SUMMARY

In the second manuscript of this dissertation (Klebba & Winter, 2025, see Appendix), we conducted a conceptual replication of Lavine et al. (2005) study, following the green pathways of the dissertation’s interaction model. It tested the prominent Threat-RWA Activation Hypothesis (interaction model #1) on participants’ selective exposure behavior to COVID-19 vaccine-related news in a contemporary information environment, using a larger sample size ($N = 1118$) rather than experimenting in a laboratory setting with a small sample ($N = 92$).

Participants explored a mock news website for four minutes, selecting articles based on headlines. Their browsing behavior (clicks, time spent on articles) was tracked automatically using a software tool (Unkel, 2019). The articles varied in stance (pro vs. con) and type (verified news vs. disinformation), which were manipulated as within-subject factors. Disinformation was included to simulate a realistic crisis information environment, where false information spreads alongside verified news, and to test whether right-wing authoritarians’ susceptibility to disinformation (Frischlich et al., 2021; Klebba & Winter, 2024) increases under threat. COVID-19 vaccine-related content, rather than capital punishment, was chosen as a more relevant topic reflecting the crisis context. Two types of threat were induced as independent variables: existential threat (as in Lavine et al., 2005) and social-normative threat (following Stenner’s 2005 theory of threat-RWA activation). These replaced the original death-thought manipulation due to ethical concerns. Participants were randomly assigned to one of three conditions: existential threat

(article about the lifetime risk of developing cancer; $n = 376$), social-normative threat (article on the influx of African refugees to Europe due to COVID-19; $n = 368$), or a control group (article on tourist destinations in Germany; $n = 374$). Afterward, participants' RWA scores and demographic information were collected.

Key findings

The data revealed that the expected interaction effect on selective exposure behavior could not be replicated, even with a larger sample size, which provided increased statistical power. Instead, the results showed that RWA was explicitly responsive to social-normative threats (e.g., the influx of African COVID-19 refugees) but led to selecting attitude-inconsistent information rather than attitude-consistent content.

Take Home Message

The findings cast doubt on the significance of the interaction between RWA and threat in driving preference for attitude-consistent over attitude-inconsistent (dis)information. Instead, the results highlighted a general confirmation bias and a tendency for right-wing authoritarians to be more susceptible to disinformation, regardless of threat perception. Thus, with its larger sample and improved data analysis, the role of the RWA-threat interaction in crisis information environments may be less critical than previously thought.

Manuscript 3

Klebba, L.-J., Winter, S., & Reese, G. (under review). A Dual Process Motivational Bias? The Impact of Right-Wing Ideological Attitude Dimensions and (Ingroup) Threat on the Sharing of Online Information with Ingroup/Outgroup Cues.

SUMMARY

In Manuscript 3 (Klebba, Winter, & Reese, under review, see Appendix), we examined the yellow pathways of the dissertation's interaction model based on the application of the DPM (interaction model #2) within communication research, specifically focusing on how right-wing ideologies (RWA and SDO) and ingroup threats influence sharing behaviors. It focused on individuals' selective sharing of news based on cues derived from the DPM. The model is well-suited for our study as it emphasizes RWA, SDO, and threat through the lens of ingroup-outgroup dynamics. For instance, individuals high in RWA perceive threats when an outgroup endangers their safety or social norms. In contrast, those high in SDO feel threatened when an outgroup challenges their social status. This dynamic is often reflected in biased news and disinformation during crises, such as on migration or the COVID-19 pandemic, where both verified and false information aim to strengthen ingroup positions and criticize political opponents or social groups (Olaru, 2023). Since this information often promotes hostility towards perceived outgroups, it raises the question of who is likely to share such content online. Therefore, the study aimed to determine whether RWA predicts the sharing of pro-ingroup content (promoting safety and security) and whether SDO predicts the sharing of anti-outgroup content (defaming outgroups). Additionally, it explored whether ingroup threats moderate these sharing behaviors, resulting in higher sharing rates of pro-ingroup content among those high in RWA and higher sharing of anti-outgroup content among those high in SDO during threats, compared to those in no-

threat conditions. It also examined whether these sharing patterns differ between verified and false information.

The hypotheses and corresponding research questions were tested using a quota-based online experiment with a 2 (ingroup threat vs. no threat) by 3 (pro vs. contra migration ingroup vs. contra migration outgroup information) by 2 (verified news vs. disinformation) mixed design ($N = 1152$). Participants rated their agreement with statements about migration and its personal relevance, followed by assessments of their social identity, right-wing ideology, and political attitudes. Randomly assigned to either a threat or control group, participants rated their perceived threat levels. In the sharing task, they viewed twelve tweets, both pro and contra migration, incorporating ingroup and outgroup cues, verified information, and disinformation. After each tweet, participants indicated their likelihood of liking, sharing, and the credibility of the information, with tweet order randomized. The questionnaire ended with rating participants' socio-demographics. In detail, the study manipulated ingroup threat as a between-subjects factor by presenting participants with a tweet and an article discussing the negative economic and cultural impacts of accepting refugees in Germany. These materials were designed to highlight threats to the ingroup's safety or social status, which are known to affect RWA and SDO. A control group received a tweet and article about a tourist destination in Germany. Participants were exposed to verified news and disinformation about migration as within-subject factors, with the pro-migration category featuring four tweets (two verified, two disinformation) and the contra-migration category comprising eight tweets (four verified, four disinformation). Each subset included two tweets focusing on ingroup cues and two on outgroup cues. All tweets with the ingroup/outgroup cues criticized migration, either emphasizing the threat to the ingroup's safety or challenging the

ingroup's status and privileges, while positively framed migration messages did not include such cues.

Key findings

The data revealed confirmation bias in participants' intentions to share political information via news tweets, favoring content aligned with their preexisting attitudes. Contrary to our expectations, which predicted a right-wing ideological bias in sharing disinformation with a hostile stance toward migration, only RWA emerged as a positive predictor. According to the DPM, we hypothesized that high-RWA individuals prefer sharing information with ingroup cues. In contrast, those high-SDO individuals prefer sharing information with outgroup cues. Additionally, we anticipated that these preferences would be more robust when individuals perceive ingroup threats. However, our results only supported the link between RWA and sharing content with ingroup cues, with no significant association for SDO and sharing content with outgroup cues, nor did ingroup threat enhance these relationships. Unexpectedly, RWA was further related to sharing outgroup-cued content. These findings suggest a disconnect between the theoretical mechanisms proposed by the DPM and our results while emphasizing RWA's significant role in disseminating disinformation, particularly with pro-ingroup or anti-outgroup cues.

Take Home Message

The data revealed a clear pattern: RWA consistently increased participants' likelihood of sharing information, regardless of its tone or accuracy. Although RWA's impact was less pronounced in models focused on sharing information in general or with a supporting stance on migration than in sharing disinformation with opposing migration stances or information with ingroup and outgroup cues, it remained significant across all tested models. This underscores a

general susceptibility among right-wing authoritarians to share various types of content, true and false, as well as positive and negative, information on migration.

Discussion

This dissertation emphasizes the importance of examining individuals' susceptibility to cognitive biases and disinformation in crisis contexts, focusing on the interaction between personality traits and situational factors. While previous research has shown that right-wing ideology and perceived threat independently influence the selection and sharing of (dis)information (e.g., Fischer et al., 2011; Kim et al., 2014; Sindermann et al., 2020; Frischlich et al., 2021), two interaction models suggest that their combination intensifies prejudices and intolerance toward outgroups. Applying these models to communication research, I explored how right-wing ideology, specifically RWA and SDO, and threat interact to shape selective exposure, sharing behavior, and susceptibility to disinformation in a corresponding dissertation's interaction model. In the following section, I outline the theoretical implications of this dissertation's interaction model based on the key findings of the three manuscripts and address the central research questions of this dissertation in response. Afterward, I discuss relevant practical implications and propose directions for future research.

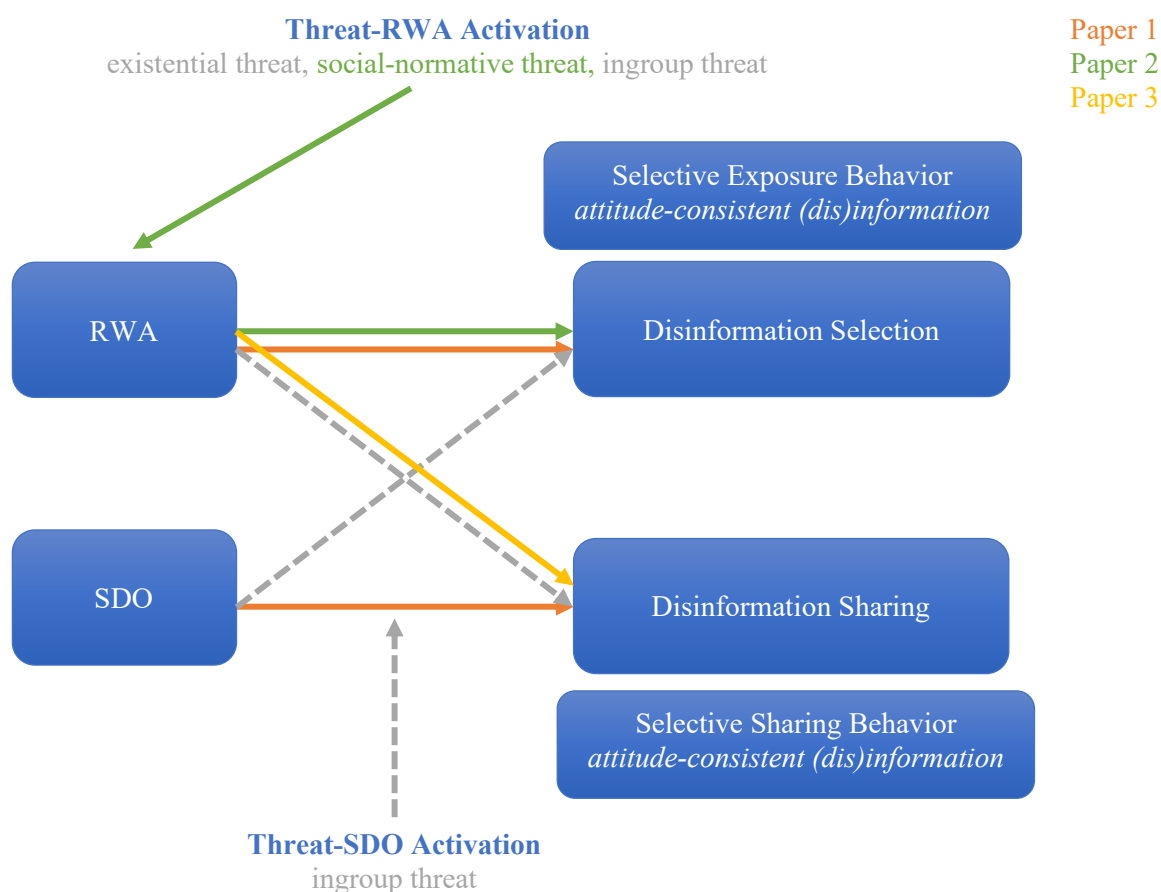
Theoretical Implications

The findings of the three manuscripts revealed essential implications for the tested pathways of this dissertation's interaction model. It becomes apparent that many of the assumed relationships do not occur in the investigations. RWA and SDO do not amplify selective exposure or sharing behaviors; instead, they primarily influence the selection and sharing of disinformation. While RWA interacts with social-normative threats (green pathway), this interaction does not significantly affect any of the variables studied. Furthermore, SDO does not interact with any of the threat types examined. Consequently, the right-wing ideology x threat activation processes tested in the dissertation's interaction model are less robust than expected.

In contrast, all studies supported the existence of confirmation bias in selecting and sharing news content, independent of its veracity. At the same time, neither threat, RWA, nor SDO amplified these biases. Instead, right-wing ideology emerged as a risk factor for susceptibility to disinformation. In the first study, RWA predicted the selection of disinformation, whereas SDO significantly influenced the sharing of such content (orange pathways). In the second study, RWA again predicted disinformation selection (green pathway). In addition, the third study identified RWA as an overall predictor for sharing information (verified news and disinformation with ingroup and outgroup cues), whereas SDO had no influence (yellow pathway; for an overview of the central findings, see Figure 6).

Figure 6

The dissertation's research model with its central findings (with null results greyed out)



The divergent and rather unexpected findings across these studies suggest that the interaction between threat and right-wing ideology, along with their impact on cognitive biases and susceptibility to disinformation, may not translate directly to the field of communication research. While political psychology presents a relatively stable threat x right-wing ideology mechanism affecting outcomes like intolerance or prejudice, this interaction appears less prominent in influencing individuals' susceptibility to cognitive biases or disinformation in information usage. This relationship, therefore, requires further investigation. Nonetheless, while some pathways were confirmed and others were not, their implications provide valuable insights into the dissertation's overarching research questions, which I discuss in the following.

Research Question 1: Selective Exposure and Sharing Under Threat

The first research question of this dissertation investigated whether selective exposure and sharing behaviors are more pronounced in threatening situations compared to non-threatening ones. This question was based on existing research that primarily examines selective exposure and sharing behaviors under normal, non-threatening conditions. Although some studies suggested that threats could amplify selective exposure under specific circumstances, such as when the threat induction is congruent with the news topic (Fischer et al., 2011), the supporting evidence was limited. Moreover, at this point, no prior research has explored the relationship between selective sharing behavior and threats in a crisis context. Consequently, the first manuscript examined participants' selective exposure and sharing behaviors at the onset of the COVID-19 pandemic, providing an opportunity to collect data in a real-time crisis scenario. The findings indicated that participants tended to expose themselves to and share COVID-19-related news that aligned with their preexisting attitudes. However, perceived threat levels did not intensify this behavior. A linear regression analysis revealed that perceived threat was not a

significant predictor of selective exposure or sharing behavior. This outcome was consistent with the findings from the second and third manuscripts, which employed experimental studies where threats were induced via various manipulations (e.g., exposure to threatening articles or tweets). In these experiments, the perceived threat did not enhance selective exposure or sharing behaviors, which remained present but independent of participants' threat perceptions.

Although the null findings on the influence of threat on attitude-consistent information selection and sharing presented a consistent pattern, there are important limitations related to the absence of significant effects. In particular, including contextual threat as a comparison factor would have been more rigorous. As previous research suggested, context congruency between the threat context and the message topic is relevant to this relationship (Fischer et al., 2011). However, the studies in this dissertation primarily focused on whether threat conditions activate right-wing ideologies (particularly RWA and SDO) and which types of threats trigger this activation. As a result, the threats examined were existential, social-normative, or ingroup threats, closely aligned with these constructs, leaving context congruence only partially addressed.

Furthermore, long-term threats may have a more substantial influence on behavior. Research supporting the interaction between RWA and threat has shown that persistent threats, such as climate change or the COVID-19 pandemic, can lead to significant behavioral changes or increased intolerance (e.g., Hartman et al., 2021; Fritzsche et al., 2012). Therefore, examining the effects of sustained threats in longitudinal studies would be valuable, as prolonged exposure could intensify confirmation bias.

Additionally, societies may increasingly experience a "permanent crisis," blurring the distinction between crisis and non-crisis periods. Constant exposure to various threats may either reduce the immediacy of threat activation or sustain it at a latent level, leading to habituation

effects. Consequently, individuals may exhibit reduced sensitivity to perceived threats, or the experience of threat may no longer enhance specific outcomes, such as increased selective exposure or sharing behaviors. However, the lack of main effects from the threat inductions on participants' selective exposure and sharing behavior in all three manuscripts leads to an important conclusion and an answer to the first research question:



Research Question 2: Selective Exposure and Sharing of Disinformation

The second research question aimed to examine whether selective exposure and sharing behaviors also manifest in the context of disinformation. This question was addressed through the studies in Manuscripts 1, 2, and 3, which incorporated disinformation into the information selection tasks to measure participants' selective exposure and sharing behaviors toward verified news and disinformation. Across all studies, whether focused on the general COVID-19 crisis, COVID-19 vaccination, or migration topics, these behaviors were consistently observed. Based on these findings, it can be confidently concluded that individuals' selective exposure and sharing behaviors remain robust regardless of the accuracy of the information they encounter.

However, conducting studies with implemented information selection and sharing scenarios has several limitations. In Manuscripts 1 and 3, participants were presented with news stories one at a time and then asked about their intention to select and share the information (Manuscript 1 included news selection and sharing, while Manuscript 3 focused solely on sharing). Although

this quasi-experimental approach aimed to simulate realistic information behavior, it significantly reduced the complexity of the actual news selection and sharing process. Furthermore, people may not accurately report their clicking or sharing behavior. Since neither study controlled for social desirability, participants' responses might have been influenced by the desire to appear in a favorable light. Although participants were unaware of which headlines contained verified news or disinformation, thereby mitigating some of this bias, we decided that tracking data would be helpful to create a more naturalistic scenario and reduce problems of social desirability. For this reason, Manuscript 2, which focused on information selection, used a software-based tool (Unkel, 2019) that unobtrusively tracked participants' browsing history, click rates, and time spent reading articles.

Another limitation is the narrow focus on a single news topic across all three studies. In real-world settings, individuals are exposed to various news topics and can choose which content to engage with, including political, entertainment, or tabloid news. In our studies, participants could not select the topics they wanted to explore or choose to avoid the news altogether. Besides, in Manuscript 2, the selection task was limited to four minutes, restricting participants' time on any article. This focus on a single topic and time constraint reduces the external validity of the experiments, aligning with broader criticisms that selection and sharing studies do not fully capture the complexity of individuals' real-world information behavior (e.g., McKay & Buchanan, 2022; Clifford & Rainey, 2025).

Since all three manuscripts included disinformation, a further limitation is that we could not account for all types of disinformation circulating on the internet regarding the COVID-19 pandemic, COVID-19 vaccination, or migration. To mitigate this limitation, we selected the most prominent disinformation narratives based on major German fact-checking websites, ensuring a

broad representation of different narratives. This approach is consistent with the measurement approach used by Zimmermann and Kohring (2020). Including verified news and disinformation circulating during the survey period is a significant strength in terms of validity. However, one drawback, on the contrary, is an inconsistent pattern of disinformation topics, which creates less comparability and control of confounding effects. Despite the limitations, the presence of selective exposure and sharing behavior to both verified news and disinformation reported in all three manuscripts supported an essential finding of this dissertation:



Research Question 3: The Influence of RWA, SDO and Threat

The third research question explored RWA and SDO as specific predictors to determine their influence on cognitive biases and susceptibility to disinformation and whether these factors interact with a perceived threat. Manuscript 1 addressed this research question by analyzing survey data on the influence of RWA and SDO on participants' selective exposure, sharing behavior, and disinformation susceptibility. Manuscript 2 revisited the Threat-RWA Activation Hypothesis to explore its impact on selective exposure and susceptibility to disinformation. Manuscript 3 applied the threat-RWA/SDO processes of the DPM to investigate how ingroup threat activated RWA and SDO, affecting sharing behavior and susceptibility to disinformation. This section first focuses on the roles of RWA and SDO in shaping selective exposure, sharing

behavior, and disinformation susceptibility. Then, it considers how perceived threat moderates these relationships.

The Influence of RWA and SDO

The findings on the influence of RWA and SDO on individuals' information usage across the three studies conducted were inconsistent. In Manuscript 1, neither RWA nor SDO significantly increased cognitive biases (selective exposure and sharing behavior). However, RWA was a positive predictor of selecting disinformation, and SDO was associated with a higher likelihood of sharing disinformation. Manuscript 2, which focused on information selection, confirmed these results, showing that RWA did not affect selective exposure but emerged as a significant predictor of susceptibility to disinformation. Manuscript 3, which examined information sharing, presented a more nuanced outcome: RWA and SDO did not influence attitude-consistent sharing behavior. However, while SDO had no impact, RWA was a vital risk factor for disinformation susceptibility.

Across all manuscripts, RWA consistently predicted the selection of disinformation during the COVID-19 crisis, including disinformation about the pandemic's onset, COVID-19 vaccination, and migration topics. In Manuscript 3, contrary to initial expectations, RWA also positively predicted the sharing of migration-related disinformation that emphasized ingroup safety (the German nation) and outgroup derogation (migrants and refugees). The significant role of RWA in individuals' susceptibility to disinformation aligns with recent research suggesting that disinformation, often steeped in extreme right-wing and conspiracy-laden narratives, tends to resonate with those high in RWA and Conspiracy Mentality (CM) (e.g., Imhoff & Lamberty, 2020; Frischlich et al., 2021). In Manuscript 2, exploratory analyses examined CM's role in participants' disinformation selection. Consistent with studies highlighting the vulnerability of these

groups to disinformation, the data revealed that CM positively predicted both the selection and extended reading time of disinformation on COVID-19 vaccination. These findings underscore that RWA and CM significantly influence exposure to, belief in, and sharing disinformation (e.g., Frischlich et al., 2021; Halpern et al., 2019).

In contrast, SDO emerged as a significant predictor of disinformation sharing only in the first study. Although SDO could theoretically link to self-promotion as a critical driver of news sharing (Islam et al., 2020), the result in the first study could not be replicated in the third study, which specifically focused on sharing behavior. Thus, the relationship between SDO and sharing disinformation is not robust. Nevertheless, this dissertation is among the first that, at least in Manuscript 1, directly connected SDO to the belief in and sharing of disinformation. Therefore, based on the manuscripts' results, RWA (in all three studies) and SDO (in study 1) remain significant predictors of disinformation vulnerability.

Overall, a few additional limitations should be acknowledged across all three studies. First, it is essential to note that the influence of RWA and SDO in this context may also partly stem from the right-wing ideological nature of certain disinformation items. Many disinformation headlines in the first two studies dealt with right-wing ideologically charged topics, suggesting a broader pattern of disinformation susceptibility. Interestingly, in the third study, where ideologically driven messages with ingroup/outgroup cues were examined, SDO did not show a significant influence. Future research should, therefore, more clearly differentiate the ideological stance of true versus false news to deepen understanding of the dynamics of disinformation vulnerability.

Second, the recruitment process, which relied on online access panels, may have introduced sampling bias. This method likely resulted in the underrepresentation of individuals with

very high RWA/SDO scores or those with extreme attitudes. Additionally, in the first manuscript, the reliability of the RWA and SDO measures was relatively low (B-RWA-6 by Aichholzer & Zeglovits, 2015: $\alpha = .57$; short KSDO-3 scale by Aichholzer, 2019: $\alpha = .56$). To address this issue in the subsequent studies, we opted to use the KSA-3 short scale (Beierlein et al., 2014) for assessing RWA and the short SDO₇ scale (Ho et al., 2015) for measuring SDO. Both scales showed improved reliability (RWA in Manuscript 2: $\alpha = .86$; SDO in Manuscript 3: $\alpha = .80$), enhancing the robustness of the findings in Manuscript 2 and 3.

In summary, while RWA and SDO did not consistently influence selective exposure and sharing behaviors for verified news and disinformation, RWA emerged as a significant predictor of disinformation susceptibility across all studies. Thus, the results show a nuanced relationship between these right-wing ideological constructs, cognitive biases, and vulnerability to disinformation:



Lea-Johanna Klebba 
@crisisresearch

RWA and SDO do not strengthen cognitive biases in information processing when selecting and sharing (dis)information.

[#norightwingbias](#)

1:20 PM · Nov 28, 2024 · **820** Views

48 Retweets **6** Quotes **120** Likes **0** Bookmarks





Lea-Johanna Klebba ✓

@crisisresearch

RWA is the overarching risk factor for disinformation susceptibility.

[#rwalikesdisinfo](#)

1:20 PM · Nov 28, 2024 · **680** Views

52 Retweets **1** Quotes **92** Likes **0** Bookmarks



The Influence of Threat

The second part of this dissertation's third research question explored the interaction of RWA and SDO with threat. Based on the theoretical rationales of the Threat-RWA Activation Hypothesis (interaction model #1) and the DPM (interaction model #2), Manuscripts 2 and 3 investigated whether the interaction of RWA and SDO with different types of threat influences or even amplifies cognitive biases or disinformation susceptibility in individuals' information processing. All the tested interactions on selective exposure, sharing behavior, and disinformation susceptibility remained insignificant.

Instead, Manuscript 2 revealed an unexpected interaction effect between RWA and the perceived threat from incoming African COVID-19 refugees (the social-normative threat type) but in a direction opposite to the initial hypothesis. Participants with high RWA scores who felt threatened by the article on incoming African COVID-19 refugees were more likely to select disinformation that contradicted their preexisting attitudes (as pretests showed that right-wing authoritarians initially endorsed COVID-19 vaccination). For them, aligning with their attitudes meant choosing information supporting the benefits of vaccination. However, when exposed to the refugee threat, they displayed a notable shift, becoming more susceptible to disinformation promoting conspiracies against COVID-19 vaccination. This behavior suggests that the

interaction between RWA and social-normative threat increased their susceptibility to disinformation that opposed their previously positive stance on COVID-19 vaccines. According to the Threat-RWA Activation Hypothesis, individuals high in RWA generally show tolerance without a threat but become more intolerant when a specific threat is perceived (Stenner, 2005). In this study, tolerance was reflected in their general support for COVID-19 vaccination, while intolerance manifested as increased interest in anti-vaccine conspiracies after encountering a perceived threat. This finding contrasts with research from the U.S., where RWA is typically associated with COVID-19 vaccine opposition (Peng, 2022). Instead, the German sample suggested that when activated by a social-normative threat, right-wing authoritarians may become more inclined to select disinformation challenging government measures that they would otherwise endorse in non-threatening situations. Although the effect is relatively small, it demonstrates a pattern of threat activation of right-wing authoritarians to soften their tolerance of state action and verified news after certain threat constraints.

Nevertheless, this significant interaction should be interpreted with caution. More research is needed to establish a reliable pattern, as the Threat-RWA Activation Hypothesis appears highly context-dependent and has yielded inconsistent findings across our studies. The type of threat that activates RWA remains to be determined, as studies have yet to identify a consistent pattern. Thus, it is crucial not to assume that the Threat-RWA Activation Hypothesis is universally applicable. A critical evaluation of the theoretical framework, incorporating various situational factors, is necessary. This research agenda involves using diverse RWA measurement scales, examining different types of threats, and exploring other related constructs and authoritarian behaviors as dependent variables. Such an approach would help clarify discrepancies and strengthen the theory with solid empirical evidence.

The absence of any interaction effect in Manuscript 3 adds to the growing literature suggesting that perceived threats do not reliably trigger RWA and SDO. This inconsistency is especially evident for RWA, as studies have shown that different types of threats can activate the construct but with varying outcomes (e.g., Cohrs et al., 2005; Lavine et al., 2002; Hartman et al., 2021). While a recognized correlation exists between RWA and specific behaviors or attitudes, this link does not always depend on threat activation. The findings from Manuscript 3 align with this view, as they failed to support the hypothesized interaction between right-wing ideology and ingroup threat, as proposed by the DPM.

Based on the findings from Manuscripts 2 and 3, which explored the interaction between RWA, SDO, and threat, the following conclusions can be drawn:



Lea-Johanna Klebba ✓

@crisisresearch

Threats do not consistently activate RWA and SDO. [#threattrigger](#)

1:20 PM · Nov 28, 2024 · **423** Views

68 Retweets **5** Quotes **102** Likes **0** Bookmarks



Lea-Johanna Klebba ✓

@crisisresearch

Right-wing ideology x threat do not consistently strengthen cognitive biases in the selection and sharing of (dis)information. [#nointeraction](#)

1:20 PM · Nov 28, 2024 · **790** Views

65 Retweets **3** Quotes **78** Likes **0** Bookmarks



Research Question 4: Different Threat Types as Trigger

The fourth research question of this dissertation addresses a significant ongoing debate regarding which types of threats activate right-wing ideology, particularly RWA and SDO. As mentioned before, the Threat-RWA Activation Hypothesis proposes that certain life events perceived as threatening can trigger RWA and lead individuals to shift their attitudinal preferences, a concept supported by several theoretical models (e.g., Duckitt, 2001; Oesterreich, 2005; Stenner, 2005). Empirical evidence aligns with these theories, showing that social-normative, existential, and ingroup threats can interact with RWA to intensify authoritarian behaviors, increase support for authoritarian policies, and justify prejudice, intolerance, and ethnocentrism (e.g., Duckitt & Sibley, 2009; Feldman, 2003; Roccato & Russo, 2017; Cohrs et al., 2005; Lavine et al., 2002).

Building on these findings, Manuscript 2 aimed to test the effects of social-normative and existential threats, alongside RWA, on selective exposure and disinformation susceptibility. Unlike Lavine et al. (2005), however, we found no significant interaction between RWA and either threat type in shaping selective exposure to verified news or disinformation. The absence of interaction effects, even with a larger sample size to increase statistical power, challenges the validity of the initial hypothesis. While RWA did respond to the social-normative threat (i.e., the threat of incoming African COVID-19 refugees), it did not significantly influence selective exposure. Although previous research indicates that RWA interacts with various existential and social-normative threats, these interactions more often manifest in authoritarian behaviors such as nationalism and anti-immigrant sentiments (Hartman et al., 2021).

Manuscript 3 further examined RWA and SDO's responses to ingroup threats but, contrary to our expectations, found no significant interactions. These results suggest a fundamental

limitation across all three manuscripts: the threat manipulations may need to be more potent to activate RWA and SDO consistently. In our studies, we used single articles or tweets to introduce social-normative, existential, or ingroup threats, which differ substantially from the more intensive manipulations used in previous studies (e.g., Lavine et al., 2005, where participants wrote essays about their mortality). Manuscript 3 also varied ingroup/outgroup threat perspectives using only brief statements in news tweets, which may have been insufficient for inducing meaningful threat perceptions in individuals high in RWA and SDO. Although manipulation checks confirmed the reliability of our findings across all studies, future research should refine threat manipulations for a more substantial impact and develop precise measures to capture how distinct threat types interact with RWA and SDO.

Nevertheless, the findings from Manuscripts 2 and 3 offer deeper insights into the interaction between threat and right-wing ideology, specifically in exploring which types of threats may activate RWA and SDO. The results suggest that the tested social-normative, existential, and ingroup threats may not be as impactful as previously assumed. Contrary to expectations, these threat types did not significantly intensify cognitive biases or susceptibility to disinformation by activating RWA and SDO sufficiently to influence selective exposure or sharing behaviors. In addressing this research question, the findings indicate that:



Lea-Johanna Klebba ✓

@crisisresearch

Social-normative, existential, and ingroup threats do not consistently activate RWA and SDO or impact the selection and sharing of (dis)information. [#nothreatbias](#)

1:20 PM · Nov 28, 2024 · **800** Views

75 Retweets **8** Quotes **98** Likes **0** Bookmarks



Practical Implications

Discussing all three manuscripts unveiled noteworthy findings with significant practical implications. First, consistent with previous research, cognitive biases manifest as selective exposure and sharing behaviors persist in individuals' information usage, regardless of whether they engage with verified news or disinformation. Notably, these cognitive biases are not intensified by perceived threats; they remain constant during non-threatening and threatening scenarios. Second, the findings underscore RWA as a crucial and unwavering risk factor for individuals' susceptibility to disinformation. Across all three studies, RWA consistently predicted the selection and sharing of disinformation, indicating a group of people particularly vulnerable to such content. In addition to right-wing ideological beliefs, Manuscript 1 identified mistrust in politics as a significant trust-related belief and certainty of knowledge as a critical science-related belief; both emerged as antecedents to susceptibility to COVID-19 disinformation (see Manuscript 1 in the Appendix). Alongside politically disenchanted citizens, individuals who hold right-wing authoritarian attitudes, resist subordination to social systems and struggle to process new and often contradictory scientific information are more likely to select, believe in, or share COVID-19 disinformation within their online networks. Thus, recognizing the persistent presence of cognitive biases in information usage and the substantial influence of RWA, political mistrust, and epistemic beliefs on predicting the selection and sharing of disinformation is crucial for combating disinformation in society. The following section outlines practical measures to address cognitive biases and combat disinformation in information usage.

First, media literacy education is essential to address general cognitive biases like selective exposure and sharing behavior. Teaching individuals how to critically evaluate sources, identify bias, and discern credible information can empower them to make informed choices

about the information they consume (Kahne & Bowyer, 2017). Specifically, workshops or training sessions focused on cognitive biases can help individuals recognize their own biases and learn strategies to overcome them. Furthermore, individuals should be encouraged to diversify their information sources. Seeking out various news sources, particularly those with differing perspectives, can reduce confirmation bias and broaden understanding. Additionally, social media platforms and news aggregators should work towards making their algorithms more transparent, allowing users to understand how content is curated and enabling them to adjust their preferences accordingly (Bozdag, 2013). Besides, supporting users in customizing their news feeds based on interests and values can mitigate the effects of algorithm-driven content. Since cognitive biases affect the selection and sharing of disinformation, independent fact-checking organizations can verify claims and provide accurate information, with an additional note that the information may not match the user's preferences, but it is nevertheless verified information. Actively debunking misinformation through campaigns, public service announcements, or dedicated websites can reduce its impact (Lewandowsky et al., 2012).

Secondly, the role of right-wing ideology, particularly RWA, in the selection and sharing of disinformation highlights a critical group to target with intervention measures. Reducing individuals' right-wing authoritarian tendencies may be challenging because RWA represents a relatively stable aspect of right-wing ideology. Thus, targeting right-wing authoritarians with disinformation intervention measures requires a nuanced approach that considers their values and beliefs (e.g., Crawford et al., 2013a; Bouguettaya et al., 2023). For instance, messages tailored to align with right-wing authoritarian values (such as emphasizing patriotism or the importance of community welfare) may be more readily accepted by this audience. Additionally, partnering with influential figures or organizations within right-wing communities who can advocate for

credible information can help establish trust and increase receptivity for accurate and two-sided content (Sundelson et al., 2023). Utilizing cognitive dissonance techniques can also be beneficial. These techniques could encourage critical thinking by introducing conflicting information alongside credible sources to help moderate discrepancies (Burman et al., 2025). As discussed earlier, specialized media literacy programs designed to address right-wing authoritarians' specific disinformation susceptibility can further enhance their ability to assess information critically. Providing easy access to fact-checking tools and resources presented in a manner that aligns with their ideological perspectives may also make the content more relatable. Finally, highlighting the tangible, negative consequences of disinformation, particularly its impact on their communities, livelihoods, and families, could serve as a powerful motivator for changing information behaviors, making it clear that disinformation poses a direct threat to the well-being of the values they prioritize.

Thirdly, given that mistrust in politics is a critical risk factor for individuals' engagement with disinformation and their willingness to support public health measures, implementing measures to foster trust in political institutions is essential. Restoring trust in politics is a complex challenge that requires coordinated efforts from governments, institutions, and civil society. One practical approach is to increase transparency and accountability by implementing policies that promote openness in government operations, such as accessible public records and open meetings, alongside conducting independent audits of local government decision-making processes (Nabatchi & Amsler, 2014). Civic engagement programs can further encourage citizen participation in the political process through public consultations and community forums. Fostering a deliberative democracy by utilizing citizens' assemblies or panels can empower ordinary citizens to discuss and contribute to policy decisions (Fishkin, 2018). Additionally, the political

system should promote inclusivity by ensuring diverse representation in political offices that reflect the population's demographics and by implementing policies that address social and economic inequalities, which often breed disenfranchisement and distrust. Building trust in politics also involves nurturing community trust. Local governance initiatives can empower local governments to make decisions directly impacting their communities, fostering a sense of connection and trust among citizens.

Fourth, beyond increasing confidence in politics, initiatives to enhance students' competence in using and evaluating information could help mitigate the risks associated with epistemic beliefs. As these beliefs are often established early in education, implementing teacher training and education programs in schools to promote critical thinking is vital for preventing susceptibility to disinformation (McGrew et al., 2017).

Ultimately, fostering open dialogue is crucial. Creating spaces for discussions or discursive representations that allow for respectful disagreement and exploration of differing viewpoints can reduce cognitive biases, vulnerability to disinformation, and polarization (Dryzek & Niemeyer, 2008). Implementing these measures will cultivate a more informed public, better equipped to navigate the complexities of today's information landscape.

Future Directions

Discussing this dissertation's findings and their practical implications highlights essential implications that extend to multiple research fields. In the following sections, I examine the impact of these findings on threat and right-wing ideology research (particularly within political psychology), selective exposure and sharing research, and disinformation research.

Implications for Threat x Right-Wing Ideology Research

A central finding of this dissertation is that the interaction between threat and right-wing ideology may be less consistent than previously assumed. Manuscript 2 did not confirm a threat-RWA interaction on selective exposure behavior despite utilizing a more advanced research design and analytical methods to replicate the findings of Lavine et al. (2005). Similarly, the interactions between RWA/SDO and ingroup threat in Manuscript 3 did not result in significant increases in selective exposure, sharing behavior, or susceptibility to disinformation. These findings, along with the limitations discussed, suggest that the interaction between perceived threat and right-wing ideology may play a more limited role within communication research than in its original field of political psychology. Thus, they raise an important question: Is the threat activation of RWA and SDO less reliable or too narrowly aligned with theoretical predictions, or do the activation processes produce outcomes that differ from those examined in this dissertation within communication research? Current research in political psychology suggests that RWA reliably responds to perceived threats, particularly social-normative threats (as seen in Manuscript 2), leading to an intensification of right-wing authoritarian attitudes and behaviors. Recent studies examining the link between right-wing ideology and perceived threats during crises, such as the COVID-19 pandemic or the 2017 terrorist attacks in the United Kingdom, have reported significant interaction effects on more traditional right-authoritarian outcomes. For instance,

Stevens and Banducci (2022) found that individuals with authoritarian predispositions exhibit heightened sensitivity to terrorist threats, with social-normative aspects of these threats prompting increased right-authoritarian attitudes on topics like immigration and national identity.

Similarly, Golec de Zavala et al. (2021) conducted a three-wave longitudinal study during the early stages of the COVID-19 pandemic. They found that RWA responded to perceived COVID-19 threats by rejecting ingroup dissenters and promoting social cohesion, as evidenced by increased sexual restrictiveness and marginalization of non-traditional women and sexual minorities. These findings support the Threat-RWA Activation Hypothesis and the threat-RWA process within the DPM, highlighting the rise of right-authoritarian attitudes in response to perceived threats. Fischer et al. (2023) further confirmed these dynamics, showing that RWA, combined with COVID-19 threats, leads to elevated RWA scores and right-authoritarian attitudes.

In contrast, these studies did not observe significant reactions from SDO to the examined threats or increases in SDO-related attitudes. This absence of response may stem from a lack of research investigating the interaction between competition-related aspects of the COVID-19 threat or its economic dimensions, given that SDO is typically linked to competitive outgroup or economic threats (Duckitt & Sibley, 2010). Alternatively, SDO may be less responsive to perceived threats than the DPM suggests.

Overall, the interaction between RWA and perceived threat across existential and social-normative dimensions appears more consistent than that between SDO and these threat types. As research continues to indicate that threat-RWA interactions predict prejudices and intolerance (Duckitt, 2022), thoroughly testing the DPM entirely within its original domain of political psychology and focusing on its established outcomes could help solidify the theoretical foundations. It is necessary to explore further the model's influence on factors like prejudice, intolerance, and

exclusionary behavior, which, like disinformation and incitement, can contribute to polarization and the erosion of democracy in society. Therefore, future research should determine whether the proposed processes are specific to prejudice and intolerance or extend to other variables relevant to communication research. Understanding the scope and limitations of these interaction models is crucial for accurately applying them across different fields, either empirically confirming the model's assumption or extending the insights theoretically.

Implications for Selective Exposure and Sharing Research

In researching cognitive biases in individual information processing, a key finding of this dissertation is that participants consistently select and share verified news and disinformation that aligns with their preexisting attitudes. However, these behaviors are not directly amplified by heightened threat perception or right-wing ideology. These findings contrast with prior research, which often cites political conservatism (typically measured unidimensionally) or context-specific threats as significant influences (e.g., Fischer et al., 2011; Burghartswieser & Rothmund, 2021). It thus seems vital for future studies on selective exposure and sharing to account for political ideology and crisis context, but exploring additional dimensions of right-wing ideology and specific crisis characteristics. Drawing on Jost et al.'s (2003) conceptualization of political conservatism as motivated social cognition, with conservatism seen as an umbrella construct, other dimensions of conservatism beyond RWA and SDO may impact cognitive biases, particularly in crisis contexts. Jost et al.'s (2003) integrative model link environmental stimuli, such as uncertainty, fear, and threat, to social-cognitive motives that include epistemic motives (e.g., dogmatism, intolerance of ambiguity, uncertainty avoidance, need for order and closure), existential motives (e.g., self-esteem, loss prevention, terror management), and ideological motives (e.g., group-based dominance, system justification). Beyond RWA and SDO, it would be

valuable to investigate whether epistemic or existential motives activated by threat and uncertainty influence the outcomes observed in this research. This line of inquiry is particularly relevant, as needs for order, structure, and closure have been linked to selective exposure effects in information selection (Hart et al., 2009). Future research could thus benefit from examining these nuanced constructs, as outlined by Jost et al. (2003), rather than focusing solely on broader ideological categories.

Another promising avenue involves exploring situational factors prevalent during crises, such as uncertainty, time pressure, or disorientation. Since uncertainty avoidance is closely related to the need for cognitive closure (Jost et al., 2003), examining how various facets of political conservatism interact with such situational factors could provide insights into the effects observed in this dissertation.

Consequently, examining whether the attitude-consistent selection and sharing of information, including disinformation, is inherently stable or shaped by factors intensified in today's social contexts (e.g., ongoing crises and rising far-right attitudes) remains essential. Findings from this line of research could support the development of varied intervention strategies, as outlined in this dissertation's practical implications.

Implications for Disinformation Research

The central finding of this dissertation underscores RWA's vulnerability to disinformation. While examining how particular topics, news cues, and underlying motives may influence right-wing authoritarians' selection and sharing of disinformation is essential, a deeper investigation of the RWA construct could yield critical insights. This dissertation operationalizes RWA as a multidimensional construct comprising three subdimensions (authoritarian submission, authoritarian aggression, and conventionalism) based on Altemeyer's (1981) theoretical

framework. Although alternative factor structures have been proposed, including a four-factor model further dividing conventionalism (Vilanova et al., 2023) and a two-factor model that consolidates submission/aggression and conventionalism (Etchezahar, 2012), the three-dimensional model remains widely endorsed in the literature (Duckitt & Bizumic, 2013). Notably, research increasingly suggests that these RWA subdimensions predict different outcomes, bearing significant implications for RWA's association with disinformation. For instance, Mallinas et al. (2020) found through an integrative analysis of three studies that RWA components were distinctly associated with attitudes toward authority: the submission component was tied to an overarching moral imperative to obey, while conventionalism was aligned with obedience to conservative, but not liberal, authorities, challenging RWA's characterization as a singular construct. Accordingly, future research could benefit from a detailed examination of each RWA subdimension's vulnerability to disinformation, as differentiating these dimensions may enable more targeted interventions and deepen our understanding of this critical risk factor.

Further, Manuscript 1 elucidated distinct effects of RWA and SDO on disinformation vulnerability, with RWA positively predicting disinformation selection and SDO predicting disinformation sharing. These findings align with prior research indicating that RWA and SDO distinctly predict attitudes toward various outgroups. Longitudinal studies support the causal effects of RWA and SDO on different dimensions of prejudice over time (Asbrock et al., 2010). Similar patterns are observed in media evaluations. RWA is associated with attitudes toward same-sex relationships, and SDO with perspectives on affirmative action (Crawford et al., 2013b), underscoring the distinct motivational underpinnings of RWA and SDO proposed by the DPM. Although Manuscript 1's findings were not replicated in Manuscript 3, particularly regarding the

null finding of SDO in driving disinformation sharing, future research could explore the distinct influences of RWA and SDO on disinformation usage using alternative research methods.

Expanding this inquiry to include Left-Wing Authoritarianism (LWA) may offer substantial insights. While Costello and colleagues (2022) have presented evidence that LWA constitutes a distinct political ideology separate from RWA in its core tenets and principles, both ideologies share a common framework encompassing personality traits, cognitive patterns, convictions, and motivational values—what the authors call the “heart of authoritarianism.” These shared characteristics include a preference for social uniformity, prejudice against those perceived as different, and a willingness to use group authority to enforce conformity (Costello et al., 2022). Therefore, susceptibility to disinformation may not be solely a feature of right-wing authoritarianism but could also extend to left-wing authoritarians. Future research should incorporate LWA into analyses to assess whether disinformation susceptibility manifests comparably across the ideological spectrum.

Additionally, while exploratory analyses in Manuscript 2 suggest that CM positively influences susceptibility to disinformation, the analyses have not focused on its role in threat. As CM represents a relatively stable attitudinal dimension, broadening the scope of the Threat-RWA Activation Hypothesis to a Threat-CM Activation Hypothesis could be helpful across crisis contexts, providing insights into threat activation mechanisms beyond political ideology. Such an approach enables an expanded understanding of how diverse threats may activate CM, directly tied to disinformation usage, particularly under crisis conditions.

These directions for future research offer valuable pathways to enhance understanding of the interconnections between perceived threat, right-wing ideology, and susceptibility to cognitive biases and disinformation.

Conclusion

The era of enduring crises underscores the critical importance of understanding the interaction between situational factors, such as perceived threats, and stable psychological dimensions, including ideological orientations. In times of crisis, the flood of information, including disinformation, can severely compromise public support for effective crisis management measures. Thus, examining how such crises shape individuals' information behaviors is crucial. This dissertation contributes significantly to the state of research by investigating the complex interplay between perceived threats (e.g., COVID-19, migration) and right-wing ideological constructs. It focuses on their impact on cognitive biases and susceptibility to disinformation within individual information processing.

An initial assessment of the findings across the three manuscripts may suggest reassuring conclusions, as none of the studies reveal a significant interaction effect between threat perception and right-wing ideology on the dependent variables. Nevertheless, cognitive biases appear consistently across contexts, unaffected by the nature or accuracy of the information. Additionally, RWA emerges as a robust predictor of disinformation susceptibility. These findings indicate that while right-wing ideology may not directly exacerbate selective exposure and sharing behavior, it increases vulnerability to disinformation.

Given the pervasive role of disinformation in crises and its potential to undermine effective crisis management, further research should continue to examine right-wing ideology as a crucial factor. A thorough understanding of its influence is essential to identifying vulnerable groups requiring targeted intervention strategies. Additionally, this knowledge can help develop practical, evidence-based approaches to reduce the impact of disinformation effectively. These findings should inspire and guide future studies in this important area of research.

References

- Aichholzer, J. (2019). Kurzskala soziale Dominanzorientierung [Short scale of social dominance orientation] (KSDO-3). *Zusammenstellung sozialwissenschaftlicher Items und Skalen (ZIS)*. <https://doi.org/10.6102/zis269>
- Aichholzer, J. & Zeglovits, E. (2015). Balancierte Kurzskala autoritärer Einstellungen [Balanced short scale of authoritarian attitudes] (B-RWA-6). *Zusammenstellung sozialwissenschaftlicher Items und Skalen (ZIS)*. <https://doi.org/10.6102/zis23>
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211–236. <http://doi.org/10.1257/jep.31.2.211>
- Altemeyer, B. (1981). *Right-wing authoritarianism*. University of Manitoba Press.
- Altemeyer, B. (1998). The “other” authoritarian personality. *Advances in Experimental Social Psychology*, 30, 47–92. [https://doi.org/10.1016/S0065-2601\(08\)60382-2](https://doi.org/10.1016/S0065-2601(08)60382-2)
- Anthony, A., & Moulding, R. (2019). Breaking the news: Belief in fake news and conspiracist beliefs. *Australian Journal of Psychology*, 71(2), 154–162. <https://doi.org/10.1111/ajpy.12233>
- Asbrock, F., Sibley, C. G., & Duckitt, J. (2010). Right-wing authoritarianism and social dominance orientation and the dimensions of generalized prejudice: A longitudinal test. *European Journal of Personality*, 24(4), 324–340. <https://doi.org/10.1002/per.746>
- Bago, B., Rand, D. G., & Pennycook, G. (2020). Fake news, fast and slow: Deliberation reduces belief in false (but not true) news headlines. *Journal of Experimental Psychology: General*, 149(8), 1608–1613. <https://doi.org/10.1037/xge0000729>
- Baptista J. P., & Gradim A. (2022). Who believes in fake news? Identification of political (a)symmetries. *Social Sciences*, 11(10), 460. <https://doi.org/10.3390/socsci11100460>

- Baron, J. (2019). Actively open-minded thinking in politics. *Cognition*, 188, 8–18.
<https://doi.org/10.1016/j.cognition.2018.10.004>
- Bauer, P. C., & Clemm von Hohenberg, B. (2020). Believing and sharing information by fake sources: An experiment. *Political Communication*, 38(6), 647–671.
<https://doi.org/10.1080/10584609.2020.1840462>
- Beierlein, C., Asbrock, F., Kauff, M., & Schmidt, P. (2014). *Die Kurzskala Autoritarismus (KSA-3): ein ökonomisches Messinstrument zur Erfassung dreier Subdimensionen autoritärer Einstellungen*. [The brief scale of authoritarianism (KSA-3): An economic measurement instrument to capture three subdimensions of authoritarian attitudes]. *GESIS-Working Papers*, 2014/35. GESIS–Leibniz-Institut für Sozialwissenschaften. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-426711>
- Bouguettaya, A., Vergani, M., Sainsbury, C., & Bliuc, A. M. (2023). I won't listen if I think we're losing our way: How right-wing authoritarianism affects the response to different anti-prejudice messages. *PloS ONE*, 18(1), e0280557, 1–15. <https://doi.org/10.1371/journal.pone.0280557>
- Bozdag, E. (2013). Bias in algorithmic filtering and personalization. *Ethics and Information Technology*, 15(3), 209–227. <https://doi.org/10.1007/s10676-013-9321-6>
- Brundidge, J. (2010). Encountering “difference” in the contemporary public sphere: The contribution of the internet to the heterogeneity of political discussion networks. *Journal of Communication*, 60(4), 680–700. <https://doi.org/10.1111/j.1460-2466.2010.01509.x>
- Burghartswieser, D., & Rothmund, T. (2021). Conservative bias, selective political exposure and truly false consensus beliefs in political communication about the ‘refugee crisis’ in Germany. *PLoS ONE*, 16(11), e0259445, 1–20. <https://doi.org/10.1371/journal.pone.0259445>

- Burman, L., Klas, A., Schneps, E.-J., Westrupp, E., & Benstead, M. (2025). Utilising cognitive dissonance to promote household pro-environmental behaviour: A scoping review. *Energy Research & Social Science*, 126, 104160. <https://doi.org/10.1016/j.erss.2025.104160>
- Calvillo, D. P., Ross, B. J., Garcia, R. J. B., Smelter, T. J., & Rutchick, A. M. (2020). Political ideology predicts perceptions of the threat of COVID-19 (and susceptibility to fake news about it). *Social Psychological and Personality Science*, 11(8), 1119–1128. <https://doi.org/10.1177/1948550620940539>
- Calvillo, D. P., Garcia, R. J.B., Bertrand, K., & Mayers, T. A. (2021). Personality factors and self-reported political news consumption predict susceptibility to political fake news. *Personality and Individual Differences*, 174, 110666. <https://doi.org/10.1016/j.paid.2021.110666>
- Carey, J. W. (2002). American journalism on, before, and after September 11. In B. Zelizer & S. Allan (Ed.), *Journalism after September 11* (pp. 71 -90). London: Routledge.
- Clifford, S., & Rainey, C. (2025). The limits (and strengths) of single-topic experiments. *Political Analysis*, 33(2), 164–170. <https://doi.org/10.1017/pan.2024.20>
- Cohrs, J. C., Moschner, B., Maes, J., & Kielmann, S. (2005). The motivational bases of right-wing authoritarianism and social dominance orientation: relations to values and attitudes in the aftermath of september 11, 2001. *Personality and Social Psychology Bulletin*, 31(10), 1425–1434. <https://doi.org/10.1177/0146167205275614>
- Cohrs, J. C., Maes, J., Moschner, B., & Kielmann, S. (2007). Determinants of human rights attitudes and behavior: A comparison and integration of psychological perspectives. *Political Psychology*, 28(4), 441–469. <https://doi.org/10.1111/j.1467-9221.2007.00581.x>

- Coppini, D., Duncan, M. A., McLeod, D. M., Wise, D. A., Bialik, K. E., & Wu, Y. (2017). When the whole world is watching: A motivations-based account of selective expression and exposure. *Computers in Human Behavior*, 75, 766–774.
<https://doi.org/10.1016/j.chb.2017.04.020>
- Costello, T. H., Bowes, S. M., Stevens, S. T., Waldman, I. D., Tasimi, A., & Lilienfeld, S. O. (2022). Clarifying the structure and nature of left-wing authoritarianism. *Journal of Personality and Social Psychology*, 122(1), 135–170. <https://doi.org/10.1037/pspp0000341>
- Crawford, J. T., Brady, J. L., Pilanski, J. M., & Erny, H. (2013a). Orientation on political candidate support: The moderating role of message framing. *Journal of Social and Political Psychology*, 1(1), 5–28. <https://doi.org/10.5964/jspp.v1i1.170>
- Crawford, J. T., Jussim, L., Cain, T. R., & Cohen, F. (2013b). Right-wing authoritarianism and social dominance orientation differentially predict biased evaluations of media reports. *Journal of Applied Social Psychology*, 43(1), 163–174. <https://doi.org/10.1111/j.1559-1816.2012.00990.x>
- D'Alessio, D., & Allen, M. (2002). Selective exposure and dissonance after decisions. *Psychological Reports*, 91(2), 527–532. <https://doi.org/10.2466/pr0.2002.91.2.527>
- Dryzek, J. S., & Niemeyer, S. (2008). Discursive representation. *American Political Science Review*, 102(4), 481–493. <https://doi.org/10.1017/S0003055408080325>
- Duckitt, J. (1989). Authoritarianism and group identification: A new view of an old construct. *Political Psychology*, 10(1), 63–84. <https://doi.org/10.2307/3791588>
- Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. *Advances In Experimental Social Psychology*, 33, 41–113. [https://doi.org/10.1016/S0065-2601\(01\)80004-6](https://doi.org/10.1016/S0065-2601(01)80004-6)

- Duckitt, J., & Sibley, C. G. (2009). A dual-process motivational model of ideology, politics, and prejudice. *Psychological Inquiry*, 20(2–3), 98–109.
<https://doi.org/10.1080/10478400903028540>
- Duckitt, J., & Sibley, C. G. (2010). Right-wing authoritarianism and social dominance orientation differentially moderate intergroup effects on prejudice. *European Journal of Personality*, 24(7), 583–601. <https://doi.org/10.1002/per.772>
- Duckitt, J., & Bizumic, B. (2013). Multidimensionality of right-wing authoritarian attitudes: Authoritarianism-conservatism-traditionalism. *Political Psychology*, 34(6), 841–862.
<https://doi.org/10.1111/pops.12022>
- Duckitt, J. (2022). Authoritarianism: Conceptualization, research, and new developments. In G. G. Sibley & D. Osborne (Eds.), *The Cambridge handbook of political psychology*. Cambridge University Press.
- Etchezahar, E. (2012). Dimensions of authoritarianism: An analysis of the scale of right-wing authoritarianism (RWA) in a college students sample of Ciudad de Buenos Aires. *Revista Psicología Política*, 12(25), 591–603. https://pepsic.bvsalud.org/scielo.php?pid=S1519-549X2012000300013&script=sci_abstract&tlng=en
- Feldman, S. (2003). Enforcing social conformity: A theory of authoritarianism. *Political Psychology*, 24(1), 41–74. <https://doi.org/10.1111/0162-895X.00316>
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford University Press.
- Fischer, K., Chaudhuri, A., & Atkinson, Q. D. (2023). Dual evolutionary foundations of political ideology predict divergent responses to COVID-19. *British Journal of Political Science*, 53(3), 861–877. <https://doi.org/10.1017/S000712342200076X>

- Fischer, P., Kastenmüller, A., Greitemeyer, T., Fischer, J., Frey, D., & Crelley, D. (2011). Threat and selective exposure: The moderating role of threat and decision context on confirmatory information search after decisions. *Journal of Experimental Psychology: General*, 140(1), 51–62. <http://doi.org/10.1037/a0021595>
- Fishkin, J. S. (2018). *Democracy when the people are thinking: Revitalizing our politics through public deliberation*. Oxford University Press.
- Frischlich, L., Hellmann, J. H., Brinkschulte, F., Becker, M., & Back, M. D. (2021). Right-wing authoritarianism, conspiracy mentality, and susceptibility to distorted alternative news. *Social Influence*, 1–41. <https://doi.org/10.1080/15534510.2021.1966499>
- Fritsche, I., Cohrs, J. C., Kessler, T., & Bauer, J. (2012). Global warming is breeding social conflict: The subtle impact of climate change threat on authoritarian tendencies. *Journal of Environmental Psychology*, 32, 1–10. <https://doi.org/10.1016/j.jenvp.2011.10.002>
- Garrett, K. R. (2009). Politically motivated reinforcement seeking: Reframing the selective exposure debate. *Journal of Communication*, 59(4), 676–699. <https://doi.org/10.1111/j.1460-2466.2009.01452.x>
- Golec de Zavala, A., Bierwiazzonek, K., Baran, T., Keenan, O., & Hase, A. (2021). The COVID-19 pandemic, authoritarianism, and rejection of sexual dissenters in Poland. *Psychology of Sexual Orientation and Gender Diversity*, 8(2), 250–260. <https://doi.org/10.1037/sgd0000446>
- Guess, A. M., & Lyons, B. A. (2020). Misinformation, disinformation, and online propaganda. In N. Persily & J. Tucker (Eds.), *Social media and democracy: The state of the field, Prospects for Reform*. (pp. 10–33) Cambridge University Press. <http://doi.org/10.1017/9781108890960>

- 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 Meiselwitz, G. (Eds.), *Social Computing and Social Media. Design, Human Behavior and Analytics*. (pp. 217–232) Springer. <https://doi.org/10.1007/978-3-030-21902-4>
- Hart, W., Albarracín, D., Eagly, A. H., Brechan, I., Lindberg, M. J., & Merrill, L. (2009). Feeling validated versus being correct: A meta-analysis of selective exposure to information. *Psychological Bulletin*, 135(4), 555–588. <https://doi.org/10.1037/a0015701>
- Hartman, T. K., Stocks, T. V. A., McKay, R., Gibson-Miller, J., Levita, L., Martinez, A. P., Mason, L., McBride, O., Murphy, J., Shevlin, M., Bennet, K., M., Hyland, P., Karatzias, T., Vallières, F., & Bentall, R. P. (2021). The authoritarian dynamic during the COVID-19 pandemic: Effects on nationalism and anti-immigrant sentiment. *Social Psychological and Personality Science*, 12(7), 1274–1285. <https://doi.org/10.1177/1948550620978023>
- Himmelboim, I., McCreery, S., & Smith, M. (2013). Birds of a feather tweet together: Integrating network and content analyses to examine cross-ideology exposure on Twitter. *Journal of Computer-Mediated Communication*, 18(2), 154–174. <https://doi.org/10.1111/jcc4.12001>
- Hinckley, R. A., & Harell, A. (2020). Selective exposure and the authoritarian dynamic: Evidence from Canada and the United States. *Journal of Social and Political Psychology*, 8(1), 151–172. <https://doi.org/10.5964/jspp.v8i1.1085>
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO₇ scale. *Journal of Personality and Social Psychology*, 109(6), 1003–1028. <https://doi.org/10.1037/pspi0000033>

- Hopp, T., Ferrucci, P., & Vargo, C. J. (2020). Why do people share ideologically extreme, false, and misleading content on social media? A self-report and trace data-based analysis of countermedia content dissemination on Facebook and Twitter. *Human Communication Research*, 46(4), 357–384. <https://doi.org/10.1093/hcr/hqz022>
- Imhoff, R., & Lamberty, P. (2020). A bioweapon or a hoax? The link between distinct conspiracy beliefs about the Coronavirus disease (COVID-19) outbreak and pandemic behavior. *Social Psychological and Personality Science*, 11(8), 1110–1118. <http://doi.org/10.1177/1948550620934692>
- Islam, A.K.M. N., Laato, S., Talukder, S., & Sutinen, E. (2020). Misinformation sharing and social media fatigue during COVID-19: An affordance and cognitive load perspective, *Technological Forecasting and Social Change*, 159, 120201. <https://doi.org/10.1016/j.techfore.2020.120201>
- Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use, *Journal of Communication*, 59(1), 19–39, <https://doi.org/10.1111/j.1460-2466.2008.01402.x>
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375. <https://doi.org/10.1037/0033-2909.129.3.339>
- Kahne, J., & Bowyer, B. (2017). Educating for democracy in a partisan age: Confronting the challenges of motivated reasoning and misinformation. *American Educational Research Journal*, 54(1), 3–34. <https://doi.org/10.3102/0002831216679817>

- Kim, J., Kim, J. H., & Seo, M. (2014). Toward a person $\times$ situation model of selective exposure: Repressors, sensitizers, and choice of online news on financial crisis. *Journal of Media Psychology, 26*(2), 59–69. <https://doi.org/10.1027/1864-1105/a000111>
- Klebba, L.-J., & Winter, S. (2024). Crisis alert: (Dis)information selection and sharing in the COVID-19 pandemic. *Communications, 49*(2), 318–338. <https://doi.org/10.1515/com-mun-2022-0020>
- Klebba, L.-J., & Winter, S. (2025). The influence of threat and right-wing authoritarianism on the selection of online (dis)information – a conceptual replication and extension of Lavine et al. (2005). *Human Communication Research, 51*(1), 52–56. <https://doi.org/10.1093/hcr/hqae016>
- Knobloch-Westerwick, S., & Kleinman, S. B. (2012). Preelection selective exposure: Confirmation bias versus informational utility. *Communication Research, 39*(2), 170–193. <https://doi.org/10.1177/0093650211400597>
- Knobloch-Westerwick, S., Westerwick, A., & Johnson, B. (2015). Selective exposure in the communication technology context. In S. S. Sundar (Ed.), *Handbook of the psychology of communication technology* (pp. 407–427). Wiley-Blackwell. <https://doi.org/10.1002/9781118426456>
- Knobloch-Westerwick, S., Mothes, C., & Polavin, N. (2020). Confirmation bias, ingroup bias, and negativity bias in selective exposure to political information. *Communication Research, 47*(1), 104–124. <https://doi.org/10.1177/0093650217719596>
- Kossowska, M., Trejtowicz, M., de Lemus, S., Bukowski, M., Van Hiel, A., & Goodwin, R. (2011). Relationships between right-wing authoritarianism, terrorism threat, and attitudes

- towards restrictions of civil rights: A comparison among four European countries. *British Journal of Psychology*, 102(2), 245–259. <https://doi.org/10.1348/000712610X517262>
- Lavine H., Lodge M., Polichak J., & Taber C. (2002). Explicating the black box through experimentation: Studies of authoritarianism and threat. *Political Analysis*, 10(4), 343–361. <https://doi.org/10.1093/pan/10.4.343>
- Lavine, H., Lodge, M., & Freitas, K. (2005). Authoritarianism, threat, and motivated reasoning. *Political Psychology*, 26(2), 219–244. <https://doi.org/10.1111/j.1467-9221.2005.00416.x>
- Lewandowsky, S., Ecker, U. K. H., Seifert, C. M., Schwarz, N., & Cook, J. (2012). Misinformation and its correction: Continued influence and successful debiasing. *Psychological Science in the Public Interest*, 13(3), 106–131. <https://doi.org/10.1177/1529100612451018>
- Liang, H. (2018). Broadcast versus viral spreading: The structure of diffusion cascades and selective sharing on social media. *Journal of Communication*, 68(3), 525–546. <https://doi.org/10.1093/joc/jqy006>
- Mallinas, S. R., Crawford, J. T., & Frimer, J. A. (2020). Subcomponents of right-wing authoritarianism differentially predict attitudes toward obeying authorities. *Social Psychological and Personality Science*, 11(1), 134–143. <https://doi.org/10.1177/1948550619843926>
- Marwick, A. E., & Boyd, D. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media and Society*, 13(1), 114–133. <https://doi.org/10.1177/1461444810365313>
- McGrew, S., Ortega, T., Breakstone, J., & Wineburg, S. (2017). The challenge that's bigger than fake news: Teaching critical thinking about digital information. *American Educator*, 41(3), 4–9.

- Mckay, D., & Buchanan, G. (2022). Capturing information behaviour in the wild: A tutorial. In D. Elswailer, U. Kruschitz & B. Ludwig (Eds.), *Proceedings of the 2022 Conference on Human Information Interaction and Retrieval (CHIIR '22)* (pp. 363–364). Association for Computing Machinery. <https://doi.org/10.1145/3498366.3505842>
- Nabatchi, T., & Amsler, L. B. (2014). Direct public engagement in local government. *The American Review of Public Administration*, 44(4), 63–88.
<https://doi.org/10.1177/0275074013519702>
- Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology*, 2(2), 175–220. <https://doi.org/10.1037/1089-2680.2.2.175>
- Oesterreich, D. (2005). Flight into security: A new approach and measure of the authoritarian personality. *Political Psychology*, 26(2), 275–298. <https://doi.org/10.1111/j.1467-9221.2005.00418.x>
- Olaru, G. O. (2023). The rapid diffusion of fake news: An analysis of content on migration, refugees, and conflict on international fact-checking platforms. *Connectist: Istanbul University Journal of Communication Sciences*(65), 61–87.
<https://doi.org/10.26650/CONNECTIST2023-1404666>
- Osmundsen, M., Bor, A., Vahlstrup, P. B., Bechmann, A., & Petersen, M. B. (2021). Partisan polarization is the primary psychological motivation behind political fake news sharing on Twitter. *American Political Science Review*, 115(3), 999–1015.
<https://doi.org/10.1017/S0003055421000290>
- Peng, Y. (2022). Politics of COVID-19 vaccine mandates: Left/right-wing authoritarianism, social dominance orientation, and libertarianism. *Personality and Individual Differences*, 194, 111661. <https://doi.org/10.1016/j.paid.2022.111661>

- Pennycook, G., Allan Cheyne, J., Barr, N., Koehler, D. J., & Fugelsang, J. A. (2015). On the reception and detection of pseudo-profound bullshit. *Judgment and Decision Making*, 10(6), 549–563. <https://doi.org/10.1017/S1930297500006999>
- Pennycook, G., & Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition*, 188, 39–50. <https://doi.org/10.1016/j.cognition.2018.06.011>
- Pennycook, G., & Rand, D. G. (2020). Who falls for fake news? The roles of bullshit receptivity, overclaiming, familiarity, and analytic thinking. *Journal of Personality*, 88(2), 185–200. <https://doi.org/10.1111/jopy.12476>
- Pennycook, G., Epstein, Z., Mosleh, M., Arechar, A. A., Eckles, D., & Rand, D. G. (2021). Shifting attention to accuracy can reduce misinformation online. *Nature*, 592, 590–595. <https://doi.org/10.1038/s41586-021-03344-2>
- Pingree, R. J. (2007). How messages affect their senders: A more general model of message effects and implications for deliberation. *Communication Theory*, 17(4), 439–461. <https://doi.org/10.1111/j.1468-2885.2007.00306.x>
- Rios, K., Sosa, N., & Osborn, H. (2018). An experimental approach to intergroup threat theory: Manipulations, moderators, and consequences of realistic vs. symbolic threat. *European Review of Social Psychology*, 29(1), 212–255. <https://doi.org/10.1080/10463283.2018.1537049>
- Roccato, M., & Russo, S. (2017). Right-wing authoritarianism, societal threat to safety, and psychological distress. *European Journal of Social Psychology*, 47(5), 600–610. <https://doi.org/10.1002/ejsp.2236>

- Rodriguez, C. G., Moskowitz, J. P., Salem, R. M., & Ditto, P. H. (2017). Partisan selective exposure: The role of party, ideology and ideological extremity over time. *Translational Issues in Psychological Science*, 3(3), 254–271. <https://doi.org/10.1037/tps0000121>
- Shehata, A., Ekström, M., & Tryggvason, P. O. (2024). Selective exposure and new political cleavages: Media use and ideological reinforcement over time. *The International Journal of Press/Politics*, 29(3), 733–754. <https://doi.org/10.1177/19401612221112003>
- Shin, J. E., & Thorson, K. (2017). Partisan selective sharing: The biased diffusion of fact-checking messages on social media. *Journal of Communication*, 67(2), 233–255. <https://doi.org/10.1111/jcom.12284>
- Sidanius, J., & Pratto, F. (2004). Social dominance theory: A new synthesis. In J. T. Jost, & J. Sidanius (Eds.), *Political psychology* (pp. 315–332). Psychology Press. <https://doi.org/10.4324/9780203505984-18>
- Sindermann, C., Elhai, J. D., Moshagen, M., & Montag, C. (2020). Age, gender, personality, ideological attitudes and individual differences in a person’s news spectrum: How many and who might be prone to “filter bubbles” and “echo chambers” online? *Heliyon*, 6(1), e03214. <https://doi.org/10.1016/j.heliyon.2020.e03214>
- Singh, L., Bansal, S., Bode, L., Budak, C., Chi, G., Kawintiranon, K., Padden, C., Vanarsdall, R., Vraga, E., & Wang, Y. (2020). A first look at COVID-19 information and misinformation sharing on Twitter. *ArXiv*, arXiv:2003.13907v1.
- Stellmacher, J. & Petzel, T. (2005). Authoritarianism as a group phenomenon. *Political Psychology*, 26(2), 245–274. <https://doi.org/10.1111/j.1467-9221.2005.00417.x>
- Stenner, K. (2005). *The authoritarian dynamic*. Cambridge University Press.

- Stevens, D., & Banducci, S. (2022). What are you afraid of? Authoritarianism, terrorism, and threat. *Political Psychology*, 43(6), 1081–1100. <https://doi.org/10.1111/pops.12804>
- Stroud, N. J. (2010). Polarization and Partisan Selective Exposure. *Journal of Communication*, 60(3), 556–576. <https://doi.org/10.1111/j.1460-2466.2010.01497.x>
- Sundelson, A.E., Jamison, A.M., Huhn, N., Pasquino, S.-L., & Sell, T. K. (2023). Fighting the infodemic: The 4 i framework for advancing communication and trust. *BMC Public Health*, 23, 1662, 1–12. <https://doi.org/10.1186/s12889-023-16612-9>
- Unkel, J. (2019). Measuring selective exposure in mock website experiments: A simple, free, and open-source solution. *Communication Methods and Measures*, 15(1), 1–16. <https://doi.org/10.1080/19312458.2019.1708284>
- Valentino, N. A., Banks, A. J., Hutchings, V. L., & Davis, A. K. (2009). Selective exposure in the internet age: The interaction between anxiety and information utility. *Political Psychology*, 30(4), 591–613. <https://doi.org/10.1111/j.1467-9221.2009.00716.x>
- Vilanova, F., Milfont, T.L., & Costa, A. B. (2023). Short version of the right-wing authoritarianism scale for the Brazilian context. *Psicologia: Reflexão e Crítica*. 36. <https://doi.org/10.1186/s41155-023-00260-4>
- Wason, P. C. (1960). On the failure to eliminate hypotheses in a conceptual task. *Quarterly Journal of Experimental Psychology*, 12(3), 129–140. <https://doi.org/10.1080/17470216008416717>
- Weeks, B. E., & Holbert, R. L. (2013). Predicting dissemination of news content in social media: A focus on reception, friending, and partisanship. *Journalism & Mass Communication Quarterly*, 90(2), 212–232. <http://doi.org/10.1177/1077699013482906>
- Wittenberg, C., & Berinsky, A. J. (2020). Misinformation and its correction. In N. Persily, & J. Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform* (pp. 163–198). Cambridge University Press. <http://doi.org/10.1017/9781108890960>

WHO, UN, UNICEF, UNDP, UNESCO, UNAIDS, ITU, UN Global Pulse, & IFRC (2020, September 23). *Managing the COVID-19 infodemic: Promoting healthy behaviours and mitigating the harm from misinformation and disinformation*. World Health Organization. <https://www.who.int/news/item/23-09-2020-managing-the-covid-19-infodemic-promoting-healthy-behaviours-and-mitigating-the-harm-from-misinformation-and-disinformation>

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. <http://doi.org/10.1080/10584609.2019.1686095>

Appendix

Table of Content

Appendix A: Manuscript 1.....	80
Appendix B: Manuscript 2.....	102
Appendix B: Online Appendix of Manuscript 2.....	108
Appendix C: Manuscript 3.....	141
Appendix C: Online Appendix of Manuscript 3.....	179

Appendix A: Manuscript 1

Klebba, L.-J., & Winter, S. (2024). Crisis alert: (Dis)information selection and sharing in the COVID-19 pandemic. *Communications*, 49(2), 318–338. <https://doi.org/10.1515/com-mun-2022-0020>

Lea-Johanna Klebba* and Stephan Winter

Crisis alert: (Dis)information selection and sharing in the COVID-19 pandemic

<https://doi.org/10.1515/commun-2022-0020>

Abstract: High levels of threat and uncertainty characterize the onset of societal crises. Here, people are exposed to conflicting information in the media, including disinformation. Because individuals often base their news selection on pre-existing attitudes, the present study aims to examine selective exposure effects in the face of a crisis, and identify right-wing ideological, trust-, and science-related beliefs that might influence the selection and sharing of disinformation. A representative survey of German internet users (N = 1101) at the time of the COVID-19 pandemic outbreak showed a confirmation bias in crisis-related news selection and sharing. It revealed right-wing authoritarianism and political mistrust as significant predictors of disinformation selection. The influence of social dominance orientation, mistrust in politics, and perceived certainty of knowledge were significant for sharing disinformation. The present results extend previous knowledge about people's (dis)information behavior in times of crisis, and shed light on groups particularly vulnerable to disinformation.

Keywords: selective exposure, information sharing, disinformation, COVID-19 pandemic, trust

1 Introduction

Since the rise of contemporary social media sites as an additional news channel, people face a highly diverse information landscape with abundant choices. Even though new technologies can facilitate access to relevant content, the unprecedented amount of information provided on social media also increases the amount of inaccurate and questionable content, and presents individuals with the challenge of selecting and sharing verified news. Selecting accurate news is even more

***Corresponding author: Lea-Johanna Klebba**, RPTU Kaiserslautern-Landau, Department of Psychology, Fortstraße 7, 76829 Landau, Germany. E-mail: leajohanna.klebba@rptu.de. <https://orcid.org/0000-0002-3455-8294>

Stephan Winter, RPTU Kaiserslautern-Landau, Department of Psychology, Fortstraße 7, 76829 Landau, Germany. E-mail: stephan.winter@rptu.de. <https://orcid.org/0000-0002-8339-1937>

difficult in crisis situations, when the volume of available information increases to an uncontrollable extent. In addition to a large amount of verified information provided by media outlets, we observe in recent crises (e. g., refugee crisis, COVID-19 pandemic) a flood of misinformation and disinformation from politicians, self-proclaimed experts, scientists, and conspiracy theorists. The term misinformation encompasses false information that spreads inadvertently or without malevolent intent of the source (Guess and Lyons, 2020), whereas disinformation can be defined as intentionally distributed claims that are inaccurate or in contrast to common understandings of empirical facts (Wittenberg and Berinsky, 2020). In the COVID-19 pandemic, people were exposed to each of these forms of news, making it even more difficult for them to distinguish between verified news and disinformation.

Against this background, it is essential to understand (a) how people select (dis) information in times of crisis and potentially share it with their network, and (b) the critical predictors that make people more vulnerable to disinformation usage. Regarding (a), previous research has shown that people select and share news with a confirmation bias, in which they choose and distribute information that corresponds to their pre-existing attitudes (e. g., Knobloch-Westerwick et al., 2015; Liang, 2018). To date, this assumption holds for the selection and sharing of news content during non-crisis periods. In the present pre-registered study, we investigate whether the existing confirmation bias in information selection is also present in the selection and sharing of information at the onset of a crisis. The beginning of the COVID-19 pandemic served as a suitable setting for this purpose.

Regarding (b), we focus on three sets of beliefs (right-wing ideological, trust-, and science-related) that are relevant in crises and likely to predict people's disinformation usage. Under right-wing ideological beliefs, we group right-wing authoritarianism (RWA) and social dominance orientation (SDO). Both constructs exhibit vital sensitivity to threats and feelings of uncertainty triggered in times of crisis (Duckitt and Sibley, 2009), and are closely associated with biased news selection (Bauer and Clemm von Hohenberg, 2020). Furthermore, as trust-related beliefs, we include trust in politics and in traditional media, which have shown to be relevant for crisis responses (Siegrist and Zingg, 2014) and general usage of mainstream vs. disinformation sources (Zimmermann and Kohring, 2020). Moreover, health crises, and the COVID-19 pandemic in particular, often require the management of science-related information. Thus, trust in science and epistemic beliefs could influence information selection, sharing, and credibility, as news about COVID-19 often references scientific studies that generate new knowledge, including conflicting evidence. Given this relevance to information behavior in a crisis, we argue that these three sets of beliefs are likely to specify the conditions under which people select, believe, and share COVID-19 disinformation.

2 Selective exposure to crisis news

Over the past decade, a large body of research has shown that attitude-consistent content is generally preferred over attitude-inconsistent content (e.g., Knobloch-Westerwick et al., 2015; Winter et al., 2016). Thus, given that cognitive selection processes already determine people's information selection in non-crisis times, we think it is highly likely that confirmation biases are also observed in times of crisis. Moreover, there are reasons to believe that threat (which is prevalent at the onset of a crisis) even increases this bias. For instance, studies have shown that perceived threat triggered selective exposure to attitude-consistent information for topics in which participants had little interest (Liao and Fu, 2013), and in people with higher sensitization tendency (Kim et al., 2014). In research by Fischer and colleagues (2011), contextual congruence (a terrorist threat followed by a selection of terrorism news) vs. incongruence (a terrorist threat followed by a selection of economic news) was identified as a moderator of increased selective exposure: Participants selected news with a confirmation bias reinforced by a perceived threat when the threat was congruent with the subsequent decision case, but not when the two were unrelated. As prior research has shown confirmation biases in information selection in both non-crisis periods and under a perceived threat, we suspect that the selective exposure effect is also present in our data for exposure to news about COVID-19 during the pandemic (context congruency). Therefore, we hypothesized:

H1: People select attitude-consistent content more frequently than attitude-inconsistent content.

In addition to selective exposure behavior, we are interested in how people share COVID-19-related news. Selective sharing conceptually complements selective exposure, and describes the pattern that individuals primarily share attitude-consistent content with their social networks (e.g., Buchanan, 2020; Shin and Thorson, 2017). While selective exposure only refers to an individual's decision to read specific content, sharing leads to the distribution of content in one's network, and thus has consequences for others. There is a lack of research on the sharing of crisis news so far, but given the close connection of selective exposure and sharing (Liang, 2018), we formulated the following research question:

RQ1: Do people share attitude-consistent content more frequently than attitude-inconsistent content?¹

¹ This research question was not preregistered on the Open Science Framework (OSF) repository and thus only allows for exploratory analysis.

3 The influence of right-wing ideological beliefs

According to the theory of cognitive dissonance as the rationale underlying selective exposure behavior, liberals and conservatives should be equally prone to preferentially selecting information consistent with their political ideology to avoid mental discomfort. However, recent research has identified a political asymmetry showing that political conservatism particularly promotes selective exposure effects. Rooted in the framework of conservatism as a motivated social cognition, conservatives are more sensitive to threat perceptions and have a greater need to avoid uncertainty. As a result, they are also less willing than liberals to tolerate ambiguity, and instead strive for cognitive closure (Jost et al., 2003). Consequently, recent research has shown that conservatism positively predicts the selection of attitude-consistent information environments with regard to the refugee crisis (Burghartswieser and Rothmund, 2021). Moreover, conservatives' selective use of conservative media in the U.S. during the COVID-19 pandemic reinforced beliefs in conspiracies and opposition to countermeasures such as vaccination (Romer and Jamieson, 2021). Political conservatism thus seems to have a strong influence on information choices and subsequent attitude formation, especially for crisis-related news.

Other conceptual studies of political conservatism emphasize two right-wing ideological beliefs that respond particularly strongly to perceived threats (Duckitt and Sibley, 2009). Originating from punitive socialization experiences which foster dangerous worldviews, right-wing authoritarianism (RWA) consists of three sub-dimensions: extreme conservatism and conventionalism, submission to authority, and aggression toward individuals and groups perceived as deviant (Altemeyer, 1998). Social dominance orientation (SDO) is rooted in unaffectionate child-rearing practices that elicit dominance-related goals according to a competitive worldview. Thus, people with high SDO hold a preference for group-based hierarchy (or hierarchy-legitimizing myths) to justify economic and racial inequality, and strive to gain control and power over others (Sidanius and Pratto, 2004). RWA in particular appears to interact with threats, and elicit behaviors that, when no threat is perceived, lie dormant. For example, a field study during the COVID-19 pandemic showed that the relationship between RWA and nationalism and anti-immigrant attitudes depended on the level of perceived COVID-19 threat (Hartman et al., 2021). Three studies in Germany and the United Kingdom found that highlighting the threat of climate change led to increased authoritarian attitudes (Fritzsche et al., 2012). In addition to triggering authoritarian attitudes and behaviors, one study also points to influence in the context of information behavior. A study by Lavine and colleagues (2005) linked RWA to selecting attitude-consistent content under conditions of threat. The findings, obtained in a laboratory setting, implied that

RWA strengthened the relationship between mortality salience and selective exposure effects. A further study showed a negative relationship between RWA and the number of news sources consumed for COVID-19-related information (Sindermann et al., 2020). Following the authors' reasoning, this result supports the assumption that individuals high in RWA tend to avoid attitude-inconsistent information and consume fewer news sources, because they explicitly use channels consistent with their pre-existing attitudes to strive for cognitive closure. Thus, RWA could promote a general tendency to select information with a confirmation bias, especially in a crisis environment that sensitizes people with high RWA scores to perceive threats. Consequently, we proposed the following hypothesis:

H2: Right-wing authoritarianism (RWA) increases preference for attitude-consistent over attitude-inconsistent content.

Unlike conservatism and RWA, SDO has not been linked to disinformation selection, sharing, and credibility in research to date. In our view, this represents a research gap, because both RWA and SDO, as two ideological beliefs underlying political conservatism, are particularly sensitive to threat situations, and may encourage engagement with disinformation. Nevertheless, as several studies have identified RWA and SDO as independent predictors of different behaviors (Hartman et al., 2021), they most likely relate to different outcomes in the context of disinformation. While RWA refers to individual attitudes and decisions, and seems involved in selective exposure behavior under threat as well as belief in disinformation (Frischlich et al., 2021), SDO is more likely to affect group attitudes and decisions. As people high in SDO tend to take the lead to reach a place at the top of the social hierarchy, we assume that SDO is more predictive of sharing disinformation to act competitively over relative power groups. Besides, it could be seen as an expression of their desire to inform other people about relevant information and, at the same time, as an effort to influence others' opinions in their interest. Therefore, we assumed that only RWA predicts disinformation selection and belief, whereas both constructs positively influence disinformation sharing.

H3: Right-wing authoritarianism (RWA) positively predicts the selection of disinformation, and attribution of credibility to disinformation.

H4: Right-wing authoritarianism (RWA) and social dominance orientation (SDO) positively predict the sharing of disinformation.²

² To structure the manuscript, we broke down the preregistered hypothesis ten (H10) on the prediction of sharing of disinformation by RWA, SDO, and certainty of knowledge into H4 and H6. We also decomposed H8 and H10 about the prediction of selecting, sharing, and believing in disinform-

4 The influence of trust- and science-related beliefs

Besides right-wing ideological beliefs, people's levels of trust in societal institutions may further affect how they select, share, and believe in disinformation. In general, trust plays an essential role in how people respond to uncertain situations, as it influences their perception of risk and effectiveness in addressing it. People, therefore, tend to rely on their trust in certain actors when they have limited knowledge to make risk assessments and decisions (Siegrist and Zingg, 2014).

In the COVID-19 pandemic, three institutions highly depend on people's trust regarding news dissemination: politics, traditional media, and science. In general, institutional *trust in politics* refers to the extent to which people assess the core political institutions and actors as credible, fair, competent, transparent, and open to competing views (Zmerli and Newton, 2017). In a public health crisis, where the government is responsible for managing the high-risk situation, distrust in politics may negatively affect participation in government-recommended actions (Fong and Chang, 2011). One consequence of this could be that individuals with low trust in politics may turn to actors or alternative news outlets that provide information defaming the political establishment. *Trust in traditional media* is generally based on a belief in journalists' unbiased selection of news and function as gatekeepers of information for society (Kohring, 2004). When people mistrust traditional media, they tend to turn away toward alternative sources (Müller and Schulz, 2021). Moreover, in health crises such as the COVID-19 pandemic, *mistrust in science* may be another predictor of vulnerability to disinformation. For instance, high trust in science positively influences the acceptance and adoption of COVID-19 protective measures often provided by epidemiologists and virologists through traditional media (Dohle et al., 2020).

Given the complexity of scientific findings, laypersons are often not able to fully evaluate the merits of scientific claims on their own, and have to mostly rely on experts. This requires an appropriate understanding of which expert sources can be trusted and of the nature of scientific findings. Particularly in emerging fields, the state of knowledge changes quickly when new study results contradict previous assumptions. *Science-related epistemic beliefs* are individuals' views about the nature of knowledge and may range from the naive view that knowledge is fixed to a more sophisticated understanding that new findings may change old truths

mation by trust- and science-related beliefs into H5 and H6. In addition, for conceptual reasons of the manuscript, we omit the presentation of H9. For the original preregistered hypotheses on OSF, see https://osf.io/f9uah/?view_only=af5552cf82ba4678a45665118eb52330.

(Kerwer and Rosman, 2020). People who believe that knowledge is highly certain may have problems in processing new science-related messages that contradict previous viewpoints, especially in a risk scenario where the scientific community has not yet agreed on the consequences of a pandemic. Furthermore, naive epistemic beliefs that knowledge is fixed could discourage people from checking news, and instead lead them to share news, even if it is fake. In summary, we assumed that:

- H5: Trust in politics, trust in the media, and trust in science negatively predict the selection and sharing of disinformation, and the attribution of credibility to disinformation.
- H6: Naive epistemic beliefs positively predict the selection and sharing of disinformation, and the attribution of credibility to disinformation.

5 Method

Setting

To investigate these preregistered hypotheses, we conducted a survey that contained a news selection procedure with an experimental within-subject design during the COVID-19 pandemic. The data were collected between April 15 and 28, 2020. When the study was launched, a total of 103,228 laboratory-confirmed COVID-19 cases had been transmitted to the Robert Koch Institute in Germany, and 1,861 deaths related to COVID-19 had been reported (Robert Koch Institute [RKI], 2020). At that time, contact restrictions were mandated by the Government, and schools were closed throughout Germany. The study was approved by a local ethics committee. The data files and materials are available at the Open Science Framework (OSF) repository: https://osf.io/f9uah/?view_only=af5552cf82ba4678a45665118eb52330.

Participants

A quota sample was drawn from an online access panel of the German research company Respondi AG, which was representative of German internet users aged 18 to 75 regarding gender, age, and education. Based on preregistered exclusion criteria, we excluded participants who were identified as inattentive responders due to their response time (less than 33 % of the median time), or failed to correctly answer a control question. Based on these criteria, the adjusted sample consisted of 1,101 respondents (female: 50.4 %, male: 49.6 %, age: $M = 45.69$, $SD = 15.58$).

Procedure

At first, we asked participants to assess the current threat posed by COVID-19 and the crisis management by the German Government (e. g., “To me, the German Government’s crisis management is very convincing”). In order to evaluate the selection and sharing of (dis)information and attribution of credibility to information, we presented twelve news headlines on the COVID-19 topic (seven disinformation items, three verified news items, two verified news pro/contra curfew items). Following an approach initially introduced by Allcott and Gentzkow (2017), a stock of disinformation articles was identified based on results from leading German-language fact-checking websites (e. g., [correctiv.org](https://www.correctiv.org), [faktenfinder.de](https://www.faktenfinder.de), [tagesschau.de](https://www.tagesschau.de)). Our selection included verifiably false claims that circulated worldwide between January and March 2020. The most common narratives concerned the activities or policies of public institutions or blaming certain ethnic groups for spreading the virus (Brennen et al., 2020). Accordingly, the five selected disinformation headlines contain similar crisis-related narratives, either blaming one particular actor or group for the outbreak of the pandemic (e. g., “Fratelli d’Italia Party: Italian Chinese community to blame for mass death”), reporting the efficacy of certain drugs (e. g., “ACE inhibitors, i. e., blood pressure reducers, drastically increase the probability of infection with the coronavirus”), or drawing attention to an impending shortage of supplies (e. g., “Agricultural organization ‘Land creates connection’ warns: Germany will not be able to guarantee the supply of safe food from the region to the population for much longer”)³. Two placebo disinformation items, which both transmit similar COVID-19 narratives but never circulated online, were additionally produced to help control for false recall in survey responses (e. g., “Is the Third World War imminent? How the Middle East is now taking its revenge on the NATO states with a deadly pandemic”). In creating the claims, we took particular care to ensure they aligned with the two main narratives identified in real-world disinformation (criticism of state institutions, and spread of the virus through communities).

We also included three accurate COVID-19 news headlines (e. g., “Record number of unemployment registrations in the USA in Corona crisis: almost 3.3 million citizens made an initial application for unemployment assistance”), and two opinion-based headlines pro and contra curfews in the pandemic (e. g., “People don’t take COVID-19 seriously enough: Curfews can no longer be avoided”; “Don’t radically limit freedom: Why curfews must be avoided”), which were used

3 For a complete overview of the news items presented to the participants, we have uploaded a list on OSF: https://osf.io/f9uah/?view_only=af5552cf82ba4678a45665118eb52330

to measure selective exposure effects. Like Zimmermann and Kohring (2020), we included the verified headlines to distract participants and ensure the most natural news exposure environment possible. The order of the displayed headlines was randomized. Participants were asked whether they recalled the news, considered it to be a credible source, or how likely it was that they would read and share the corresponding article. Following the ethical guidelines, after that task, participants were informed in detail about which of the headlines contained disinformation. This was supported by additional information about the source that identified the message as false as well as a statement clarifying the news' incorrect content. Finally, participants were fully debriefed and were invited to download the explanation of the news headlines as a PDF document.

Measures

Selecting and sharing attitude-consistent content. After each news headline, participants were asked how likely it was that they would read the full article and then forward it to their social media contacts. The likelihood of selection and sharing was measured on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). To assess participants' exposure to attitude-consistent content, we asked them to report their attitude towards curfews in the COVID-19 pandemic on a 5-point scale ("In Germany, the curfews should be even stricter"; $M = 2.60$, $SD = 1.29$). This item was dichotomized to differentiate between opponents (values 1–2, $n = 546$) and supporters (values 4–5, $n = 266$) of curfews, thereby allowing categorization of attitude-consistent vs. attitude-inconsistent news selection (e.g., attitude-consistent when a supporter/opponent would like to read the full pro-/contra-curfew article; attitude-inconsistent when a supporter/opponent would like to read the full con-/pro-curfew article).⁴ On this basis, the likelihood scores of selecting/sharing articles (see above) could be transformed into likelihood scores of selecting/sharing attitude-consistent or attitude-consistent news. For further analysis, we calculated a ratio score by subtracting the attitude-consistent news selection variable from the attitude-inconsistent selection variable. This enabled us to detect the likelihood of exposure to attitude-consistent over attitude-inconsistent content on a continuous level ($M = 0.42$, $SD = 1.91$). We adopted the same procedure to build the corresponding variables for sharing attitude-consistent or attitude-inconsistent content and

⁴ Participants who indicated a neutral attitude about curfews were not considered for these analyses.

subsequently calculated participants' likelihood to share attitude-consistent over attitude-inconsistent content ($M = 1.15$, $SD = 2.13$).

Disinformation selection, recall, credibility, and sharing. To assess participants' selection and sharing of disinformation, we calculated the overall mean score of the likelihood of reading ($M = 3.49$, $SD = 1.63$, Cronbach's $\alpha = .79$) and sharing ($M = 1.91$, $SD = 1.33$, $\alpha = .87$) the articles of the displayed headlines on a 7-point scale. We further asked whether participants had already encountered the news item (1 = no; 2 = yes). Like Allcott and Gentzkow (2017), we used two placebo headlines to control for recall of the disinformation headlines to rule out recall bias. Their study had to express limitations because the participants remembered the placebos almost as well as the existing disinformation. Since in our sample only 8.5 % of the respondents supposedly remembered having seen one of the two placebos before, while 43.8 % of the respondents claimed to encounter at least one of the disinformation headlines that circulated online, we could exclude both placebo news items in the upcoming analysis. The perceived credibility was measured on a 5-point scale adapted by Zimmermann and Kohring (2020), ranging from 0 (*certainly false*) to 4 (*certainly true*). We again calculated the overall mean score, which represents the average credibility of the presented disinformation items ($M = 2.23$, $SD = 0.68$, $\alpha = .59$).

Right-wing ideological beliefs. RWA was assessed with the commonly used short scale of authoritarian attitudes (B-RWA-6, Aichholzer and Zeglovits, 2015), which includes six items (e. g., "The country would be better off if young people were more aware of values and traditions"; 5-point scale; $M = 3.36$, $SD = 0.67$). It has to be acknowledged that the internal consistency of the scale in the sample was low ($\alpha = .57$). Given that it is a standard scale, and other studies have reported similar low reliability scores (Jedinger and Burger, 2019), we did not further modify the selection of the items. However, the discussion section will address this issue in more detail. Three items measured SDO (e. g., "Every society needs groups that are above and others that are below the social hierarchy"; 5-point scale; $M = 2.38$, $SD = 0.85$). They were adapted from the short KSDO-3 scale (Aichholzer, 2019), based on a translation of the SDO7 scale (Ho et al., 2015). Like the B-RWA-6 scale, the KSDO-3 scale is listed in the GESIS ZIS catalog and is considered a valid measuring instrument for SDO in German-speaking countries. However, a similar weak reliability score, as above, must be noted for our sample ($\alpha = .56$).

Trust- and science-related beliefs. We captured trust in politics using three items (e. g., "People in government waste tax money" (reverse-coded)), which were rated on a 7-point scale ($M = 3.31$, $SD = 1.46$) with an acceptable reliability ($\alpha = .75$), adapted from the American National Election Studies (ANES, 2020). To measure trust in traditional media, we employed three items (Schultz et al., 2017) such as "The established media report in a balanced way", rated on a 7-point scale ($M = 4.15$, $SD = 1.58$, $\alpha = .94$). To ensure that participants' answers referred to traditional news

media, they were explicitly requested to think of the established media in Germany, i. e., the large TV stations or newspapers that most people know. To assess trust in science, we asked respondents to rate a single item (“How much trust do you have in science and research in Germany?”; $M = 4.99$, $SD = 1.35$) using a 7-point scale. To assess the epistemic belief that knowledge is fixed, we included one dimension from a scale by Hofer (2000). The participants rated eight items (e. g., “On this subject the truth does not change”) on a 7-point scale ($M = 3.59$, $SD = 0.91$, $\alpha = .70$) to assess their perceived certainty of knowledge in the field.

Controls. Gender, age, and education, as well as political leaning, which was measured on a 10-point scale ranging from 1 (*left-leaning*) to 10 (*right-leaning*) ($M = 5.04$, $SD = 1.81$), were assessed as further variables.

6 Results

According to our first hypothesis H1, we expected people to select attitude-consistent content more frequently than attitude-inconsistent content. To determine whether there was a mean difference between an attitude-consistent and attitude-inconsistent selection, we conducted a parametric paired sample t-test. As predicted, the paired t-test revealed a significant difference between the mean scores of both variables, $t(1101) = 7.227$, $p < .001$ (two-tailed) (attitude-consistent selection: $M = 3.38$, $SD = 3.15$; attitude-inconsistent selection: $M = 2.96$, $SD = 2.97$). Hence, H1 was supported by the data. Regarding RQ1, we examined whether there was a mean difference between the likelihood of sharing attitude-consistent and attitude-inconsistent content. A paired t-test indicated a significant difference between the variables, $t(1101) = 5.721$, $p < .001$ (two-tailed) (pro attitude-consistent sharing: $M = 1.69$, $SD = 2.43$; attitude-inconsistent sharing: $M = 1.40$, $SD = 2.14$).

To test the subsequent hypotheses, we conducted four hierarchical regression analyses with the dependent variables: (1) selective exposure effects (ratio score variable: attitude-consistent news selection over attitude-inconsistent news selection), (2) disinformation selection likelihood, (3) perceived disinformation credibility, and (4) disinformation sharing. As predictors, the following variables were entered: (1) gender, age, and political leaning (as control variables); (2) RWA and SDO; (3) trust in politics, trust in traditional media, trust in science, and certainty of knowledge. Three of four regression models were significant (see Table 1). Based on H2, we expected that RWA would increase preference for attitude-consistent over attitude-inconsistent news content. However, RWA was not a significant predictor of the corresponding ratio score variable ($\beta = -.019$, $p = .566$); therefore, this assumption was not supported.

Table 1: Hierarchical multiple regression analyses including selective exposure, disinformation selection, disinformation credibility, and disinformation sharing as dependent variables (N = 1101).

	Selective exposure				Disinformation selection				Disinformation credibility				Disinformation sharing			
	<i>B</i> (<i>SE_B</i>)	β	ΔR^2		<i>B</i> (<i>SE_B</i>)	β	ΔR^2		<i>B</i> (<i>SE_B</i>)	β	ΔR^2		<i>B</i> (<i>SE_B</i>)	β	ΔR^2	
Step 1			.001				.024				.021					.012
Gender (1=male/2=female)	-.03(.12)	-.01			.30(.10)	.09**			.09(.04)	.07*			-.04(.08)	-.01		
Age	.00(.00)	.00			.01(.00)	.07*			-.00(.00)	-.07*			-.01(.02)	-.13***		
Political leaning	-.01(.04)	-.01			-.01(.03)	-.02			.01(.01)	.03			.01(.02)	.02		
Step 2			.002				.030				.008					.014
RWA	.05(.09)	-.02			.37(.07)	.15***			.05(.03)	.05			.12(.06)	.06		
SDO	-.04(.07)	-.02			.10(.06)	.05			.07(.03)	.10**			.16(.05)	.10**		
Step 3			.021				.026				.052					.027
Trust in politics	-.07(.05)	-.06			-.10(.04)	-.09**			-.05(.02)	-.12***			.09(.03)	-.10**		
Trust in media	-.08(.05)	-.07			.08(.04)	.08*			-.02(.02)	-.04			.04(.03)	.04		
Trust in science	-.09(.05)	-.07			.12(.04)	.10**			-.07(.02)	-.15***			-.05(.04)	-.16		
Certainty of knowledge	01.(.07)	.00			.11(.06)	.06			.07(.02)	.09**			.23(.05)	.16***		
Total <i>R</i> ²			.023				.079				.082					.054

p* < .05. *p* < .01. ****p* < .001.

In H3, RWA was assumed to positively predict the selection of disinformation and the attribution of credibility to disinformation. Whereas RWA positively predicted the likelihood of selecting disinformation ($\beta = .154, p < .001$), RWA was not found to have a significant effect on perceived disinformation credibility ($\beta = .050, p = .115$). Thus, the data only partially supported this hypothesis. Further exploration of this aspect, considering the predictor SDO, revealed a significant positive effect of SDO on the dependent variable ($\beta = .093, p = .003$): People high in SDO evaluate disinformation as more credible than those who score low on the SDO dimension.

Regarding participants' sharing of disinformation, we hypothesized that RWA and SDO would be positively related to the dependent variable (H4). Whereas SDO ($\beta = .099, p = .002$) positively predicted sharing of disinformation, RWA emerged as a positive but non-significant predictor of sharing disinformation news content with social media contacts ($\beta = .055, p = .084$). In conclusion, the data only partially supported H4.⁵

In H5, we postulated that trust in politics, trust in traditional media, and trust in science would negatively predict the selection of disinformation and perceived disinformation credibility. The data showed a significant influence of trust in politics, traditional media, and science on participants' disinformation selection. Contrary to our assumption, trust in traditional media ($\beta = .079, p = .046$) and trust in science ($\beta = .100, p = .006$) positively predicted people's disinformation selection in the COVID-19 pandemic, whereas trust in politics ($\beta = -.093, p = .006$) negatively predicted the outcome variable. Regarding people's attribution of credibility to disinformation, the results revealed that people's belief in COVID-19 disinformation was significantly influenced by trust in politics and trust in science, but not significantly related to trust in traditional media ($\beta = -.041, p = .302$). Trust in politics ($\beta = -.116, p = .001$) and trust in science ($\beta = -.149, p < .001$) emerged as negative predictors. Consequently, H5 was only partially supported.

Referring to H6, the effect of participants' naive epistemic beliefs that knowledge is certain and relatively unchangeable on their disinformation selection was non-significant ($\beta = .061, p = .054$). However, whether people believe in the disinformation headlines presented was positively predicted by perceived certainty of knowledge ($\beta = .090, p = .005$). As hypothesized, certainty of knowledge ($\beta = .156,$

⁵ Additionally, we had preregistered the hypothesis that SDO would positively influence peoples' self-perception as an online opinion leader during the COVID-19 pandemic. As expected, that relationship was found to be highly significant. However, to allow for a consistent structure of the manuscript, analyses on opinion leadership were not included, but are reported as an appendix on OSF (https://osf.io/f9uah/?view_only=af5552cf82ba4678a45665118eb52330).

$p < .001$) further positively predicted sharing of disinformation. Exploratively, trust in politics was found to be a negative significant predictor for disinformation sharing on COVID-19 ($\beta = -.098, p = .004$).

7 Discussion

Given the rise of news in crises such as the COVID-19 pandemic, we argued that examining confirmation bias in information selection and sharing, and the factors that make people particularly susceptible to disinformation is essential to understanding and combating (dis)information dynamics. Using representative survey data collected at the onset of the COVID-19 pandemic, we aimed to examine selective exposure effects in crisis news selection and sharing, as well as the importance of right-wing ideological, trust-, and science-related beliefs that may influence how people select, share, and evaluate disinformation as credible.

Initially, our results showed that people generally preferred attitude-consistent over attitude-inconsistent information on COVID-19 (with the example of the topic of curfews). Consistent with other research, under normal situational circumstances (Knobloch-Westerwick et al., 2015) and threats, people are most likely to select attitude-consistent information that upholds their prior attitudes. Moreover, as has been found in other studies in non-crisis periods (Liang, 2018), we likewise found such a confirmation bias for people's information sharing.

An examination of the influence of right-wing ideological beliefs anchored in political conservatism revealed that RWA is an influential factor for selecting disinformation. This finding supports recent suggestions that disinformation, which often incorporates extreme right-leaning and conspiracy-inspired narratives, could be particularly attractive to people high in RWA (e. g., Imhoff and Lamberty, 2020; Frischlich et al., 2021). However, unlike Lavine and colleagues (2005), we did not identify RWA as as influential when people select attitude-consistent news content. A possible explanation for this is that our field study was conducted in a real-life risk situation in which people were exposed to an abundance of threatening news daily, rather than measuring selective exposure behavior under threat in an experiment. That imminent confrontation with the COVID-19 threat might have mitigated RWA-related activation effects through COVID-19 threat over time compared to acute stimuli, made salient under experimental conditions on short notice. An alternative explanation could be that high-RWA individuals do not take COVID-19 threats seriously (as far-right actors, among others, denied the existence or the danger of the virus). However, our data showed significant positive correlations between RWA and support for the government's

crisis management, indicating that RWA is not generally associated with a denial of COVID-19 threats.

Instead of a more substantial confirmation bias, our results show a higher likelihood of selecting disinformation for people high in RWA. In addition, SDO, not RWA, emerged as a decisive predictor for disinformation sharing and attribution of credibility to disinformation. At the same time, the independence of RWA and SDO in predicting different outcomes is consistent with previous results. To our knowledge, while related studies have positively associated SDO with self-promotion as a strong predictor for sharing news (Islam et al., 2020), the present research is one of the first that connects SDO directly to the belief in and the sharing of disinformation. Accordingly, both RWA and SDO seem to increase people's vulnerability to disinformation, and the influence of SDO and RWA remains significant when controlling for political leaning in the analyses. Critically, we would like to note that the findings could also be due to the right-wing orientation of some of the disinformation items presented (which would be in line with a confirmation bias). However, only three of the seven disinformation headlines in our sample directly relate to right-wing ideologically charged issues, which may also indicate a more general pattern of disinformation susceptibility. Future research should therefore more clearly variate the ideological leaning of true vs. false news.

Second, including *trust-related beliefs* in our analysis, the results indicated that political trust, as one of the most consistent predictors, plays a crucial role. Whether people selected, shared, and believed in COVID-19 disinformation was strongly related to their mistrust in politics. Likewise, recent findings by Zimmermann and Kohring (2020) demonstrated a negative relationship between trust in politics and people attributing credibility to disinformation. Along these lines, recent research on the acceptance and adoption of COVID-19 behavioral protective measures uncovered a consistent positive effect of political trust (Dohle et al., 2020). In contrast to mistrust in politics, trust in traditional media and science were unexpectedly found to be ambivalent predictors for disinformation selection, sharing, and credibility. Contrary to results reported by Zimmermann and Kohring (2020), trust in traditional media even positively predicted disinformation selection, but did not have a significant effect on people's belief in disinformation. Furthermore, trust in science was positively related to selecting and sharing disinformation, while negatively associated with its credibility. Accordingly, contrary to our hypotheses, the findings suggest that trust in traditional media and trust in science do not mitigate people's selection and sharing of COVID-19 disinformation, but partly foster it. As reported by other studies of crisis scenarios, a possible explanation could be that in times of crisis people experience a higher need to inform themselves on the crisis topic and generally tend to select more information (in a more thoughtless way). In this process, trust in traditional media and science can particularly increase the

need and amount of selecting and sharing of news, regardless of whether the news is accurate or not. It may also suggest that, particularly at the onset of the COVID-19 pandemic, public institutions have not always succeeded in responding to clear, helpful, and trustworthy information on pressing public issues. In the absence of sufficient information, misinformation and disinformation about these issues may fill gaps in the public's need for understanding (Brennen et al., 2020). Thus, trust in the media and science may extend somewhat mindlessly to dubious media sources.

Concerning the influence of epistemic beliefs, perceived certainty of knowledge emerged as a stable predictor for almost all dependent variables. People who are firmly convinced that knowledge is fixed and relatively unchangeable are more prone to select, share, and believe in disinformation. Our findings corroborate results indicating that epistemological reasoning influences people's ability to process new knowledge and scientific progress. People's belief that knowledge is relatively stable and unchangeable may undermine necessary measures to prevent disease spread as individuals avoid, deny, or misinterpret relevant information.

Limitations

Overall, in terms of limitations, the study may suffer from a sampling bias due to the recruitment procedure using an online access panel with potentially lower participation of people with very high RWA/SDO or people with extreme attitudes. Second, we must consider that the study design incorporated a rather artificial scenario to measure (dis)information usage. In our setting, we presented participants with news stories one at a time, followed by items that inquired about their intention to select and share the information and its credibility. Although this quasi-experimental approach tries to adhere to realistic information behavior, our study's procedure highly reduced the complexity of a news selection and sharing process. Besides, people may not accurately report their clicking or sharing behavior in a survey. To ensure a more naturalistic scenario, tracking data would prove helpful and reduce problems of social desirability. Because we did not control for social desirability, the only argument that might soften this limitation is that our participants did not initially know which of the headlines contained verified news or disinformation.

Furthermore, we could not include all disinformation distributed online in the COVID-19 pandemic. However, we tried to weaken this limitation by drawing on major German fact-checking websites when selecting the most prominent disinformation, and by considering a wide range of narratives. This procedure follows the approach of Zimmermann and Kohring (2020), and the inclusion of verified news and disinformation in circulation during the survey is a significant validity advan-

tage. One disadvantage, on the contrary, is an inconsistent pattern of disinformation topics, which creates less comparability and control of confounding effects. Therefore, we would advise future research to control, for instance, for perceived relevance when varying the stimuli.

Additionally, it should also be noted that the measurement methods of both right-wing ideological beliefs and disinformation credibility produced a relatively low-reliability score, possibly due to reversed items and a small number of items. The employed RWA and SDO scales were established in prior research and seemed to represent the dimensions of the concepts adequately, but we recommend broader measurement procedures to assess RWA, SDO, and disinformation credibility more reliably for future research.

Although we focused on selecting and disseminating information in times of crisis, the COVID-19 pandemic is only one example of a crisis in which the data were collected. Thus, the generalizability of the results is limited. Accordingly, the results of this study do not allow us to conclude the general prevalence of a confirmation bias in the selection of crisis news or the influence of the investigated predictors on susceptibility to disinformation. Even more so, this study analyzed data collected at the very beginning of the COVID-19 pandemic. The later debate about COVID-19 vaccination has unleashed a new wave of disinformation that differs in its representations from the news stories studied, which may already alter the validity of the identified predictors. However, given that susceptibility to disinformation is positively correlated with hesitancy to COVID-19 vaccination (Roozenbeek et al., 2020), it is plausible that right-leaning ideology, trust in politics, media, and science, and certainty of knowledge, when exposed to new and conflicting scientific evidence, continue to play a role in this context. Nevertheless, replications and further testing of the significant effects on our depending variables are required.

8 Conclusion

Despite these limitations, this preregistered study shows that the well-studied confirmation bias in selecting and sharing news content holds in times of crisis, while also providing insights into individuals who are particularly vulnerable to disinformation. Within the beliefs examined, RWA and SDO as right-wing ideological beliefs, mistrust in politics as a trust-related belief, and certainty of knowledge as a science-related belief emerged as antecedents of people's susceptibility to COVID-19 disinformation. In addition to politically disenchanted citizens, people who uphold right-wing authoritarian attitudes, refuse to be subordinated to a social system and struggle with processing new, often contradictory, scientific knowledge select,

believe in, or share COVID-19 disinformation with their online networks. Moreover, the significant role of mistrust in politics and epistemic beliefs in predicting people's selection and sharing of disinformation has practical implications for combating disinformation usage. Apart from measures to increase people's confidence in politics, initiatives to promote students' competence in using and evaluating knowledge could be one approach to reduce the risks of both factors. This is because epistemic beliefs are often established at an early stage in education. According to the epistemic risk factor identified, to fully develop such skills, teacher training and education programs in schools would be vital to promote critical thinking, and prevent individuals from being susceptible to disinformation. We hope that the present study will contribute to a better understanding of information dynamics at the onset of a crisis while providing an application framework for the conception of preventive measures that limit an information usage rooted in partially distorted beliefs.

References

- Aichholzer, J. (2019). *Kurzskala Soziale Dominanzorientierung (KSDO-3)* [Short scale of social dominance orientation]. Zusammenstellung sozialwissenschaftlicher Items und Skalen (ZIS). <https://doi.org/10.6102/zis269>
- Aichholzer, J., & Zeglovits, E. (2015). *Balancierte Kurzskala autoritärer Einstellungen (B-RWA-6)* [Balanced short scale of authoritarian attitudes]. Zusammenstellung sozialwissenschaftlicher Items und Skalen (ZIS). <https://doi.org/10.6102/zis239>
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211–236. <http://doi.org/10.1257/jep.31.2.211>
- Altemeyer, B. (1998). The “other” authoritarian personality. *Advances in Experimental Social Psychology*, 30, 47–92. [https://doi.org/10.1016/S0065-2601\(08\)60382-2](https://doi.org/10.1016/S0065-2601(08)60382-2)
- American National Election Studies (ANES). (2020). *ANES 2020 Time series study. Pre-election and post-election*. https://electionstudies.org/wp-content/uploads/2021/07/anes_timeseries_2020_questionnaire_20210719.pdf
- Bauer, P. C., & Clemm von Hohenberg, B. (2020). Believing and sharing information by fake sources: An experiment. *Political Communication*, 38(6), 647–671. <https://doi.org/10.1080/10584609.2020.1840462>
- Brennen, J. S., Simon, F. M., Howard, P. N., & Nielsen, R. K. (2020). *Types, sources, and claims of COVID-19 misinformation*. Reuters Institute for the Study of Journalism. <https://reutersinstitute.politics.ox.ac.uk/types-sources-and-claims-covid-19-misinformation>
- Buchanan, B. (2020). Why do people spread false information online? The effects of message and viewer characteristics on self-reported likelihood of sharing social media disinformation. *PLoS ONE*, 15(10), 1–33. <http://doi.org/10.1371/journal.pone.0239666>
- Burghartwieser, D., & Rothmund, T. (2021). Conservative bias, selective political exposure and truly false consensus beliefs in political communication about the ‘refugee crisis’ in Germany. *PLoS ONE*, 16(11), 1–20. <https://doi.org/10.1371/journal.pone.0259445>

- Dohle, S., Wingen, T., & Schreiber, M. (2020). *Acceptance and adoption of protective measures during the COVID-19 pandemic: The role of trust in politics and trust in science*. *Social Psychological Bulletin*, 15(4), Article e4315. <https://doi.org/10.32872/spb.4315>
- Duckitt, J., & Sibley, C. G. (2009). A dual-process motivational model of ideology, politics, and prejudice. *Psychological Inquiry*, 20(2–3), 98–109. <https://doi.org/10.1080/10478400903028540>
- Fischer, P., Kastenmüller, A., Greitemeyer, T., Fischer, J., Frey, D., & Crelley, D. (2011). Threat and selective exposure: The moderating role of threat and decision context on confirmatory information search after decisions. *Journal of Experimental Psychology: General*, 140(1), 51–62. <http://doi.org/10.1037/a0021595>
- Fong, E., & Chang, L. Y. (2011). Community under stress: Trust, reciprocity, and community collective efficacy during SARS outbreak. *Journal of Community Health*, 36, 797–810. <https://doi.org/10.1007/s10900-011-9378-2>
- Frischlich, L., Hellmann, J. H., Brinkschulte, F., Becker, M., & Back, M. D. (2021). Right-wing authoritarianism, conspiracy mentality, and susceptibility to distorted alternative news. *Social Influence*, 16(1), 24–64. <https://doi.org/10.1080/15534510.2021.1966499>
- Fritzsche, I., Cohrs, J. C., Kessler, T., & Bauer, J. (2012). Global warming is breeding social conflict: The subtle impact of climate change threat on authoritarian tendencies. *Journal of Environmental Psychology*, 32, 1–10. <https://doi.org/10.1016/j.jenvp.2011.10.002>
- Guess, A. M., & Lyons, B. A. (2020). Misinformation, disinformation, and online propaganda. In N. Persily, & J. Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform* (pp. 10–33). Cambridge University Press. <http://doi.org/10.1017/9781108890960>
- Hartman, T. K., Stocks, T. V. A., McKay, R., Gibson Miller, J., Levita, L., Martinez, A. P., Mason, L., McBride, O., Murphy, J., Shevlin, M., Bennett, K. M., Hyland, P., Karatzias, T., Vallières, F., & Bentall, R. P. (2021). The authoritarian dynamic during the COVID-19 pandemic: effects on nationalism and anti-immigrant sentiment. *Social Psychological and Personality Science*, 12(7)1–12. <http://doi.org/10.1177/1948550620978023>
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO, scale. *Journal of Personality and Social Psychology*, 109(6), 1003–1028. <https://doi.org/10.1037/pspi0000033>
- Hofer, B. K. (2000). Dimensionality and disciplinary differences in personal epistemology. *Contemporary Educational Psychology*, 25(4), 378–405. <http://doi.org/10.1006/ceps.1999.1026>
- Imhoff, R., & Lamberty, P. (2020). A bioweapon or a hoax? The link between distinct conspiracy beliefs about the Coronavirus disease (COVID-19) outbreak and pandemic behavior. *Social Psychological and Personality Science*, 11(8), 1110–1118. <http://doi.org/10.1177/1948550620934692>
- Islam, N. A. K. M., Laato, S., Talukder, S., & Sutinen, E. (2020). Misinformation sharing and social media fatigue during COVID-19: An affordance and cognitive load perspective. *Technological Forecasting and Social Change*, 159, 1–14. <http://doi.org/10.1016/j.techfore.2020.120201>
- Jedinger, A., & Burger, A. M. (2019). The ideological foundations of economic protectionism: Authoritarianism, social dominance orientation, and the moderating role of political involvement. *Political Psychology*, 41(2), 403–424. <http://doi.org/10.1111/pops.12627>
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375. <http://doi.org/10.1037/0033-2909.129.3.339>
- Kerwer, M., & Rosman, T. (2020). Epistemic change and diverging information: How do prior epistemic beliefs affect the efficacy of short-term interventions? *Learning and Individual Differences*, 80, 1–13. <http://doi.org/10.1016/j.lindif.2020.101886>

- Kim, J., Kim, J.-H., & Seo, M. (2014). Toward a person $\times$ situation model of selective exposure. Repressors, sensitizers, and choice of online news on financial crisis. *Journal of Media Psychology*, 26(2), 59–69. <https://doi.org/10.1027/1864-1105/a000111>
- Kohring, M. (2004). *Vertrauen in Journalismus. Theorie und Empirie* [Trust in journalism. Theory and empiricism]. University Publishing House.
- Knobloch-Westernick, S., Westernick, A., & Johnson, B. (2015). Selective exposure in the communication technology context. In S. S. Sundar (Ed.), *Handbook of the psychology of communication technology* (pp. 407–427). Wiley-Blackwell. <https://doi.org/10.1002/9781118426456>
- Lavine, H., Lodge, M., & Freitas, K. (2005). Authoritarianism, threat, and motivated reasoning. *Political Psychology*, 26(2), 219–244. <http://doi.org/10.1111/j.1467-9221.2005.00416.x>
- Liang, H. (2018). Broadcast versus viral spreading: The structure of diffusion cascades and selective sharing on social media. *Journal of Communication*, 68(3), 525–546. <https://doi.org/10.1093/joc/jqy006>
- Liao, Q. V., & Fu, W. (2013). Beyond the filter bubble: interactive effects of perceived threat and topic involvement on selective exposure to information. *CHI '13: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 2359–2368. <https://dl.acm.org/doi/pdf/10.1145/2470654.2481326>
- 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), 277–293. <https://doi.org/10.1080/1369118X.2019.1646778>
- Robert Koch Institute. (2020, April 15). *COVID-19: Fallzahlen in Deutschland und weltweit* [COVID-19: Case numbers in Germany and worldwide]. https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Fallzahlen.html
- Romer, D., & Jamieson, K. H. (2021). Conspiratorial thinking, selective exposure to conservative media, and response to COVID-19 in the US. *Social Science & Medicine*, 291, 114480. <https://doi.org/10.1016/j.socscimed.2021.114480>
- Roozenbeek, J., Schneider, C. R., & Dryhurst, S. (2020). Susceptibility to misinformation about COVID-19 around the world. *Royal Society Open Science*, 7(10), 1–15. <https://doi.org/10.1098/rsos.201199>
- Schultz, T., Jakob, N., Ziegele, M., Quiring, O., & Schemer, C. (2017). Erosion des Vertrauens zwischen Medien und Publikum? Ergebnisse einer repräsentativen Bevölkerungsumfrage [Erosion of trust between media and audience? Results of a representative survey]. *Media Perspektiven*, 5, 246–259. https://www.ard-werbung.de/fileadmin/user_upload/media-perspektiven/pdf/2017/0517_Schultz_Jakob_Ziegele_Quiring_Schemer.pdf
- Shin, J. E., & Thorson, K. (2017). Partisan selective sharing: The biased diffusion of fact-checking messages on social media. *Journal of Communication*, 67(2), 233–255. <https://doi.org/10.1111/jcom.12284>
- Sidanius, J., & Pratto, F. (2004). Social dominance theory: A new synthesis. In J. T. Jost, & J. Sidanius (Eds.), *Political psychology* (pp. 315–332). Psychology Press. <https://doi.org/10.4324/9780203505984-18>
- Siegrist, M., & Zingg, A. (2014). The role of public trust during pandemics: Implications for crisis communication. *European Psychologist*, 19(1), 23–32. <https://doi.org/10.1027/1016-9040/a000169>
- Sindermann, C., Elhai, J. D., Moshagen, M., & Montag, C. (2020). Age, gender, personality, ideological attitudes and individual differences in a person's news spectrum: How many and who might be prone to “filter bubbles” and “echo chambers” online? *Heliyon*, 6(1), article e03214. <https://doi.org/10.1016/j.heliyon.2020.e03214>
- Winter, S., Metzger, M. J., & Flanagin, A. J. (2016). Selective use of news cues: A multiple motive perspective on information selection in social media environments. *Journal of Communication*, 66(4), 669–693. <http://doi.org/10.1111/jcom.12241>

- Wittenberg, C., & Berinsky, A. J. (2020). Misinformation and its correction. In N. Persily, & J. Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform* (pp. 163–198). Cambridge University Press. <http://doi.org/10.1017/9781108890960>
- 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. <http://doi.org/10.1080/10584609.2019.1686095>
- Zmerli, S., & Newton, K. (2017). Objects of political and social trust: Scales and hierarchies. In S. Zmerli, & T. W. G. van der Meer (Eds.), *Handbook of political trust* (pp. 104–124). Edward Elgar. <https://doi.org/10.4337/9781782545118>

Appendix B: Manuscript 2

Klebba, L.-J., & Winter, S. (2025). The influence of threat and right-wing authoritarianism on the selection of online (dis)information—a conceptual replication and extension of Lavine et al. (2005). *Human Communication Research*, 51(1), 52–56.
<https://doi.org/10.1093/hcr/hqae016>



The influence of threat and right-wing authoritarianism on the selection of online (dis)information — a conceptual replication and extension of Lavine et al. (2005)

Lea-Johanna Klebba ^{1,*} Stephan Winter ¹

¹Department of Media Psychology, University of Kaiserslautern-Landau (RPTU), Landau in der Pfalz, Germany

*Corresponding author: Lea-Johanna Klebba. E-mail: leajohanna.klebba@rptu.de

Abstract

Over the decades, communication research has investigated the situational and personal conditions under which people particularly prefer attitude-consistent over attitude-inconsistent content (confirmation bias). In a central study, Lavine et al. (2005) [Lavine, H., Lodge, M., & Freitas, K. (2005). Authoritarianism, threat, and motivated reasoning. *Political Psychology*, 26(2), 219–244.] examined how right-wing authoritarianism (RWA) and threat cause bias when processing political information. Their laboratory experiment suggested that right-wing authoritarians prefer attitude-consistent information in the presence of a threat. Given new crisis environments accompanied by various threats, we re-examined this interaction effect and conceptually replicated Lavine et al.'s central hypothesis in a contemporary media environment. In an online experiment ($N = 1,118$), we focused on selective exposure to verified news and disinformation and tracked participants' selection unobtrusively. Contrary to expectations, the interaction between different threats and RWA did not increase selective exposure to attitude-consistent (dis)information. The results challenge the hypothesis' underlying framework and make it necessary to consider new ways of advancing the theoretical model.

Keywords: selective exposure, RWA, threat, disinformation, confirmation bias

How people select information is a central topic in communication research. The selective exposure approach (Knobloch-Westerwick et al., 2015), which assumes that people prefer information consistent with their pre-existing attitudes (confirmation bias), has been robustly supported in numerous studies considering personal and situational conditions (threat in particular; Fischer et al., 2011). In this context, a central study by Lavine et al. (2005) investigated the interaction effect of threat and right-wing authoritarianism (RWA) on selective exposure behavior to political information. Consistent with the threat-RWA activation hypothesis (Feldman & Stenner, 1997), they argued that threat activates otherwise dormant RWA values (authoritarian aggression, submission, and conventionalism), thereby increasing their influence on other political judgments and preferences. In a laboratory experiment, they asked 92 participants to read one of three articles that contained either pro-, con-, or balanced information about capital punishment after a writing task reminding them of their death threatened half of the sample. Lavine et al. (2005) showed that in the presence of the threat, high (but not low) right-wing authoritarians preferred political information consistent with their pre-existing attitudes. Thus, the effect of RWA on selective exposure to information was fully dependent on threat.

Beyond testing the interaction of RWA and threat within the confines of a controlled experimental setting, their study addressed a pertinent gap in research at this time. In addition to other studies that established a positive relationship between RWA, threats and a range of attitudes and policies such as prejudice, intolerance toward marginalized groups, and endorsement of authoritarian measures (e.g., Cohrs &

Ibler, 2009; Hartman et al., 2021), Lavine et al. (2005) were the first to show the influence of threat on the cognitive strategies employed by right-wing authoritarians when processing new political information. Given the extensive research conducted in communication science on selective exposure (see Hart et al., 2009), the finding that threat leads to biased rather than open-minded information processing in right-wing authoritarians was particularly noteworthy and contributed to understanding which situational and personal conditions (and the interaction of both) can intensify the confirmation bias. However, although recent societal crises (e.g., the coronavirus disease 2019 (COVID-19) pandemic, climate change, and refugee crisis) created increasingly suitable conditions for the threat-RWA interaction effect to unfold (increased threat level, the prevalence of right-wing authoritarian attitudes, increase in (dis)information), the frequently cited result was not revisited in subsequent years. Therefore, to advance the underlying theoretical framework in a contemporary information environment, the primary objective of this study was to conceptually replicate the core hypothesis put forth by Lavine et al. (2005) under more rigorous circumstances and examine the existence (and direction) of the interaction effect between threat and RWA on selective exposure (see goal #1; Anderson & Maxwell, 2016). We deliberately opted for a conceptual replication that allowed us to evaluate the theoretical robustness of the threat-RWA activation dynamic.¹ At the same time, this gave us the opportunity to make substantial changes to the measurements and procedures that we considered more appropriate for retesting the critical predictions of Lavine et al. (2005), accepting that the approach may limit full

comparability between both studies. We hypothesized that people show a stronger confirmation bias in selecting information when threat is high than when threat is low and that RWA strengthens this effect (just as in Lavine et al., 2005), but made significant adjustments to our experimental conditions, considering the current global crisis climate and utilizing a more natural news selection environment with different news options, measures, stimuli, and statistical analysis, as detailed in the Method section. The full preregistered hypotheses and a complete study overview are available online at the Open Science Framework (OSF) repository (https://osf.io/z82re/?view_only=d54676f684ba405d95937bd0106ae539).

Method

Data and participants

Data were collected between August 5 and 17, 2021, from an online access panel with quotas set for gender, age, and education, representative of German Internet users aged 18–75 years (for additional information on the participants see the expanded methodological write-up in the [Supplementary Appendix A](#)). Data files and materials are available at OSF (see link above).

Procedure and variables of selective exposure, threat, and RWA

Instead of conducting the experiment in a laboratory setting ($N = 92$), we implemented an online approach to test Lavine et al.'s (2005) central hypothesis in a contemporary information environment with a larger sample size ($N = 1118$).² Participants browsed a mock news site for a limited time (four minutes) and clicked on headlines to read full articles (see [Figure 1](#); English versions of the headlines are available in [Supplementary Appendix C](#)). A software-based tool (Unkel, 2021) tracked their browsing history, click rate, and time spent reading the articles, replacing hand-coding used by Lavine et al. (2005). We varied the stance of the articles (pro versus con) and the news type (verified news versus disinformation) as within-subject factors. As our study centered around Lavine et al.'s (2005) theoretical rational (threat-RWA activation on selective exposure behavior), we refrained to add assumptions on participants' balanced news selection, and, therefore, balanced news options. Instead, we provided disinformation to (a) simulate a realistic information environment in times of crisis in which disinformation spread alongside verified news and, (b) examine whether the general susceptibility of right-wing authoritarians to disinformation (e.g., Frischlich et al., 2021; Klebba & Winter, 2024) is increased under threat (see the commentary on the influence of right-leaning factors in the [Supplementary Appendix D](#)). To further reflect a crisis information environment, we chose COVID-19 vaccine-related news and disinformation as a more suitable topic than capital punishment in Lavine et al. (2005). As the independent variable, we elicited an existential threat as in Lavine et al. (2005) and a social-normative threat according to Stenner's (2005) theory of threat-RWA activation to better reflect the state of the research debate (for further elaboration, refer to the additional commentary in the [Supplementary Appendix D](#) on the modification of manipulating different types of threats). We varied the induction of threat as a between-subjects factor, using news articles instead of the original death-thought manipulation due to ethical concerns and the recommendation of a local ethics

committee (see [Supplementary Appendix C](#) for stimulus material). Participants were randomly assigned to three conditions before the selection task: existential threat (article on the high risk of developing cancer in the course of a lifetime; $n = 376$), social-normative threat (article on the influx of African refugees to Europe as a result of the COVID-19 pandemic; $n = 368$), or a control group (article about trips to a tourist destination in Germany; $n = 374$). We conducted a pilot study to identify the most threatening articles for each threat types, and manipulation checks confirmed that participants in the threat induction groups felt significantly more threatened than the control group (see manipulation check and correlations in [Supplementary Appendix A](#)). Instead of Altemeyer's (1996) RWA scale, to rate RWA in its subdimensions, we used the KSA-3 short scale (Beierlein et al., 2014) as a well-tested German scale, including three items measuring authoritarian aggression, authoritarian submission, and conventionalism, on a five-point scale ($M = 3.02$, $SD = .82$, $\alpha = .86$) (see an expanded description of key measures in the [Supplementary Appendix A](#)).

Results

Data analysis plan

We used moderated regression models rather than a mixed-effects ANOVA as in Lavine et al. (2005).³ Following current empirical studies (e.g., Winter et al., 2016; Wojcieszak et al., 2020), we recorded which articles were selected for further reading. These clicks were categorized into attitude-consistent or attitude-inconsistent selection of (dis)information based on participants' prior attitudes toward COVID-19 vaccination (e.g., attitude-consistent if a proponent/opponent read a full pro/con article on COVID-19 vaccination; attitude-inconsistent if a proponent/opponent read a full con/pro article on COVID-19 vaccination). Then, we calculated a ratio score by subtracting the attitude-consistent news selection variable from the attitude-inconsistent news selection variable for both verified news and disinformation, representing the extent of the confirmation bias. Thus, the higher the value, the higher the participants' selective exposure behavior (see an expanded description in the methodological write-up in [Supplementary Appendix A](#)).

Testing the existence (and direction) of the interaction effect

We conducted moderated regression analysis with the predictors of threat (threat of cancer or African COVID-19 refugees), RWA, and the dependent variable of the confirmation bias (ratio score, selection rates) for verified news and disinformation. The moderated regression analyses found no significant interaction effects for RWA and the threat of cancer ($\beta = -.001$, $p = .988$) or African COVID-19 refugees ($\beta = -.047$, $p = .516$) in predicting participants' selective exposure behavior (preference for attitude-consistent over attitude-inconsistent information) to verified news on COVID-19 vaccination. However, a significant interaction effect was found for RWA and the threat of African COVID-19 refugees on participants' selective exposure behavior to disinformation on COVID-19 vaccination. Unlike predicted, participants with high RWA scores threatened by incoming African COVID-19 refugees were more likely to select attitude-inconsistent over attitude-consistent disinformation



Figure 1. Screenshot of the mock news site.

Note. The image depicts the mock news site created for the study titled “NEWS FEED” with various sections such as Home, Politics, International, Sports, Economy, Science, Health, Mobility, and Art. The page contains multiple articles related to COVID-19 vaccination with headlines and brief descriptions. The articles cover topics such as vaccine effectiveness, mental health benefits of vaccination, high pharmaceutical quality, the impact of the vaccine on DNA, and concerns about fertility.

on COVID-19 vaccination ($\beta = -.175$, $p = .025$, see [Figure 2](#) and a discussion in the [Supplementary Appendix D](#)).

Additional analysis

A repeated-measures ANOVA showed that participants selected significantly more attitude-consistent verified information ($M = .64$, $SD = .75$) than attitude-inconsistent verified information ($M = .58$, $SD = .76$; $F(1, 940) = 5.102$; $p = .024$, $\eta_p^2 = .005$), and were more likely to select attitude-consistent disinformation ($M = .67$, $SD = .77$) than attitude-inconsistent disinformation ($M = .56$, $SD = .73$; $F(1, 940) = 18.274$; $p < .001$, $\eta_p^2 = .019$) on COVID-19 vaccination. In contrast, no significant main effect of threat was found on participants' selective exposure to verified news ($F(2, 940) = 1.794$; $p = .167$, $\eta_p^2 = .004$) and disinformation ($F(2, 940) = 1.465$; $p = .232$, $\eta_p^2 = .003$), but RWA predicted a decrease in participants' time spent on verified news versus disinformation ($\beta = -.07$; $p = .036$). All hypotheses' tests and exploratory analyses are reported and discussed in [Supplementary Appendix B](#).

Discussion

The lack of support for [Lavine et al.'s \(2005\)](#) central hypothesis that right-wing authoritarians are more likely to select attitude-consistent (versus attitude-inconsistent) information under threat raises issues regarding statistical power, experimental variation, and theoretical strength of the hypothesis.

Discussion of the methodological changes

While we acknowledge the limitations of comparability due to deviations from the original [Lavine et al. \(2005\)](#) design, we contend that several of the changes are superior options for

rigorously testing the eighteen-year-old finding. Our decision to significantly augment the sample size vis-à-vis [Lavine et al. \(2005\)](#)—which is underpowered for testing mixed effects⁴—should have facilitated detection of the effect and helped to avoid inflated effect sizes and constitution of type-1-errors in smaller studies ([Button et al., 2013](#)). The omission of a balanced news option, and instead including disinformation to better simulate a crisis news scenario, might have influenced participants' news selection in direct comparison to [Lavine et al. \(2005\)](#) but leaves the theoretical rationale of the threat-RWA activation hypothesis on selective exposure behavior, the formation of the dependent variable and statistical analysis untouched (in both [Lavine et al. \(2005\)](#) and our testing). Due to the ongoing debate surrounding which type of threat activates RWA and produces right-wing authoritarian outcomes, we opted to switch the type and topic of threat induction. We utilized existential and social-normative threats in the form of news articles to examine which apprehension provokes RWA more and mitigate ethical concerns by not threatening participants with reminding them of their death. The manipulation checks confirmed the effectiveness of the induction, and the different RWA measure displayed strong reliability, supporting an appropriate evaluation of the construct. However, we concur that a news-based threat induction could be less impactful, and that differences in the setup of the study (larger sample size, online setting, different measurements, adjusted news selection scenario) may partly explain diverging results. Despite these limitations and reasonable disagreement among readers about the degree of methodological changes that are “allowed” and valuable, we believe the current study to be a conceptual replication of [Lavine et al. \(2005\)](#) (and designed as such) that contributes to moving the literature on the threat-RWA activation

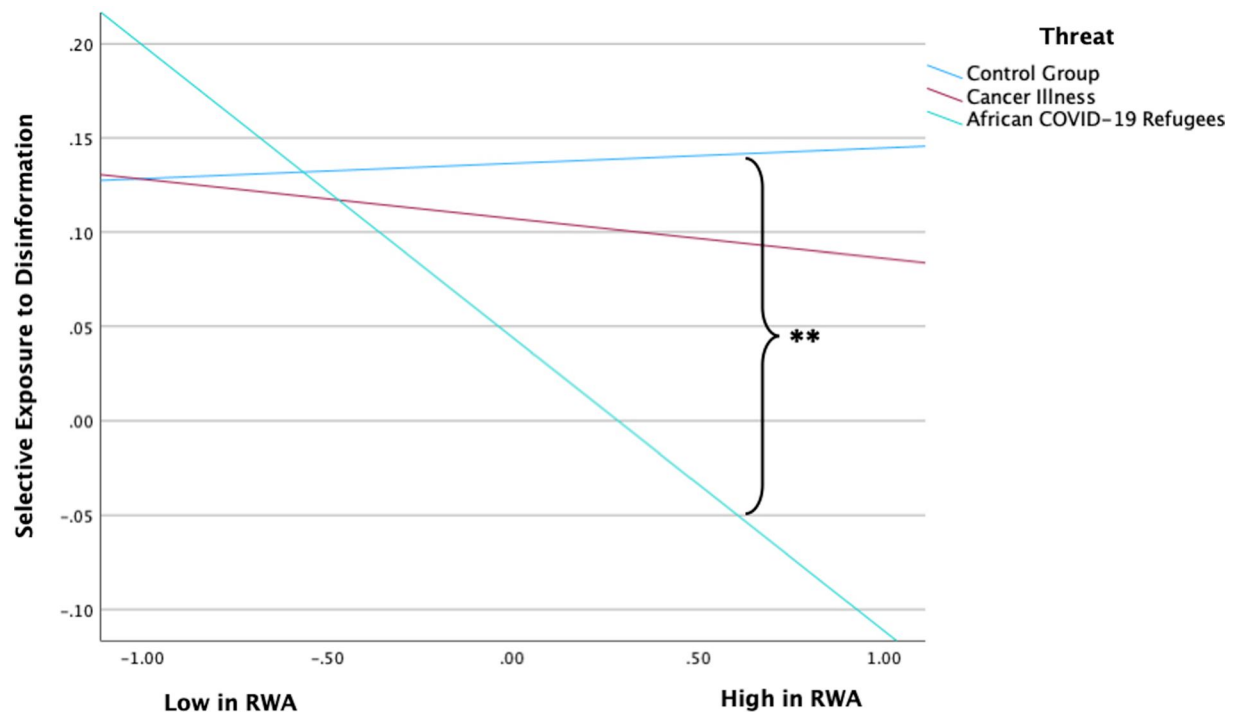


Figure 2. Interaction effect of threat and RWA on participants' selective exposure to attitude-consistent over attitude-inconsistent disinformation.

Note. The graph illustrates the interaction effect between RWA and threat type on selective exposure to disinformation. The x-axis represents the level of RWA, ranging from low to high. The y-axis represents selective exposure to disinformation, ranging from $-.10$ to $.20$. Three lines indicate different threat conditions: the control group (blue line), the cancer illness threat (red line), and the threat of African COVID-19 refugees (green line). The graph shows that for individuals low in RWA, selective exposure to disinformation is relatively high and similar across all threat conditions. As RWA increases, selective exposure to disinformation decreases significantly, particularly for the threat of African COVID-19 refugees, indicated by the steep downward slope of the green line. The control group and cancer illness threat lines show only slight decreases. A double asterisk (**) denotes a statistically significant difference between the selective exposure to disinformation under the African COVID-19 refugees threat compared to the control group for individuals high in RWA.

hypothesis forward, and should be of interest to the research community.

Discussion of the results

Since we could not reproduce the direction and presence of the interaction effect on selective exposure behavior with a larger sample, which provides a higher probability of detecting the effect and more precise data analysis, it is necessary to question the underlying framework of the hypothesis. Our results showed that RWA responded exclusively to our social-normative threat induction (the threat of African COVID-19 refugees), but selective exposure was not a significant finding. Although other studies showed that RWA interacts with existential or social-normative threats, recent interactions were more likely to elicit right-authoritarian behaviors (e.g., nationalism and anti-immigrant sentiments, Hartman et al., 2021). Our results, therefore, question the significance of the interplay between RWA and threat for the preference of attitude-consistent over attitude-inconsistent (dis)information. Instead, they showed a general confirmation bias and a susceptibility of highly right-wing authoritarian individuals to disinformation independent of threat perception. Thus, this study (with a larger sample and a more appropriate data analysis) suggests that the interaction between threat and RWA plays a minor role in crisis information environments than we previously expected (see Supplementary Appendix D for further discussion). To further investigate the threat-RWA-activation hypothesis, it is crucial to address the conflicting results by solidifying the categorization of threat types and systematizing the outcomes. As we incorporated

disinformation into the selection task, more detailed replications of existing studies and outcome variations may be fruitful in field surveys and experimental settings. The overarching goal should be to develop a more advanced model of the threat-RWA-activation hypothesis, capable of verifying existing contexts and looking at them more sophisticatedly with new crucial moderators and possible boundary conditions.

Supplementary material

Supplementary material is available online at *Human Communication Research* online.

Data availability

Data are publicly available online. Data files and survey materials are available at OSF (https://osf.io/z82re/?view_only=d54676f684ba405d95937bd0106ae539).

Conflicts of interest

The authors have no external funding or conflicts of interest to disclose.

Open science framework badges

 Open Materials

The components of the research methodology needed to reproduce the reported procedure and analysis are publicly available for this article.

Open Data

Digitally shareable data necessary to reproduce the reported results are publicly available for this article.

Preregistered

Research design was preregistered.

Notes

1. This approach aligns with a critical component of conceptual replication, which involves operationalizing theoretical variables with diverse manipulations and measurements to examine whether the underlying mechanism can be demonstrated through variations (Crandall & Sherman, 2016).
2. A power analysis with GPower (Faul et al., 2009) yielded a required sample size of at least $N=652$ to detect a small effect ($f^2=.02$, power = .95; see the analysis protocol on OSF). We increased the sample size to $N=1,000$ with a 10% over-recruitment to ensure a quasi-representative sample of German Internet users aged 18–75 with quotas set for gender, age, and education.
3. Moderated regression analysis provides a more appropriate approach to assess interaction effects with continuous moderators (in this case, RWA), as compared to mixed-effect ANOVA (as in Lavine et al., 2005). Although we consider our analysis procedure to be more robust, we also evaluated the data using an ANOVA analysis with the RWA median split to align as closely as possible with the procedure of Lavine et al. (2005). The results remained unchanged. The additional ANOVA analysis is available in the [Supplementary Appendix D](#).
4. A simulation of the statistical power revealed that 92 participants were insufficient to detect the two-way interaction effect between threat and RWA when testing for mixed effects (Lakens & Caldwell, 2021). Adequate power can only be achieved if each message type is analyzed in isolation, as Lavine et al. (2005) did (see the detailed simulated power analysis with Laken's and Caldwell's package "Superpower" in R on OSF).

References

- Altemeyer, B. (1996). *The authoritarian specter*. Harvard University Press.
- Anderson, S. F., & Maxwell, S. E. (2016). There's more than one way to conduct a replication study: Beyond statistical significance. *Psychological Methods*, 21(1), 1–12. <https://doi.org/10.1037/met0000051>
- Beierlein, C., Asbrock, F., Kauff, M., & Schmidt, P. (2014). *Die Kurzskaala Autoritarismus (KSA-3): Ein ökonomisches Messinstrument zur Erfassung dreier Subdimensionen autoritärer Einstellungen*. [The brief scale of authoritarianism (KSA-3): An economic measurement instrument to capture three subdimensions of authoritarian attitudes]. GESIS-Working Papers, 2014/35. GESIS-Leibniz-Institut für Sozialwissenschaften. <https://nbn-resolving.org/urn:nbn:de:0168-ssor-426711>
- Button, K. S., Ioannidis, J. P., Mokrysz, C., Nosek, B. A., Flint, J., Robinson, E. S., & Munafò, M. R. (2013). Power failure: Why small sample size undermines the reliability of neuroscience. *Nature Reviews Neuroscience*, 14(5), 365–376. <https://doi.org/10.1038/nrn3475>
- Cohrs, J. C., & Ibler, S. (2009). Authoritarianism, threat, and prejudice: An analysis of mediation and moderation. *Basic and Applied Social Psychology*, 31(1), 81–94. <https://doi.org/10.1080/01973530802659638>
- Crandall, C. S., & Sherman, J. W. (2016). On the scientific superiority of conceptual replications for scientific progress. *Journal of Experimental Social Psychology*, 66, 93–99. <https://doi.org/10.1016/j.jesp.2015.10.002>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using GPower 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Feldman, S., & Stenner, K. (1997). Perceived threat and authoritarianism. *Political Psychology*, 18(4), 741–770. <https://doi.org/10.1111/0162-895X.00077>
- Fischer, P., Kastenmüller, A., Greitemeyer, T., Fischer, J., Frey, D., & Crelley, D. (2011). Threat and selective exposure: The moderating role of threat and decision context on confirmatory information search after decisions. *Journal of Experimental Psychology: General*, 140(1), 51–62. <https://doi.org/10.1037/a0021595>
- Frischlich, L., Hellmann, J. H., Brinkschulte, F., Becker, M., & Back, M. D. (2021). Right-wing authoritarianism, conspiracy mentality, and susceptibility to distorted alternative news. *Social Influence*, 16(1), 24–64. <https://doi.org/10.1080/15534510.2021.1966499>
- Hart, W., Albarracín, D., Eagly, A. H., Brechan, I., Lindberg, M. J., & Merrill, L. (2009). Feeling validated versus being correct: A meta-analysis of selective exposure to information. *Psychological Bulletin*, 135(4), 555–588. <https://doi.org/10.1037/a0015701>
- Hartman, T. K., Stocks, T. V. A., McKay, R., Gibson-Miller, J., Levita, L., Martinez, A. P., Mason, L., McBride, O., Murphy, J., Shevlin, M., Bennet, K., M., Hyland, P., Karatzias, T., Vallières, F., & Bental, R. P. (2021). The authoritarian dynamic during the COVID-19 pandemic: Effects on nationalism and anti-immigrant sentiment. *Social Psychological and Personality Science*, 12(7), 1274–1285. <https://doi.org/10.1177/1948550620978023>
- Klebba, L.-J., & Winter, S. (2024). Crisis alert: (Dis)information selection and sharing in the COVID-19 pandemic. *Communications*, 49(2), 318–338. <https://doi.org/10.1515/commun-2022-0020>
- Knobloch-Westerwick, S., Westerwick, A., & Johnson, B. (2015). Selective exposure in the communication technology context. In S. S. Sundar (Ed.), *Handbook of the psychology of communication technology* (pp. 407–427). Wiley-Blackwell. <https://doi.org/10.1002/9781118426456>
- Lakens, D., & Caldwell, A. R. (2021). Simulation-based power analysis for factorial analysis of variance designs. *Advances in Methods and Practices in Psychological Science*, 4(1). <https://doi.org/10.1177/2515245920951503>
- Lavine, H., Lodge, M., & Freitas, K. (2005). Authoritarianism, threat, and motivated reasoning. *Political Psychology*, 26(2), 219–244. <https://doi.org/10.1111/j.1467-9221.2005.00416.x>
- Stenner, K. (2005). *The authoritarian dynamic*. Cambridge University Press.
- Unkel, J. (2021). Measuring selective exposure in mock website experiments: A simple, free, and open-source solution. *Communication Methods and Measures*, 15(1), 1–16. <https://doi.org/10.1080/19312458.2019.1708284>
- Winter, S., Metzger, M. J., & Flanagin, A. J. (2016). Selective use of news cues: A multiple-motive perspective on information selection in social media environments. *Journal of Communication*, 66(4), 669–693. <https://doi.org/10.1111/jcom.12241>
- Wojcieszak, M., Winter, S., & Yu, X. (2020). Social norms and selectivity: Effects of norms of open-mindedness on content selection and affective polarization. *Mass Communication and Society*, 23(4), 455–483. <https://doi.org/10.1080/15205436.2020.171466>

Appendix B: Online Appendix of Manuscript 2

**The Influence of Threat and Right-Wing Authoritarianism on the Selection of Online
(Dis)Information – A Conceptual Replication and Extension of Lavine et al. (2005)**

Supplemental Materials:

ONLINE APPENDIX

Table of Contents

Appendix A: Expanded Methodological Write-Up	111
Appendix A: Expanded Description of Key Measures	114
Appendix A: Manipulation Check and Correlations	116
Appendix B: Hypothesis Tests.....	117
Appendix B: Exploratory Analyses	120
Appendix C: Threat Treatments.....	122
Appendix C: Translation of the Headlines.....	128
Appendix D: Commentary on Manipulating Different Threat Types	130
Appendix D: Commentary on the Influence of Right-leaning Factors	132
Appendix D: Commentary on Limitations	133
Appendix D: Discussion on the Significant Results	135
Appendix D: Additional ANOVA Analysis	137
References.....	138

Appendix A: Expanded Methodological Write-Up

Sample

Data were collected between August 5 and 17, 2021, from an online access panel of the German research company respondi AG. Quotas were set for gender, age, and education, representative for German Internet users aged 18–75 years. Participants who failed to correctly answer a control question and those who completed the survey in less than 33% of the median time were excluded. In addition to these exclusion criteria, because the reading time of five participants exceeded the maximum of four minutes (due to technical errors), they were excluded from the sample. Thus, we obtained an adjusted sample of 1,118 respondents (female: 50.7%, male: 49.3%; aged 18–29 years: 20%, 29–39 years: 18%, 39–49 years: 17%, 49–59 years: 21%, and 59–75 years: 24%; $M = 45.86$, $SD = 15.58$; education level as low: 28%, medium: 32%, and high: 40%). The sample had a mean value of 5.06 ($SD = 1.73$) for political ideology (left = 1; right = 10).

Procedure

First, we assessed participants' gender, age, education, political leaning, and right-leaning ideological attitudes (RWA, social dominance orientation (SDO), and conspiracy mentality (CM)). Subsequently, they were randomly assigned to one of the three conditions: an existential threat (article on the high risk of developing cancer in the course of a lifetime; $n = 376$), a social-normative threat (article on the influx of African refugees to Europe as a result of the COVID-19 pandemic; $n = 368$), or a control group (article about trips to a tourist destination in Germany; $n = 374$). Randomization checks revealed no significant differences between the conditions in terms of participants' gender, age, education, and attitude toward COVID-19 vaccination. After

processing the stimulus, we asked the participants about their current threat perception and their threat perception in everyday life.

Following ethical guidelines, before administering the survey, the participants were informed that they would be confronted with severe topics that might evoke feelings of threat and that they could withdraw at any time. After disclosing the study's purpose in detail, the participants were advised to contact the researchers if a sense of threat persisted. Note that the threat inductions did not place them in unnatural or extreme threat scenarios. Because the authoritarian dynamic theory assumes that latent threat perceptions are sufficient to identify the interaction effect of threat and RWA, news articles with images that correspond to the news content of traditional media outlets were used as threat inductions for the risk of developing cancer and or of incoming African COVID-19 refugees. A pilot study ($N = 233$) ensured that both inductions elicited a sense of threat.²

After being exposed to one of the three conditions, participants were linked to a fictitious news site that featured eight articles containing either pro or contra, verified or false information on COVID-19 vaccination. They could browse the news page for a limited time (four minutes), and by clicking on a news headline, they were redirected to the full articles. Meanwhile, their browsing history, click rate, and time spent reading the articles were implicitly captured using a software-based tracking tool (Unkel, 2019). The verified information on COVID-19 vaccination was taken from traditional media outlets and summarized in corresponding headlines and articles (e.g., pro: "High pharmaceutical quality, efficacy, and safety: 6 good reasons why the COVID-19

² Threat inductions significantly influenced subsequent threat perceptions ($F(2, 233) = 37.276, p < .001, \eta_p^2 = .245$). Post-hoc tests with Bonferroni correction showed that the cancer threat group ($M = 4.14; SD = 1.46$) and African COVID-19 refugee threat group ($M = 4.49; SD = 1.67$) were significantly different from the control group ($M = 2.44; SD = 1.58$). No significant difference was observed between the cancer threat group and the African COVID-19 refugee threat group in terms of the sense of threat.

vaccine was developed more quickly but no less carefully”; contra: “Does the COVID-19 vaccine change the genetic composition of our cells? Why an attack on our DNA cannot be ruled out”). The disinformation presented against COVID-19 vaccination (e.g., “Is this the end of humanity? Why the vaccination against COVID-19 leads to infertility in women”) was identified via German fact-checking websites (e.g., [faktenfinder.tagesschau.de](https://www.faktenfinder.tagesschau.de) and [correctiv.org](https://www.correctiv.org)). Because we were unable to find any disinformation circulating online that advocated for COVID-19 vaccination, we fabricated two headlines and associated articles (e.g., “The miracle drug COVID-19 vaccination: Why vaccination against COVID-19 strengthens the human immune system and prevents other deadly diseases”). The headlines were displayed in random order on the news page.

A pilot study ($N = 233$) confirmed that the headlines and articles used represented the pro and contra positions on COVID-19 vaccination as intended.³ Next, the participants were informed in detail about which of the presented headlines contained verified news and which contained disinformation. They were also informed about the source that identified certain messages as false and were presented a complete correction. Once fully debriefed, the participants were allowed to download the explanations of the news headlines as a PDF document.

³ Contra positions on a seven-point scale: “A second-class vaccine? Lower efficacy of AstraZeneca’s COVID-19 vaccine continues to raise questions” ($M = 3.31$, $SD = 1.53$); “Deadly cytokine storm: why vaccines can kill people instead of protecting them from COVID-19 infection” ($M = 2.38$, $SD = 1.52$); “Does the COVID-19 vaccine change the genetic makeup of our cells? Why an attack on our DNA cannot be ruled out” ($M = 2.86$, $SD = 1.45$); and “Is this how humanity ends? Why COVID-19 vaccination leads to infertility in women” ($M = 2.12$, $SD = 1.49$). Pro positions on a seven-point scale: “The more vaccine, the better: why everyone should take the COVID-19 vaccine they can get, regardless of the provider” ($M = 4.83$, $SD = 1.83$); “Miracle cure COVID-19 vaccination: why vaccination against COVID-19 strengthens the human immune system and prevents other deadly diseases” ($M = 5.17$, $SD = 1.71$); “High pharmaceutical quality, efficacy, and safety: 6 good reasons why the COVID-19 vaccine was developed more quickly but no less carefully” ($M = 5.25$, $SD = 1.71$); and “Mood booster vaccination: why COVID-19 vaccination not only protects against infection but also improves our mental health” ($M = 5.03$, $SD = 1.61$).

Appendix A: Expanded Description of Key Measures

Selective Exposure

To unobtrusively capture the participants' news choices in a more realistic scenario, we used online selective exposure measurement (OSEM), which allows for experiments with mock news sites to be conducted in SoSciSurvey (German online questionnaire software). Following the mock website paradigm, the tracking tool measures the clicks and dwell time on different news articles with a hub and spoke page logic (Unkel, 2019). Thus, it guarantees observational data while participants are still answering the questionnaire. One item assessed participants' attitude toward COVID-19 vaccination ("Everyone should get vaccinated with a certified vaccine as soon as possible" on a five-point scale; $M = 3.63$, $SD = 1.48$). To distinguish between supporters and opponents, we dichotomized the item (values 1–2: contra COVID-19 vaccination, $n = 250$; values 4–5: pro COVID-19 vaccination, $n = 690$). The participants who chose value three were excluded from the analysis. The resulting variables represent the number of articles read that either support or oppose COVID-19 vaccination and the corresponding reading times in seconds. On average, the participants read 2.53 articles ($SD = 2.33$) and spent 78.83 s ($SD = 70.02$) reading them. For further analysis, we categorized the selection between attitude-consistent and attitude-inconsistent verified news versus disinformation (e.g., attitude-consistent if a proponent/opponent read a full pro/con article on COVID-19 vaccination; attitude-inconsistent if a proponent/opponent read a full con/pro article on COVID-19 vaccination). Finally, to assess exposure to attitude-consistent versus attitude-inconsistent information, we calculated a corresponding ratio score by subtracting the attitude-consistent news selection variable from the attitude-inconsistent selection news selection variable for both verified news content and disinformation.

Predictor variables

We used the KSA-3 short scale (Beierlein et al., 2014) to rate RWA in its subdimensions, including three items measuring authoritarian aggression (e.g., “Society should take a tough stance against outsiders and underachievers”), authoritarian submission (e.g., “We need strong leaders so that we can live safely in society”), and conventionalism (e.g., “Traditions should be cherished at all costs”), on a five-point scale ($M = 3.02$, $SD = .82$, $\alpha = .863$). In the hypothesis tests, RWA is implemented as the moderator variable.

Social Dominance Orientation (SDO) was measured with eight items (e.g., “An ideal society requires some groups to be on top and others to be at the bottom”) of the short SDO₇ scale (Ho et al., 2015) by rating on a five-point scale ($M = 2.21$, $SD = .74$, $\alpha = .816$).

Further, for explorative analyses, 12 items measured Conspiracy Mentatlity (CM) (e.g., “There are many extremely important things happening in the world about which the public is not informed”; $M = 4.14$, $SD = 1.36$, $\alpha = .927$; Imhoff & Bruder, 2014) using a seven-point scale.

Appendix A: Manipulation Check and Correlations

After threat induction, the participants rated their perceived threat levels on a seven-point scale (“After reading the news article I feel...” [1 = no threat; 7 = very high threat]). A one-way ANOVA test revealed that the threat treatments were successful. The participants who were threatened by one of the inductions (cancer threat: $M = 4.27$, $SD = 1.57$; African COVID-19 refugee threat: $M = 3.98$, $SD = 1.78$) felt significantly more threatened than the participants in the control group ($M = 2.28$, $SD = 1.48$; $F(2, 1118) = 165.955$, $p < .001$, $\eta_p^2 = .229$). Moreover, post-hoc tests with Bonferroni correction showed that the article on cancer was slightly significantly more threatening than the article on African COVID-19 refugees ($p = .046$). We also tested correlations among the relevant factors to assess participants’ attitudes toward COVID-19 vaccination in terms of political ideology. The data showed that RWA positively correlated with participants’ attitudes toward COVID-19 vaccination, whereas CM showed a significant negative relation.

Variables	Attitude toward COVID-19 vac- cination	RWA	Political lean- ing (left–right)	CM	SDO
Attitude toward COVID-19 vaccination	1				
RWA	.165***	1			
Political leaning (left–right)	–.109***	.260***	1		
CM	–.401***	.211***	.180***	1	
SDO	–.042	.372***	.324***	.147***	1

* $p < .05$. ** $p < .01$. *** $p < .001$.

Pairwise Correlations: Participants’ Attitude Toward COVID-19 Vaccination, Right-Wing Authoritarianism (RWA), Political Leaning, Conspiracy Mentality (CM), and Social Dominance Orientation (SDO) (N = 1118)

Appendix B: Hypothesis Tests

Hypothesis 1 (H1) predicted that participants select attitude-consistent information more frequently than attitude-inconsistent information (in the case of verified news). A repeated-measures ANOVA showed that the participants significantly selected more attitude-consistent information ($M = .64$, $SD = .58$) than attitude-inconsistent information ($M = .58$, $SD = .76$; $F(1, 940) = 5.102$; $p = .024$, $\eta_p^2 = .005$). An analysis of reading time yielded parallel results. The participants spent significantly more time reading news articles that were consistent ($M = 21.72$, $SD = 41.90$) than articles that were inconsistent with their attitudes ($M = 17.76$, $SD = 37.93$; $F(1, 940) = 4.357$; $p = .037$, $\eta_p^2 = .005$). Thus, H1 is supported.

To determine whether threat affects participants' congeniality bias to news selection (H2), a one-way ANOVA with threat as an independent variable and the extent of the confirmation bias (selection of attitude-consistent minus selection of attitude-inconsistent articles) was conducted. However, the result was non-significant ($F(2, 940) = 1.794$; $p = .167$, $\eta_p^2 = .004$). Participants did not show a stronger confirmation bias toward verified news on COVID-19 vaccination in the high threat conditions than in the low threat conditions. The analysis results of participants' reading time reached significance ($F(2, 940) = 3.512$; $p = .030$, $\eta_p^2 = .007$). However, post-hoc comparisons showed no difference between the groups (control group: $M = 7.91$; cancer threat: $M = -3.00$; African COVID-19 refugee threat: $M = 7.19$). H2 must therefore be rejected.

Hypothesis 3 (H3) examined our main research interest—whether an interaction of threat and RWA, according to the authoritarian dynamic theory, increases the confirmation bias. A moderated regression analysis conducted with the SPSS macro by Hayes (2020) revealed no significant interaction effect. The interaction of RWA with neither the threat of cancer ($\beta = -.001$, $p = .988$) nor with the threat of African COVID-19 refugees ($\beta = -.047$, $p = .516$) significantly

predicted the selection of attitude-consistent over attitude-inconsistent verified news articles on COVID-19 vaccination. The same pattern appeared for participants' reading time. An interaction of RWA and threat (cancer threat: $\beta = 3.221$, $p = .563$; African COVID-19 refugee threat: $\beta = .849$, $p = .877$) did not lead participants to read attitude-consistent over attitude-inconsistent verified news articles for a significantly long time.

Hypotheses 4, 5, and 6 followed the analogous order for the selection of disinformation. Hypothesis 4 (H4) predicted that participants more frequently select attitude-consistent than attitude-inconsistent disinformation, independent of threat inductions. The repeated-measures ANOVA showed significant results: participants were more likely to select disinformation that supported their attitudes toward COVID-19 vaccination ($M = .67$, $SD = .77$) than disinformation that opposed it ($M = .56$, $SD = .73$; $F(1, 940) = 18.274$; $p < .001$, $\eta_p^2 = .019$). Similar results emerged for variables that displayed participants' reading time. Participants read attitude-consistent disinformation significantly longer ($M = 21.93$, $SD = 37.51$) than attitude-inconsistent disinformation ($M = 17.09$, $SD = 35.29$; $F(1, 940) = 7.894$; $p = .005$, $\eta_p^2 = .007$). Thus, H4 is supported.

Contrary to the assumptions of hypothesis 5 (H5), no significant threat effect was found on participants' exposure to disinformation ($F(2, 940) = 1.465$; $p = .232$, $\eta_p^2 = .003$). The one-way ANOVA model on reading time reached significance ($F(2, 940) = 3.249$; $p = .039$, $\eta_p^2 = .007$). Post-hoc comparison tests revealed an unexpected pattern: in comparison to the cancer threat, the African COVID-19 refugee threat significantly decreased participants' time spent on attitude-consistent disinformation about COVID-19 vaccination (control group: $M = 5.52$; cancer threat: $M = 9.77$; African COVID-19 refugee threat: $M = -.86$). Therefore, H5 must be rejected.

Regarding hypothesis 6 (H6) that postulated an interaction effect of RWA and threat on the selection of attitude-consistent (vs. inconsistent) disinformation, the analysis revealed a significant interaction effect ($RWA \times$ African COVID-19 refugee threat) in the opposite direction than predicted. Participants with high RWA scores who were threatened by incoming African COVID-19 refugees were more likely to select attitude-inconsistent over attitude-consistent disinformation on COVID-19 vaccination ($\beta = -.175, p = .025$). The same effect did not reach significance for participants' reading time ($\beta = -8.679, p = .082$). This leads to the rejection of H6.

Appendix B: Exploratory Analyses

To exploratively investigate the influence of right-leaning ideological predictors on participants' exposure to disinformation, we conducted hierarchical regression analyses with the following dependent variables: (1) ratio variables of selecting or reading verified news versus disinformation about COVID-19 vaccination, (2) ratio variables of selecting or reading pro versus contra disinformation about COVID-19 vaccination, and (3) ratio variables of selecting and reading attitude-consistent versus attitude-inconsistent disinformation about COVID-19 vaccination. As predictors, the following variables were entered: (1) gender and age (as control variables), (2) RWA and SDO, (3) CM. Four of the six regression models were significant (see Table 2).

Whether the participants selected or read verified over fake news articles was predicted by participants' gender. Men selected significantly more verified news articles over disinformation about COVID-19 vaccination than women ($\beta = -.10, p = .002$). Participants' reading time on verified news over disinformation about COVID-19 vaccination was significantly influenced by RWA and SDO. RWA decreased participants' time spent on verified news versus disinformation ($\beta = -.07; p = .036$), whereas SDO increased the outcome ($\beta = .08, p = .021$).

Hierarchical Multiple Regression Analyses Including Ratio Variables on Participants' Selection and Reading Time of Verified News vs. Disinformation and Pro vs. Contra Disinformation as Dependent Variables (N = 1118)

	Verified news vs. disinformation (clicks)			Verified news vs. disinformation (reading time)			Pro vs. contra disinformation (clicks)			Pro vs. contra disinformation (reading time)		
	<i>B</i> (<i>SE_B</i>)	β	ΔR^2	<i>B</i> (<i>SE_B</i>)	β	ΔR^2	<i>B</i> (<i>SE_B</i>)	β	ΔR^2	<i>B</i> (<i>SE_B</i>)	β	ΔR^2
Step I			.010			.003			.004			.013
Gender (0 = male; 1 = female)	-.21 (.07)	-.10**		-8.10 (4.70)	.05		-.06 (.05)	-.04		-4.19 (3.28)	-.04	
Age	.00 (.00)	-.01		.00 (.15)	.00		-.00 (.00)	.04*		-.32 (.11)	-.09**	
Step 2			.003			.007			.000			.000
RWA	-.06 (.04)	-.04		-6.45 (3.07)	-.07*		.01 (.03)	.01		2.42 (2.14)	.04	
SDO	.08 (.05)	.05		7.78 (3.37)	.07*		.00 (.04)	.00		.40 (2.35)	.01	
Step 3			.000			.001			.016			.013
CM	-.01 (.03)	-.02		-1.51 (1.71)	-.03		-.08 (.02)	-.13***		-4.59 (1.20)	-.12***	
Total R^2			.013			.011			.020			.026

* $p < .05$. ** $p < .01$. *** $p < .001$.

Appendix C: Threat Treatments

Threat of cancer

Volkskrankheit Krebs: Jeder zweite Mensch in Deutschland erkrankt

Am 25. August 2018 erfährt Lisa (35) von ihrer Krebserkrankung: Einwachsung eines 27 cm großen Liposarkoms in der linken Niere. Eigentlich war an diesem Tag nur eine Kontrolle des Bauchraumes per Ultraschall vorgesehen. Wegen Zysten an der Niere ging es sofort weiter zur Computertomografie. Schon da sagte der Röntgenarzt: „Es sieht nicht gut aus – Sie müssen zu weiteren Untersuchungen in die Uniklinik.“



Lisas Leben veränderte sich schlagartig. Die Zeit bis zur lebensrettenden Operation verbrachte sie damit, sich zu informieren: Patientenverfügung, Vorsorgevollmacht und ein Testament – all das war jetzt ein Muss. Vorbereitung und Operation dauerten ca. 8 Stunden, durchgeführt von einem 12 Personen starken Ärzte- und Schwesternteam. Später erfuhren ihre Eltern und ihr Freund den Umfang des großen Eingriffs. Dabei wurde das fast 30 cm große Liposarkom entfernt, dazu die linke Niere und Nebenniere, die Milz, ein Teil des Zwerchfells, und ein großer Teil des Dickdarms.

Die Zahl der Krebsfälle weltweit dürfte sich nach einer Prognose der Weltgesundheitsorganisation (WHO) bis 2040 fast verdoppeln. Das geht aus dem alle fünf Jahre erstellten Weltkrebsreport der Internationalen Agentur für Krebsforschung (IARC) hervor. 2018 erkrankten demnach weltweit 18,1 Millionen Menschen neu an Krebs, 9,6 Millionen Menschen starben daran. Im Jahr 2040 dürften etwa 29 bis 37 Millionen Menschen neu an Krebs erkranken, berichtet die IARC.

Für den Augsburger Onkologen Björn Hackanson kommen die Zahlen nicht überraschend. Nach Angaben des Robert Koch-Instituts (RKI) erkrankt in Deutschland fast jeder Zweite in seinem Leben. „Damit können Krebserkrankungen durchaus als Volkskrankheit bezeichnet werden“. Herzinfarkt und Schlaganfall seien zwar ebenfalls häufig und gefährlich. „Mit Krebs aber ist nach wie vor die größte Angst verbunden.“ Krebs wird in absehbarer Zeit die häufigste Todesursache sein. „In Deutschland wird ein Anstieg der jährlichen Neuerkrankungen von derzeit 500 000 auf etwa 600 000 Fälle erwartet.“ 65 Prozent aller an Krebs erkrankten Menschen in Deutschland überleben derzeit für mindestens fünf Jahre. Das bedeute aber auch, dass 35 Prozent aller Mitbürger, die an Krebs erkranken, in den ersten fünf Jahren sterben. Auch Lisa überlebt den Eingriff nicht und ist damit nur eine von vielen, die den Krebs nicht besiegen konnte.

Translation

Cancer as a widespread disease: one in two people in Germany has the disease

On August 25, 2018, Lisa (35) learns of her cancer: ingrowth of a 27 cm liposarcoma in her left kidney. Actually, only a control of the abdomen by ultrasound was scheduled for that day. Because of cysts in the kidney, she immediately went for a computer tomography. Even then, the radiologist said, “It doesn't look good - you have to go to the university hospital for further examinations.”

Lisa's life changed abruptly. She spent the time until the life-saving operation informing herself: Living will, health care proxy and a will - all of which were now a must. Preparation and surgery took about 8 hours, performed by a team of 12 doctors and nurses. Later, her parents and boyfriend learned the extent of the major surgery. The nearly 30 cm liposarcoma was removed, along with the left kidney and adrenal gland, the spleen, part of the diaphragm, and a large portion of the colon.

The number of cancer cases worldwide is expected to nearly double by 2040, according to a forecast by the World Health Organization (WHO). That is according to the International Agency for Research on Cancer's (IARC) World Cancer Report, produced every five years. According to the report, 18.1 million people worldwide were newly diagnosed with cancer in 2018, and 9.6 million people died from it. In 2040, around 29 to 37 million people are expected to develop cancer, the IARC reports.

For Augsburg oncologist Björn Hackanson, the figures do not come as a surprise. According to the Robert Koch Institute (RKI), almost one in two people in Germany will develop the disease in their lifetime.

“This means that cancer can definitely be described as a widespread disease”. Heart attacks and strokes are also frequent and dangerous, he said. “However, cancer is still associated with the greatest fear.” Cancer will be the most common cause of death in the foreseeable future. “In Germany, the number of new cases per year is expected to rise from the current 500,000 to about 600,000.” Sixty-five percent of all people in Germany with cancer currently survive for at least five years. But that also means, he said, that 35 percent of all fellow citizens who develop cancer die in the first five years. Lisa, too, will not survive the procedure, making her just one of many who did not beat cancer.

Threat of African COVID-19 refugees

Flucht vor (und mit) COVID-19: 103.000 Asylanträge trotz Corona im Jahr 2020

Obwohl die internationale Mobilität infolge der Pandemie stark eingeschränkt war, blieb die Asylzuwanderung nach Deutschland relativ hoch. Die meisten Antragssteller kamen aus Syrien, gefolgt von Afghanistan, Irak und der Türkei. Trotz des deutlichen Rückgangs der Antragszahlen im Corona-Jahr lagen sie noch über dem Niveau der Jahre vor 2013. Mehr Asylanträge als im Jahr 2020 gab es in der Geschichte der Bundesrepublik nur in den Jahren 1990 bis 1999 und dann erst wieder 2013 bis 2019.



Hauptgrund für die immer noch im historischen und internationalen Vergleich starke Asylzuwanderung ist die unerlaubte Weiterreise von Asylbewerbern aus anderen EU-Staaten in die Bundesrepublik. Laut den europäischen Asylverträgen sollen sie in der Regel in ihrem Erstaufnahmeland ihr Asylverfahren durchlaufen. Falls sie dennoch unerlaubt in andere Staaten weiterreisen, sollen sie wieder in das für sie zuständige Land zurückgebracht werden. Diese Rücküberstellungen gelingen aber nur in wenigen Tausend Fällen pro Jahr und von den Zurückgebrachten reist später ungefähr ein Drittel erneut nach Deutschland.

Besondere Sorge bereitet aktuell die Migrationsroute von Afrika zu den Kanarischen Inseln; dort kamen 2020 rund 23.000 Personen laut spanischer Regierung an – fast neunmal mehr als im Jahr zuvor (2700). Inklusive der übrigen Routen aus Afrika erreichten 2020 rund 42.000 Migranten Spanien, darunter ungefähr die Hälfte Marokkaner und Algerier und die übrigen aus Staaten wie Mali, Guinea oder Elfenbeinküste.

Gleichzeitig wurden kaum noch Boote vor der Landgrenze nach Griechenland abgehalten. Am 1. März wurden 900 Ankünfte auf den Inseln gezählt; mehr waren es an keinem einzigen Tag seit Inkrafttreten der EU-Türkei-Erklärung 2016. Und nicht alle Flüchtlinge werden nach Ankunft auf eine Corona-Infektion getestet. Zu oft wird dadurch das Corona-Virus ungehindert nach Europa und dann weiter nach Deutschland getragen – was die afrikanische Virusmutation bedrohlich verdeutlicht. Das unkoordinierte Vorgehen Europas birgt sowohl Gefahren für die Asylbewerber, die zum Teil lebensbedrohliche Routen antreten und in beengten Verhältnissen ein hohes Infektionsrisiko haben, als auch für die deutsche Bevölkerung, die von eingetragenen Infektionen und Mutationen betroffen sein kann. Damit hat kein anderer Kontinent so versagt, die Gesundheit seiner einheimischen Bürgerinnen und Bürger zu schützen wie Europa seit Beginn der Pandemie.

Translation

Escape from (and with) COVID-19: 103,000 asylum applications despite Corona in 2020

Although international mobility was severely restricted as a result of the pandemic, asylum immigration to Germany remained relatively high. Most applicants came from Syria, followed by Afghanistan, Iraq, and Turkey. Despite the significant drop in the number of applications in the Corona year, they were still above the level of the years before 2013. In the history of the Federal Republic, there were only more asylum applications than in 2020 in the years 1990 to 1999 and then only again in 2013 to 2019.

The main reason for the asylum influx, which is still strong by historical and international standards, is the unauthorized onward travel of asylum seekers from other EU countries to the Federal Republic. According to the European asylum treaties, asylum seekers should generally undergo their asylum procedure in their first host country. If they nevertheless travel on to other countries without permission, they are to be returned to the country responsible for them. However, only a few thousand such transfers are successful each year, and about one-third of those who are returned later return to Germany.

Of particular concern at present is the migration route from Africa to the Canary Islands; according to the Spanish government, around 23,000 people arrived there in 2020 - almost nine times more than the year before (2700). Including the other routes from Africa, about 42,000 migrants reached Spain in 2020, including about half Moroccans and Algerians and the rest from countries such as Mali, Guinea or Ivory Coast.

At the same time, hardly any boats were stopped before the land border with Greece. On March 1, 900 arrivals were counted on the islands; that's the most on any day since the EU-Turkey declaration took effect in 2016. And not all refugees are tested for Corona infection upon arrival.

Too often, this allows the Corona virus to be carried unimpeded to Europe and then on to Germany - ominously highlighting the African viral mutation. Europe's uncoordinated approach poses dangers both to the asylum seekers, some of whom take life-threatening routes and face a high risk of infection in cramped conditions, and to the German population, which can be affected by carried-in infections and mutations. Thus, no other continent has failed to protect the health of its native citizens as Europe has since the beginning of the pandemic.

Appendix C: Translation of the Headlines

Verified news items

- Hohe pharmazeutische Qualität, Wirksamkeit und Sicherheit: 6 gute Gründe, warum der Corona-Impfstoff schneller, aber nicht weniger sorgfältig entwickelt wurde. [*High pharmaceutical quality, efficacy and safety: 6 good reasons why the coronavirus vaccine was developed faster, but no less carefully.*]
- Je mehr Impfstoff, desto besser: Warum jeder den Corona-Impfstoff nehmen sollte, den er kriegen kann – unabhängig von welchem Anbieter. [*The more vaccine, the better: Why everyone should take all the coronavirus vaccine they can get - regardless of the provider.*]
- Ein Impfstoff zweiter Klasse? Geringere Impfeffektivität beim Corona-Impfstoff von AstraZeneca wirft weiterhin Fragen auf. [*A second-class vaccine? Lower vaccine effectiveness of AstraZeneca's coronavirus vaccine continues to raise questions.*]
- Verändert der Corona-Impfstoff das Erbgut unserer Zellen? Warum ein Angriff auf unsere DNA nicht ausgeschlossen werden kann. [*Does the coronavirus vaccine change the genetic material of our cells? Why an attack on our DNA cannot be ruled out.*]

Disinformation items

- Wundermittel Corona-Impfung: Warum die Impfung gegen das Corona-Virus das menschliche Immunsystem stärkt und sogar andere tödliche Krankheiten verhindert. [*Corona vaccine miracle cure: Why vaccination against the coronavirus strengthens the human immune system and even prevents other deadly diseases.*]
- Stimmungs-Booster Impfung: Warum die Corona-Impfung nicht nur vor einer Infektion schützt, sondern auch unsere mentale Gesundheit verbessert. [*Mood booster vaccination:*

Why the coronavirus vaccination not only protects against infection, but also improves our mental health.]

- Tödlicher Zytokinsturm: Warum Impfungen Menschen nicht vor einer Corona-Infektion schützen, sondern töten können. [*Deadly cytokine storm: Why vaccinations do not protect people from coronavirus infection, but can kill them.*]
- Endet so die Menschheit? Warum die Impfung gegen Corona bei Frauen zu Unfruchtbarkeit führt. [*Is this the end of humanity? Why vaccination against corona leads to infertility in women.*]

Appendix D: Commentary on Manipulating Different Threat Types

The threat-RWA-activation hypothesis posits that certain life events perceived as threatening activate Right-Wing Authoritarianism (RWA) and cause individuals to adjust their existing attitudinal preferences. The concept of RWA has been repeatedly associated with threats in various theoretical models, such as the formation of RWA on a worldview characterized by threat and fear (Duckitt, 2001). RWA activation through threat has also been described as a functional mechanism to overcome feelings of fear and insecurity (Oesterreich, 2005). Moreover, the theory of authoritarian dynamics considers RWA in light of situational environmental stimuli and assumes that people adopt authoritarian values and behaviors in the face of external threats (Stenner, 2005). Consequently, research has shown that an interaction between RWA and perceived threats reinforces authoritarian behavior and leads to higher support for authoritarian policies than others (e.g., legitimizing prejudice, intolerance, ethnocentrism, and myths; Duckitt & Sibley, 2009).

While there is disagreement about the threats that interact with RWA, several studies have shown that threats to social security and social cohesion significantly affect individuals with high RWA scores (e.g., Feldman, 2003; Roccato & Russo, 2017). Moreover, the interaction of RWA and perceived social threat leads to higher support for authoritarian policies than others (advocating national surveillance powers while disregarding human rights; Cohrs et al., 2007; Kossowska et al., 2011). Other scholars have called for studies considering the interaction of existential threats (e.g., terrorist attacks or threats to one's livelihood) with RWA (Cohrs et al., 2005; Lavine et al., 2002). For instance, a field study during the COVID-19 pandemic showed that associations between RWA and nationalism and anti-immigrant attitudes depended on the extent of the perceived COVID-19 threat. Similarly, highlighting the threat of climate change has

led to increased authoritarian attitudes. Furthermore, RWA has been found to strengthen the relationship between mortality salience and selective exposure behavior in a laboratory experiment. Thus, against this background, we want to reflect on the state of the research debate and independently test the influence of RWA interacting with both threat types when re-investigating the hypothesis.

Appendix D: Commentary on the Influence of Right-leaning Factors

The influence of right-leaning factors, in general, is most notable in participants' exposure to disinformation. RWA increased the reading time of disinformation versus verified news, and CM positively predicted the selection and reading time of disinformation criticizing COVID-19 vaccination. Several studies have recently shown the vulnerability of these populations to disinformation; they found that both RWA and CM influence exposure to, belief in, and sharing of disinformation (e.g., Frischlich et al., 2021; Halpern et al., 2019). Consistent with the present study results, right-leaning factors complete the picture only when examining what leads participants to choose disinformation. In contrast, confirmation bias in selecting and reading attitude-consistent versus attitude-inconsistent verified news and disinformation appears to be independent of these predictors.

Appendix D: Commentary on Limitations

Our study has certain limitations. Although we tried to create a scenario of news selection as realistic as possible, the mock news site we presented to participants slightly differed from typical news portals or social media news feeds. We also presented a set of verified news articles and disinformation about COVID-19 vaccination that corresponded to the news articles participants might encounter online. However, on the news site we simulated, we could not arrange them as randomly as they would be presented to participants in their natural news environments (two verified pro and con news items and disinformation). Moreover, because we implicitly measured selection and reading time, we could not control participants' motives for selection and their reading intent. Thus, in particular, the articles that contained misinformation might have aroused other motives owing to their lurid wording. In this context, other studies have shown a very complex picture regarding the spread of misinformation. For example, in addition to right-leaning political attitudes, altruism, ignorance, entertainment, or personality traits such as openness are relevant predictors (e.g., Balakrishnan et al., 2021; Sindermann et al., 2020). Because many essential factors appear to influence the routing of fake news, we conclude that their selection is also predicted by a potpourri of variables, as indicated by the low R-squared values in the present empirical analyses focusing only on political ideology.

Limitations also exist in the selection of treatments. When examining the influence of threat on attitude-consistent message selection, given the current state of research, including contextual threat as a comparison dimension would have been more rigorous. As noted earlier, context appears to be a relevant moderator (Fischer et al., 2011). Because our study focused on the research debate about which threat variant activates RWA, we distinguished only between an existential and social-normative threat. Accordingly, the nonexistent main effects of threat

induction on participants' selective exposure behavior, although congruent with the state of the research, omit an important finding that could have been integrated and tested in the research design at this point. In addition, threat induction occurred immediately before news article selection and triggered direct threat effects. However, long-term threats are likely to cause more powerful results. Other studies supporting the interaction effects of RWA and threat have shown that persistent threats such as climate change or the COVID-19 pandemic trigger serious behavioral consequences or intolerance (e.g., Hartman et al., 2021; Fritzsche et al., 2012). Thus, examining the effects of constant threat in longitudinal studies would be valuable, as prolonged exposure could have differential effects on intolerance and confirmation bias increases.

Another limitation is the restriction of the choice of news articles to one main topic. Individuals are not exposed to just one issue in natural news environments but choose which news to follow. This variety includes political content as well as a wide range of shallower topics (e.g., entertainment or tabloid news). In our study, participants could not choose which topics they would expose themselves to or whether they would consciously avoid confrontation with the news. Moreover, the selection task was limited to four minutes; therefore, even if they had wanted to spend more time on an article, they would not have had the opportunity to do so. The decision to disregard other issues reduces our experiment's degree of external validity, in line with the criticism that selection studies do not fully represent individuals' news behavior.

Appendix D: Discussion on the Significant Results

As presented above, unlike we assumed, the data revealed a significant interaction effect of RWA and the threat of African COVID-19 refugees on disinformation selection in the opposite direction. Right-wing authoritarians who felt threatened by the article on incoming African COVID-19 refugees were more likely to select disinformation disseminated online that does not conform to their preconceptions (right-wing authoritarians endorsed COVID-19 vaccination in pretests). Consequently, for them, selecting messages in an attitude-consistent manner meant selecting messages that emphasized the benefits of COVID-19 vaccination. However, after being confronted with the threat of African COVID-19 refugees, they showed significant susceptibility to disinformation that promoted COVID-19 vaccination conspiracies. Thus, the data cautiously support the existence of an interaction between RWA and a social-normative threat that causes them to be more susceptible to disinformation disseminated online opposing their prior positive attitude toward COVID-19 vaccination. According to threat-RWA activation theory, people with high RWA scores remain tolerant when no threat is present but are more intolerant when a specific threat is present (Stenner, 2005). In the present study, tolerance may be reflected in the general endorsement of COVID-19 vaccines, whereas intolerance may be manifested in the interest in COVID-19 conspiracies. In contrast to the U.S. context, where RWA is generally positively correlated with opposition to COVID-19 vaccination (Peng, 2022), the German data suggested that right-wing authoritarians activated by a threat select disinformation with arguments against government action that would endorse in the absence of a threat. Although the effect is relatively small, it demonstrates a new pattern of threat activation of right-wing authoritarians to soften their tolerance of state action and verified news after certain threat constraints. However, it is important to interpret this significant effect with caution. It is necessary to conduct more research

and systematization to identify a reliable pattern. The hypothesis of threat-RWA activation appears to be highly dependent on the situational context and has shown inconsistent results in studies. The type of threat that actually activates RWA remains to be determined, as studies have yet to show it consistently. Therefore, we must avoid making assumptions that the threat-RWA activation hypothesis is universally applicable. It is imperative to critically examine the theoretical foundation and account for diverse factors in varying formats. This entails utilizing diverse measurement scales to evaluate RWA, choosing different types of threats, and investigating authoritarian behaviors and other correlated constructs as dependent variables. Through this approach, we can uncover any discrepancies and advance the theory with empirical substantiation.

Appendix D: Additional ANOVA Analysis

To model the interaction effect of threat and RWA on selective exposure behavior to verified content and disinformation as closely as possible to the analysis plan of Lavine et al. (2005), we also analyzed the data using ANOVA analysis and the RWA median split (in addition to the moderated regression analysis, which we still consider to be a more appropriate procedure). The median split of the continuous RWA variable reduced the sample size for the ANOVA to $N = 1049$ (low RWA: $n = 508$; high RWA: $n = 541$). The ANOVA analysis on selective exposure behavior (confirmation bias) to verified messages showed that the overall model is insignificant ($F(5, 1049) = .922, p = .466$, adjusted $R^2 = .004$). RWA alone did not significantly influence the dependent variable ($F(1, 1049) = .485, p = .486$). The threat types (threat of cancer or incoming COVID-19 refugees) also had no significant influence ($F(2, 1049) = 1.930, p = .146$). Additionally, there was no significant interaction between threat type and RWA on selective exposure behavior toward verified messages ($F(2, 1049) = .086, p = .917, \eta p^2 = .000$). These results are consistent with the findings of the moderated regression analysis reported in the manuscript.

References

- Balakrishnan, V., Ngb, K. S., & Rahimc, H. A. (2021). To share or not to share – The underlying motives of sharing fake news amidst the COVID-19 pandemic in Malaysia. *Technology in Society*, 66, 1–11. <https://doi.org/10.1016/j.techsoc.2021.101676>
- Beierlein, C., Asbrock, F., Kauff, M., & Schmidt, P. (2014). *Die Kurzskala Autoritarismus (KSA-3): ein ökonomisches Messinstrument zur Erfassung dreier Subdimensionen autoritärer Einstellungen*. [The brief scale of authoritarianism (KSA-3): An economic measurement instrument to capture three subdimensions of authoritarian attitudes]. *GESIS-Working Papers*, 2014/35. GESIS–Leibniz-Institut für Sozialwissenschaften. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-426711>
- Fischer, P., Kastenmüller, A., Greitemeyer, T., Fischer, J., Frey, D., & Crelley, D. (2011). Threat and selective exposure: The moderating role of threat and decision context on confirmatory information search after decisions. *Journal of Experimental Psychology: General*, 140(1), 51–62. <https://doi.org/10.1037/a0021595>
- Frischlich, L., Hellmann, J. H., Brinkschulte, F., Becker, M., & Back, M. D. (2021). Right-wing authoritarianism, conspiracy mentality, and susceptibility to distorted alternative news. *Social Influence*, 16(1), 24–64. <https://doi.org/10.1080/15534510.2021.1966499>
- Fritsche, I., Cohrs, J. C., Kessler, T., & Bauer, J. (2012). Global warming is breeding social conflict: The subtle impact of climate change threat on authoritarian tendencies. *Journal of Environmental Psychology*, 32, 1–10. <https://doi.org/10.1016/j.jenvp.2011.10.002>
- 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

- Meiselwitz G. (Eds.), *Social computing and social media. Design, human behavior and analytics* (pp. 217–232). Springer. <https://doi.org/10.1007/978-3-030-21902-4>
- Hartman, T. K., Stocks, T. V. A., McKay, R., Gibson-Miller, J., Levita, L., Martinez, A. P., Mason, L., McBride, O., Murphy, J., Shevlin, M., Bennet, K., M., Hyland, P., Karatzias, T., Vallières, F., & Bentall, R. P. (2021). The authoritarian dynamic during the COVID-19 pandemic: Effects on nationalism and anti-immigrant sentiment. *Social Psychological and Personality Science*, 12(7), 1274–1285. <https://doi.org/10.1177/1948550620978023>
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO₇ scale. *Journal of Personality and Social Psychology*, 109(6), 1003–1028. <https://doi.org/10.1037/pspi0000033>
- 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>
- Peng, Y. (2022). Politics of COVID-19 vaccine mandates: Left/right-wing authoritarianism, social dominance orientation, and libertarianism. *Personality and Individual Differences*, 197, 111661. <https://doi.org/10.1016/j.paid.2022.111661>
- Sindermann, C., Elhai, J. D., Moshagen, M., & Montag, C. (2020). Age, gender, personality, ideological attitudes and individual differences in a person's news spectrum: How many and who might be prone to “filterbubbles” and “echochambers” online? *Heliyon*, 6(1). <http://dx.doi.org/10.1016/j.heliyon.2020.e03214>
- Stenner, K. (2005). *The authoritarian dynamic*. Cambridge University Press.

Unkel, J. (2019). Measuring selective exposure in mock website experiments: A simple, free, and open-source solution. *Communication Methods and Measures*, 15(1), 1–16.

<https://doi.org/10.1080/19312458.2019.1708284>

Appendix C: Manuscript 3

Klebba, L.-J., Winter, S., & Reese, G. (under review). A Dual Process Motivational Bias? The Impact of Right-Wing Ideological Attitude Dimensions and (Ingroup) Threat on the Sharing of Online Information with Ingroup/Outgroup Cues.

A Dual Process Motivational Bias? The Impact of Right-Wing Ideological Attitude Dimensions and (Ingroup) Threat on the Sharing of Online Information with In-group/Outgroup Cues

Abstract

Previous research indicated a connection between selecting and disseminating political information (both verified news and disinformation), confirmation bias, and right-wing ideology, such as Right-Wing Authoritarianism (RWA) or Social Dominance Orientation (SDO). Seeking to organize the influence of RWA and SDO as either universal risk factors or dependent on message cues and situational circumstances, the present study draws on the Dual Process Motivational Model of Ideology and Prejudice (DPM; Duckitt & Sibley, 2009). In a quota-based online experiment with 1152 participants, we investigated confirmation bias and RWA's and SDO's susceptibility to disseminate news content with specific ingroup/outgroup cues derived from the DPM. The data indicated a general confirmation bias when sharing (dis)information. More importantly, RWA predicts content sharing with ingroup/outgroup cues, whereas SDO and ingroup threat demonstrate no significant influence. These findings do not support the DPM but reaffirm an association between RWA and disinformation sharing targeting migration with a negative focus.

Keywords: threat, RWA, SDO, disinformation, selective sharing

Social media platforms like Facebook, Instagram, TikTok, and X (formerly Twitter) have become significant sources and targets of politically charged information. Both verified news and disinformation (intentionally inaccurate information; Wittenberg & Berinsky, 2020) focusing on contentious issues such as conflicts, crises (e.g., the refugee crisis, climate crisis, COVID-19 pandemic), and migration-related topics (Olaru, 2023) are especially prevalent. Whether true or false, this content often aims to criticize political opponents, media institutions, or other social groups and to strengthen ingroup positions (e.g., blaming refugees for societal problems while highlighting homeland security). Given that such information often presents a hostile view towards perceived outgroups, thus representing an aggressive stance against others, it raises the question of who shares this content online. Research shows that specific predictors, such as a right-wing political attitude, conspiracy mentality, or low trust in politics, media, and science, increase the likelihood of sharing and the belief in disinformation (e.g., Daunt et al., 2023; Frischlich et al., 2021; Zimmermann & Kohring, 2020). However, the dynamics or patterns that influence sharing specific disinformation still need to be better understood. For instance, it remains unclear whether threat perceptions and predictors (in interaction) or specific message cues play a role, particularly for certain groups. In other words, an interplay of different factors may provide more insight than the predictive power of individual predictors alone.

To address this question, our study centers on a theoretical model from political psychology that explains the conditions under which individuals with specific characteristics develop prejudices against others. The Dual Process Motivational Model of Ideology and Prejudice (DPM) proposed by Duckitt & Sibley (2009) links ingroup favoritism and prejudice against outgroups with right-wing ideological constructs, particularly in conjunction with ingroup threat. According to Duckitt (1989), the activation of the right-wing ideological attitude dimensions Right-Wing Authoritarianism (RWA) and Social Dominance Orientation

(SDO) hinges on ingroup identification, typically characterized by the importance of one's ingroup to one's self-concept (Rios et al., 2018). Individuals showing high RWA scores tend to prioritize conformity to behavioral and attitudinal norms established by authorities (conventionalism), display deference and obedience to leadership figures and authority (authoritarian submission), and demonstrate intolerance and punitive attitudes towards those who deviate from these norms (authoritarian aggression; Altemeyer, 1981). Furthermore, RWA is correlated with the adoption of dangerous worldviews, characterized by perceptions of the social environment as unsafe and threatened by outgroups. SDO, in turn, traces its roots to unaffectionate child-rearing practices, eliciting dominance-related goals within a competitive worldview, characterized by threat perceptions to intergroup dominance. Therefore, individuals with high SDO scores tend to endorse group-based hierarchies (or uphold myths legitimizing hierarchy) to justify economic and racial inequality, striving to attain control and dominance over others (Sidanius & Pratto, 2004). Consequently, a strong ingroup identification makes those individuals particularly attuned to threat perceptions arising from disruptive societal changes jeopardizing personal and collective security or social status by outgroups, and is essential for the emergence of right-wing ideological responses in individuals (Duckitt, 2022).

Conditions of bias stemming from individual preconceptions and political ideology also plays a crucial role in studying information usage in communication science over the years. Research consistently demonstrated that individuals select information with a preference for information that aligns with their opinions, predispositions or political leaning (confirmation bias: Hart et al., 2009; partisan selective exposure: Stroud, 2010). A recent study conducted during the COVID-19 crisis confirmed the prevalence of confirmation bias in selecting and sharing verified news and disinformation related to COVID-19. It also revealed that disinformation is associated with right-wing ideological constructs, such as RWA

and SDO (Klebba & Winter, 2024), a first indication that constructs of the DPM might be relevant for disinformation susceptibility. Another study by Knobloch-Westernwick et al. (2020) examined participants' confirmation bias, ingroup bias, and negativity bias when selecting political information. The findings unveiled confirmation and negativity bias (preference for negative and attitude-consistent news), whereas no discernible influence of ingroup bias was observed (preference for news items supported the participants' ingroup). In discussing this absence of the finding, the authors highlighted that the political information presented referred to no specific ingroup/outgroup cues such as political parties or partisanship. In addition, it is plausible that ingroup bias, as proposed in the DPM, impacts only certain groups of people (those high in RWA or SDO) under specific situational contexts, such as a perceived threat to one's ingroup. This bias may drive them to disseminate (dis)information featuring specific message cues to which those groups are particularly susceptible (e.g., protecting the ingroup or denigrating an outgroup).

Therefore, the main objective of this research was to investigate how susceptible individuals with high in RWA and SDO are to sharing (dis)information when exposed to certain message cues during ingroup threat. We planned to expand on the work of Knoblauch-Westernwick et al. (2020) by examining the impact of confirmation bias, ingroup bias, and right-wing ideological bias in an information environment that includes both verified news and disinformation, while incorporating cues related to ingroup and outgroup dynamics based on the theoretical framework of the DPM. We believe that this approach will be more effective in identifying specific groups that are particularly prone to disseminating such content. This understanding will help in exploring the interaction between predispositions, situational conditions on information with specific message cues and aid in developing targeted countermeasures.

(Dis)information usage and prominent biases

As mentioned above, communication science research on information usage, including verified news and disinformation, consistently highlights two key assumptions: People tend to exhibit confirmation bias when selecting and sharing information. The selective exposure approach posits that individuals favor information aligning with their preexisting beliefs or preconceptions and try to avoid cognitive dissonance, which arises when information or opinions diverge from their worldview, values, or attitudes. Likewise, selective sharing is the degree to which individuals disseminate content consistent with their attitudes (Shin & Thorson, 2017) and is commonly observed across various social media platforms such as former Twitter (now X) (Barberá et al., 2015; Colleoni et al., 2014) and Facebook (Jacobson et al., 2016). Particularly within social media, the scope of sharing can vary significantly. Content may be shared from one individual to many, from person to person, or through a combination of both (Goel et al., 2016).

Confirmation Bias: Selective Exposure and Selective Sharing

The distinction between selective sharing and the closely related concept of selective exposure provides a clearer understanding of online content dissemination. These constructs differ in their definitions, underlying motives, and consequences (Liang, 2018). Whereas selective sharing means the dissemination of content, selective exposure refers to the degree to which individuals seek out attitude-consistent content (Garrett, 2009; Himelboim et al., 2013). These two constructs complement each other in this regard, as information must first be encountered before it can be shared (Shin & Thorson, 2017). The motives for utilizing both constructs stem from the desire to alleviate cognitive dissonance triggered by exposure to attitude-inconsistent information (Garrett, 2009; Liang, 2018). However, selective sharing is inherently a social activity driven by an envisioned audience for whom the shared content is customized (Marwick & Boyd, 2011). In contrast, selective exposure occurs independently

of social interaction with others (Shin & Thorson, 2017). Consequently, selective exposure primarily concerns content consumption, often occurring passively. In contrast, content sharing involves a much more active role (Liang, 2018). Reflecting this distinction, research indicates that individuals may sometimes consume content that diverges from their attitudes (Brundidge, 2010; Knobloch-Westerwick & Kleinman, 2012; Valentino et al., 2009). However, sharing such content might be more unlikely due to the social nature and public visibility of shared content (Coppini et al., 2017; Shin & Thorson, 2017). The outcomes of these behaviors vary according to the motives behind their usage. In selective exposure, consequences occur at the individual level, as these entail personal choices regarding content consumption. Conversely, selective sharing manifests repercussions at the social level, impacting what other users will perceive (Liang, 2018). The discrepancy in consequences lies in the focus of selective exposure on effects for the recipient, whereas research on selective sharing also considers the ramifications for the sender (Pingree, 2007). Regarding disinformation, selective exposure behavior can lead to detrimental outcomes for the recipient, such as distortion of reality and the adoption of misperceptions or prejudices. As the DPM provides insight into the formation of prejudice, often clothed in the desire to devalue an outgroup perceived as hostile, we find it more suitable to focus not on the relatively passive behavior of selective exposure to disinformation as the dependent variable but rather on selective sharing, which serves the purpose of actively denigrating the outgroup publically.

In light of this context, the present study investigates selective sharing behavior concerning disseminating both verified news and disinformation, with a particular emphasis on disinformation that disparages an outgroup or exclusively prioritizing the interests of the ingroup. Initially, within this information environment, we propose the following hypothesis to assess the selective sharing approach within this information environment:

H1: People share attitude-consistent content more frequently than attitude-inconsistent content (selective sharing of verified news and disinformation).

Right-Wing Ideology Bias: RWA and SDO

Research has highlighted the impact of right-wing ideology on the confirmation bias in information selection and consumption of disinformation (e.g., Sindermann et al., 2020; Frischlich et al., 2021). In the realm of selective sharing of disinformation, one study indicated that SDO rather than RWA positively predicted the effect. In the same study, simultaneously, RWA, not SDO, emerged as a highly significant predictor for disinformation selection (Klebba & Winter, 2024). This outcome can be interpreted based on the distinction between selective exposure and sharing (see above). Given that SDO, unlike RWA, contains an outgroup focus, it is plausible that individuals rooted in this dimension are more inclined to share disinformation actively, primarily if it refers to a competitive outgroup and a broader audience. Nevertheless, in the presence of particular ingroup/outgroup cues within disinformation, both RWA and SDO may exhibit heightened susceptibility to share such messages with others. Given that our study examined disinformation on migration, which centers on both the security of the ingroup and the denigration of an outgroup (in our case refugees), we hypothesized that both constructs positively impact the dissemination of disinformation with these specific message cues:

H2: RWA and SDO positively predict the sharing of disinformation that contain negative stances toward migration.

Ingroup/Outgroup Bias: the DPM and Selective Sharing

Over the past decade, studies have consistently shown that RWA has a lasting impact on various aspects of human behavior, particularly in shaping stereotypes and discriminating against marginalized groups. In a recent study on Authoritarianism in Germany by Decker et al. (2022), it was found that there has been an increase in RWA among the German

population, particularly in terms of high approval ratings for authoritarian submission, conventionalism, and authoritarian aggression. The study also highlighted a new form of protective-authoritarian response during the COVID-19 pandemic, where right-wing authoritarians sought refuge in cohesive group identities rather than state authority, exhibiting high levels of authoritarian aggression towards particular outgroups, leading to xenophobia and racism targeting Muslims, Sinti, and Romans. To explain the development of prejudice against outgroups, the framework of the DPM integrated RWA and SDO with ingroup threat through two parallel processes. Ingroup threat refers to the perception of possible harm, disadvantage, or challenges faced by one's social group from external forces or outgroups, leading to insecurity, anxiety, or fear regarding preserving the ingroup's identity, interests, or well-being (Stephan et al., 2015). In the DPM, the first process involves RWA responding to an ingroup threat from an outgroup when intergroup categorization is prominent, activating a collective security motivation against outgroups. This means individuals with high RWA scores are more hostile towards threatening outgroups as a group authoritarian reaction, perceiving the outgroup as a threat to group security and cohesion and derogating them through right-wing authoritarian behaviors. In contrast, SDO responds to an ingroup threat to intergroup dominance, activating a competitive motivation to maintain dominance over the outgroup. Consequently, individuals with high SDO scores are more hostile towards competing groups as a group reaction to social dominance orientation. The outgroup is perceived as challenging the ingroup's social dominance and is derogated through social dominance-oriented behaviors. In summary, RWA is responsive to threats to social security, order, norms, and traditions and is strongly correlated with pro-ingroup attitudes aiming to maintain the ingroup's security. Meanwhile, SDO is responsive to threats of losing social dominance and status and is strongly correlated with anti-outgroup attitudes aiming to derogate the outgroup explicitly (for an overview of a simplified version of the DPM, see Figure 1).

(INSERT FIGURE 1 HERE)

As outlined above, we see meaningful connections between RWA, SDO, and selective information usage, considering the roles of group identification and perceived threats in moderating this relationship. We believe that using the DPM in communication research holds promise as it incorporates right-wing ideology, group identification, and the role of perceived threat. This framework allows for a comprehensive investigation of how these factors interact on dependent variables of biased dissemination of (dis)information. According to the DPM, both RWA and SDO lead to the development of prejudice or the devaluation of the outgroup, driven by distinct motivations. Right-wing authoritarians view the outgroup as a threat to their ingroup's security, resulting in its denigration. Similarly, individuals with high SDO values see the outgroup as a competitive threat to their perceived higher status or privileges, leading to its derogation. In the context of selectively sharing information, our assumptions lead to the following conclusions: Individuals with high RWA scores may be more inclined towards content that emphasizes homeland security, social order, and the preservation of normative values and traditions (e.g., religion) due to their strong association with pro-ingroup attitudes and focus on ingroup security (ingroup focus due to their dangerous worldview). On the other hand, individuals with high SDO scores may be more receptive to content that highlights group-based hierarchy, denigrates the outgroup, or advocates measures to maintain superior group status, owing to their strong correlation with anti-outgroup attitudes and focus on ingroup dominance and superiority (outgroup focus due to their competitive worldview). Drawing from the potential impact of RWA, SDO, and ingroup threat on information sharing, we have formulated the following hypotheses (for an overview of the research model and hypotheses derived from the DPM, see Figure 2):

H3a: RWA positively predicts the sharing of content promoting pro-ingroup attitudes (ingroup's safety and security).

H3b: SDO positively predicts the sharing of content promoting anti-outgroup attitudes (defaming the outgroup that challenge the ingroup's social superiority and dominance).

H4: Ingroup threat moderates the effects predicted in H3a und b, such that people high in RWA experiencing threat show a higher sharing rate of content promoting pro-ingroup attitudes, and people high in SDO experiencing threat show a higher sharing rate of content promoting anti-outgroup attitudes in comparison to participants in the no threat condition.

To identify potential differences in the sharing behavior between verified news and disinformation related to these dynamics, we posed an additional research question:

RQ: Do the patterns of H4a and b differ between verified and false news?

(INSERT FIGURE 2 HERE)

Method

Overview

The hypotheses were tested in a quota-based online experiment with a 2 (ingroup threat vs. no threat) by 3 (pro vs. contra migration ingroup vs. contra migration outgroup information) by 2 (verified news vs. disinformation) mixed design. The data were collected between August 9 and 17, 2023. As the between-subjects factor, we manipulated ingroup threat by presenting participants with a tweet and an article discussing the adverse economic and cultural impacts of accepting refugees in Germany. These materials included elements highlighting threats to the safety of the ingroup or threats to the ingroup's social status, factors to which RWA and SDO are known to be responsive. A control group was provided with a news tweet and an article about a tourist destination in Germany. As the within-subject factors, we presented participants with verified news and disinformation on the topic of migration (pro migration vs. contra migration). Instead of articles, we opted for tweets as news

items to more accurately reflect a contemporary online information landscape. Four tweets conveyed pro-migration information, consisting of two items with verified information and two with disinformation. The contra migration category consisted of eight tweets, divided into four tweets featuring verified information and four tweets containing disinformation. Each subset included two tweets emphasizing ingroup cues (about the ingroup's safety) and outgroup cues (denigrating the outgroup). The tweets were thus manipulated to varying degrees in terms of containing verified information or disinformation and whether they expressed support or criticism of migration (acceptance or rejection of incoming refugees). If critical of migration, they either highlighted the ingroup's safety, portraying refugees as a threat to the ingroup, or depicted refugees as a threat to the ingroup's higher status and privileges. As the DPM centers on prejudice directed towards outgroups and, consequently, negative attitudes towards them, the positively framed messages regarding migration do not incorporate ingroup/outgroup cues.

Participants

A quota sample was drawn from an online access panel of a German research company, which was representative of German internet users aged 18 to 75 regarding gender, age, and education. Based on preregistered exclusion criteria, we excluded participants who were identified as inattentive responders due to their response time (less than 33 % of the median time), or failed to correctly answer a control question. Based on these criteria, the adjusted sample consisted of 1,152 respondents (female: 49.2 %, male: 50.8 %, age: $M = 46.18$, $SD = 15.30$). The study was approved by a local ethics committee. The data files and materials are available at the Open Science Framework (OSF) repository:

https://osf.io/4z2s8/?view_only=8d78c6b80efa4f6b9571cb1832052b9e.

Procedure

Initially, participants were directed to express their opinions on current societal issues, including topics such as sexism, the increasing number of people leaving the Catholic Church due to recent scandals, and the possibility of marriage for same-sex partnerships in the Catholic Church. Additionally, participants were asked to rate their agreement with five statements related to migration (e.g., “There are too many immigrants in our country”, “I believe accepting refugees poses a danger”). Furthermore, participants’ perceptions of the relevance of the migration topic were assessed as a control variable (e.g., “The issue of migration holds significant personal importance to me”). The following section outlined measures of participants’ social identity, right-wing ideological and political attitudes. Prior to the sharing task, participants were assigned randomly to either the threat or control group and rated their threat levels after the induction. In the sharing task, they were presented with the twelve tweets containing both pro vs. contra (ingroup vs. outgroup) verified information and disinformation on migration. Following each tweet, they expressed their likelihood of endorsing the (dis)information by indicating their inclination to like and share it with their contacts. Subsequently, they rated the credibility of the (dis)information presented in the tweet. The order of the tweets was randomized. Following ethical guidelines, after the sharing task, the participants were informed which tweet contained disinformation. They were given detailed information about the source that identified the disinformation, along with a statement clarifying the inaccurate content of the news. After that, a thorough debriefing was conducted, and the participants were offered the opportunity to download an explanation of the tweets as a PDF document.

Stimuli and Pretest

The threat manipulation consisted of a fictitious tweet created by a fictitious German X user named `rudolf_k`. The tweet emphasized the German nation as the ingroup, evident through the German name of the producer and an icon featuring the German country in the colors of the German flag. The tweet conveyed both symbolic and realistic threats related to

migration. The symbolic ingroup threat depicted incoming refugees as posing a threat to German traditions, while the realistic ingroup threat portrayed refugees as taking away jobs and receiving benefits for free (“Refugees are not only taking our jobs and getting everything for free, they also destroy our German traditions!”). The tweet induction was preceded by an article that elaborated on both threats, providing more detailed information. For the control group, we presented a tweet about a tourist destination in Germany by a fictitious news magazine that did not contain any threatening content (“Vacation on your doorstep: The Elbe Sandstone Mountains are one of the most spectacular hiking areas in Europe and offer not only the bizarre rock formations of Saxon Switzerland, but also a lot of culture!”). This was followed by an article with additional details about the destination (for an overview of the manipulation tweets see Online Appendix A). The manipulation tweets reached an average length of $M = 21.5$ words and the articles a length of $M = 301.5$ words. A pretest ($N = 168$) revealed that the manipulation worked as intended. An ANOVA test indicated that participants’ threat levels differed significantly between the threat and the control group ($F(1,167) = 49.496, p < .001, \eta_p^2 = .230$).

The tweets in the sharing task were displayed in the design of a (fictitious) news outlet. The stimulus material was designed to emulate the format commonly found on real German news sites on X. Each stimulus comprised a brief headline ($M_{words} = 13.67$), and an accompanying image, as well as the time and date of publication, along with metrics such as the number of retweets, quote tweets, and likes, ensuring comparability across all tweets. Disinformation tweets were selected based on data from the prominent German-language fact-checking website [correctiv.org](https://www.correctiv.org) (e.g., “Immigrants destroy Christmas trees: We must protect symbols of Christianity at Christmas”) or created specifically for the study (e.g., “After a series of thefts by refugees: German grocery stores must be protected”). Verified information tweets were crafted using recent news on migration sourced from established German media

outlets available online (e.g., “Increased protection against illegal immigrants needed: Enhanced use of dragnet searches to safeguard the German state”). The manipulation of ingroup/outgroup cues involved either emphasizing the safety of the ingroup or denigrating the outgroup (in our case, incoming refugees). The pretest results confirmed the effectiveness of manipulating tweets as intended. The average ratings for the position item “What stance or position does the news tweet take on the topic of migration?” (rated from 1 = strongly negative to 7 = strongly positive) ranged from $M = 2.14$ to $M = 3.11$ for the contra migration tweets and from $M = 5.22$ to $M = 5.47$ for the pro migration tweets. The differentiation between contra migration and pro migration was significant as a within-group factor in a repeated-measures ANOVA ($F(1,167) = 369.953, p < .001, \eta^2 = .689$). Regarding the ingroup cue item “The news tweet emphasizes safeguarding German society” (rated from 1 = strongly disagree to 7 = strongly agree), the average ratings ranged from $M = 4.79$ to $M = 5.48$. For the outgroup cue item “The news tweet highlights the benefits or privileges experienced by migrants in Germany” (rated from 1 = strongly disagree to 7 = strongly agree), the average ratings were between $M = 5.65$ and $M = 5.79$. For the news tweets with ingroup cue, a repeated-measures ANOVA showed that the differentiation between ingroup and outgroup cues was significant ($F(1,167) = 210.760, p < .001, \eta^2 = .558$). Similarly, for the news tweets with outgroup cue, a repeated-measures ANOVA indicated significant differentiation between ingroup and outgroup cues ($F(1,167) = 351.271, p < .001, \eta^2 = .601$). The news credibility item (“In my opinion, this news tweet contains information that are...” (1 = undoubtedly false, 5 = undoubtedly true) ranged from $M = 2.27$ to $M = 3.85$. A repeated-measures ANOVA showed significant differences in news credibility between the disinformation and verified news tweets ($F(1,167) = 172.548, p < .001, \eta^2 = .508$). Nevertheless, both means exceed the midpoint of the scale, and the disparity between them is not substantial ($M_{disinformation} = 2.65, M_{verifiednews} = 3.24$), suggesting that all news items were perceived as generally credible. Based on

the results of the pretest, we chose twelve tweets for the main study (the Online Appendix A gives an overview of all news tweets presented).

Measures

RWA. We assessed RWA using the KSA-3 short scale (Beierlein et al., 2014), which includes three items for each subdimensions: authoritarian aggression (e.g., “Society should take a tough stance against outsiders and underachievers”), authoritarian submission (e.g., “We need strong leaders so that we can live safely in society”), and conventionalism (e.g., “Traditions should be cherished at all costs”). Participants rated the items on a five-point scale ($M = 3.17$, $SD = .76$, $\alpha = .827$).

SDO. SDO was measured with seven items (e.g., “An ideal society requires some groups to be on top and others to be at the bottom”) of the short SDO₇ scale (Ho et al., 2015) by rating on a five-point scale ($M = 2.41$, $SD = .73$, $\alpha = .796$).

Group Identity. The measurement of participants’ identification with the German group was conducted using a modified version of the Arrow-Carini Group Identification Scale 2.0 (Henry et al., 1999). Eleven items specifically targeted identification with Germany rather than general group identification (e.g., “All citizens must contribute something to achieve Germany’s goals”) ranged on a five-point scale from “strongly disagree” (1) to “strongly agree” (5) ($M = 3.41$, $SD = .60$, $\alpha = .733$).

Attitude towards migration. Participants’ attitudes toward migration were used to classify selective exposure to each presented news tweet as either attitude-consistent or attitude-inconsistent. Prior to the sharing task, participants were requested to express their opinions on five items related to migration topics, as well as on four items covering distractor topics such as sexism, same-sex marriage, the Catholic church, and climate change countermeasures. Ratings were provided on one-item scales ranging from 1 = strongly disagree to 5 =

strongly agree. The five items concerning migration exhibited high reliability ($M = 2.64$, $SD = 1.15$, $\alpha = .908$).

Selective Sharing. After each news tweet, participants were asked to rate their inclination to share it with their social media contacts on a scale from 1 (strongly disagree) to 7 (strongly agree). Participants' attitudes towards migration were categorized into opponents (values 1-2.99, $n = 641$) and supporters (values 3.01-5, $n = 411$). This categorization allowed for the classification of attitude-consistent and attitude-inconsistent news tweet sharing. In simple terms, attitude-consistent sharing occurred when a supporter/opponent shared a pro-/contra-migration news tweet, while attitude-inconsistent sharing occurred when a supporter/opponent shared a contra-/pro-migration news tweet. Participants with a neutral attitude towards migration were not included in the analysis (value 3, $n = 100$). The likelihood scores of sharing a news tweet were transformed into likelihood scores of sharing attitude-consistent or attitude-inconsistent news tweets. A ratio score was then computed by subtracting the attitude-consistent tweet-sharing variable from the attitude-inconsistent tweet-sharing variable. This approach allowed for the continuous assessment of the likelihood of sharing of attitude-consistent versus attitude-inconsistent content ($M = .77$, $SD = 1.37$).

Sharing of disinformation with negative stances on migration and (true and false) negative information with ingroup/outgroup cues. To assess participants' likelihood to share disinformation with negative stances on migration, we computed the overall mean score of the likelihood of sharing ($M = 2.58$, $SD = 1.76$, $\alpha = .948$) for these disinformation tweets on a 7-point scale ("How likely is it that you would share the tweet with your contacts?" ranging from 1 = highly unlikely to 7 = highly likely). Similarly, we utilized the same procedure to determine the likelihood of sharing (true and false) negative information with

ingroup/outgroup cues (ingroup cues: $M = 2.64$, $SD = 1.85$, $\alpha = .913$; outgroup cues: $M = 2.52$, $SD = 1.80$, $\alpha = .906$).⁴

Credibility of information. Perceived credibility was measured using a 5-point scale adapted from Zimmermann and Kohring (2020), ranging from 0 (certainly false) to 4 (certainly true). We calculated the overall mean score to determine the average credibility of the presented (true and false) information tweets ($M = 2.90$, $SD = 0.57$, $\alpha = .678$).

Controls. Gender, age, education, political leaning and topic relevance were included as additional variables. Political leaning was assessed on a 10-point scale ranging from 1 (left-leaning) to 10 (right-leaning) ($M = 5.31$, $SD = 1.83$). Topic relevance was measured with two items (e.g., “The issue of migration holds significant personal importance to me”) on a seven-point scale (1 = strongly disagree, 7 = strongly agree; $M = 4.46$, $SD = 1.47$, $\alpha = .837^5$).

Results

Manipulation check and correlations

Following threat induction, participants evaluated their perceived threat levels on a seven-point scale (“After reading the news tweet and corresponding article I feel...”; 1 = no threat, 7 = very high threat). A one-way ANOVA test demonstrated the success of the threat treatments. Participants subjected to threat induction reported feeling significantly more threatened than those in the control group (threat group: $M = 4.24$, $SD = 1.74$, control group: $M = 2.22$, $SD = 1.53$; $F(1, 1150) = 436.577$, $p < .001$, $\eta_p^2 = .275$). For an overview of variables’ correlations, see Table 1.

(INSERT TABLE 1 HERE)

Hypothesis tests

⁴ We also created variables for (true and false) positive information, (true and false) negative information, (positive and negative) disinformation, and (true and false, positive and negative) general information sharing on migration topics for further analyses. These variables were used to conduct additional regression analyses, which are available in the Online Appendix B.

⁵ Initially, we assessed topic relevance using three items. Following a reliability analysis, we excluded one item to improve the α score.

In line with our first hypothesis (*H1*), we anticipated that individuals would share attitude-consistent content more frequently than attitude-inconsistent content. To assess whether there existed a mean difference between attitude-consistent and attitude-inconsistent sharing, we conducted a parametric paired sample t-test. As expected, the paired t-test revealed a significant difference between the mean scores of both variables ($t(1052^6) = 18.244, p < .001$ (two-tailed); attitude-consistent sharing: $M = 2.93, SD = 1.82$; attitude-inconsistent sharing: $M = 2.15, SD = 1.55$). Thus, the data supported *H1*.

To test the following hypotheses *H2*, *H3a* and *H3b* we conducted three hierarchical regression analyses with the dependent variables: (1) disinformation sharing (with negative stances on migration), (2) information sharing (promoting ingroup cues), and (3) information sharing (promoting outgroup cues). As predictors, the following variables were entered: (1) gender, age, education, political leaning and topic relevance (as control variables); (2) RWA and SDO. All three regression models were significant (see Table 2).

(INSERT TABLE 2 HERE)

In *H2*, we posited that RWA and SDO positively predict the sharing of disinformation that contain negative stances toward migration. However, unlike our predictions, the data revealed that RWA but not SDO positively predicted the sharing of disinformation that contain negative stances toward migration (RWA: $\beta = .627, p < .001$, SDO: $\beta = .127, p = .280$). Thus, *H2* could only be partially supported.

H3a and *H3b* examined the prediction of RWA and SDO on the sharing of tweets featuring ingroup versus outgroup cues. *H3a*, based on the processes outlined in the DPM, proposed that RWA would positively predict the sharing of content endorsing pro-ingroup

⁶ The sample size for this analysis was reduced by 100 participants who scored precisely at the midpoint (3) on the attitudes towards migration scale, as they were already excluded from the formation of the selective exposure variables.

attitudes (tweets with ingroup cues emphasizing safety and security). Consistent with our hypothesis, the data revealed that RWA significantly predicted the sharing of content endorsing ingroup cues ($\beta = .662, p < .001$), while SDO did not reach significance ($\beta = .114, p = .131$). Conversely, *H3b* postulated that SDO positively predicted content sharing endorsing anti-outgroup attitudes (tweets with outgroup cues disparaging the outgroup and challenging the ingroup's social superiority and dominance). However, the data indicated that SDO did not significantly influence content sharing by endorsing outgroup cues ($\beta = .046, p = .541$), thereby failing to support the hypothesis. In contrast, the regression model identified RWA as a significant positive predictor ($\beta = .625, p < .001$).

In *H4*, we examined the influence of ingroup threat on RWA and SDO (in interaction) on the sharing rate of content featuring ingroup/outgroup cues. Specifically, we anticipated that individuals high in RWA experiencing threat would exhibit a higher sharing rate of content promoting pro-ingroup attitudes, while individuals high in SDO experiencing threat would demonstrate a higher sharing rate of content promoting anti-outgroup attitudes compared to participants in the no-threat condition. However, a moderated regression analysis indicated no significant interaction effect of ingroup threat and RWA on sharing tweets with ingroup cues ($\beta = -.181, p = .163$). Similarly, the analysis revealed no significant interaction effect of ingroup threat and SDO on sharing tweets with outgroup cues ($\beta = .034, p = .805$). Consequently, we were unable to provide support for *H4*.

In a research question (*RQ*) we asked about potential differences in the anticipated patterns of *H3a* and *H3b* between verified news and disinformation. In summary, the data showed no significant differences between the outcomes of *H3a* and *H3b* when analyzing the sharing of verified news and disinformation with ingroup/outgroup cues separately. In *H3a*, RWA emerged as a significant predictor for sharing both verified news and disinformation with ingroup cues (sharing verified news: $\beta = .658, p < .001$; sharing disinformation: $\beta =$

.666, $p < .001$). However, there was a difference in the models' R^2 change of .013. The model predicting sharing disinformation with ingroup cues explained more variance than the model predicting sharing verified news with ingroup cues (sharing verified news: total $R^2 = .182$; sharing disinformation: total $R^2 = .195$). For *H3b*, SDO did not significantly predict either outcome.⁷

Discussion

The current study examined hypotheses concerning the selective sharing of political news tweets on migration topics, encompassing both verified information and disinformation. We hypothesized confirmation bias, right-wing ideology bias, and ingroup bias (in line with the DPM), further considering the influence of ingroup threat. German participants were surveyed regarding their likelihood to share twelve online news tweets, each taking either a pro or contra stance on migration topics. Additionally, the contra-migration news tweets included ingroup/outgroup cues. Attitude-consistent sharing was assessed according to participants' attitudes towards migration, as reported prior to the sharing task. Given the inclusion of tweets with ingroup or outgroup cues in the contra-migration category to test assumptions rooted in the DPM, there was an overrepresentation of contra-migration news tweets, with eight tweets against migration and four tweets in favor of migration⁸.

In line with *H1*, the data revealed support for a confirmation bias on participants' intention to share political information (via news tweets). When individuals encounter news tweets containing political information and are given the option to share these tweets within their personal network, they are more inclined to share the news tweets that align with their preexisting attitudes. The result corroborates findings from previous studies on selective

⁷ Additional exploratory analyses (see Online Appendix) revealed that RWA is a significant predictor of the sharing of all (true and false, positive and negative) information we presented. We discussed this finding and its implications in the following section.

⁸ This approach contrasts with the methodological procedure employed in other studies, which typically present news items with equal proportions of pro and contra topic stances.

exposure and selective sharing of political information (Knobloch-Westernwick et al., 2020; Klebba & Winter, 2024), confirming the existence of confirmation bias even during the dissemination of information (both verified information and disinformation).

H2 assumed a right-wing ideology bias in sharing disinformation containing a negative stance toward migration. Contrary to expectations, only RWA emerged as a positive predictor. This finding underscores RWA's susceptibility to disinformation and authoritarian outcomes, such as prejudice against outgroups, as evidenced in other studies. However, it contradicts results that highlighted SDO as an influential factor in these outcomes. Unlike findings by Klebba & Winter (2024), we could not confirm the assumption that RWA predicts more passive news engagement, such as selecting disinformation, while SDO predicts more active news engagement behavior, like sharing disinformation, due to the constructs' characteristics. However, since we did not include a measurement of information selection and investigated news items with another topic, as in Klebba & Winter (2024), we could not thoroughly examine this differentiation by directly comparing and interpreting the different results.

Hypotheses *H3a*, *H3b*, and *H4* were directly tied to the propositions of the DPM. According to the DPM, in response to ingroup threat, RWA results in a right-wing authoritarian reaction (ingroup focus) against outgroups, leading to right-wing authoritarian outcomes. In contrast, in response to ingroup threat, SDO fosters a social dominance-oriented reaction (outgroup focus) manifested in social dominance-oriented behaviors. Applying these assumptions to a communication context, we hypothesized that individuals with high RWA tendencies prefer sharing information with ingroup cues. In contrast, those with high SDO tendencies were assumed to prefer sharing information with outgroup cues. Additionally, we presumed that such relationships are even more pronounced when individuals perceive ingroup threats. Based on our data, only the anticipated association between RWA and sharing

content featuring ingroup cues reached significance and could be upheld (*H3a*). SDO did not predict sharing content with outgroup cues (*H3b*), and ingroup threat did not enhance these relationships (*H4*). Contrary to our expectations, RWA was also associated with sharing content featuring outgroup cues. Consequently, the theoretically proposed mechanisms in the DPM do not align with the empirical findings of our investigation. Instead, RWA emerged as the overarching risk factor for disseminating disinformation, particularly disinformation containing pro-ingroup or anti-outgroup positions.

Contrary to *H3b*, the receptivity of RWA to both ingroup and outgroup news cues may be attributed to the three fundamental dimensions of the construct. In addition to authoritarian submission and conventionalism, which characterize more passive behavior, authoritarian aggression encompasses the tendency of RWA to act aggressively toward nonconformists – individuals who diverge from group norms and traditions and do not fully adhere to or subordinate themselves to the group. Several studies have demonstrated that the sub-dimensions of RWA operate autonomously, and upon closer examination, they exhibit distinct and sometimes even conflicting impacts on the outcome (e.g., Peng, 2022; Duckitt & Bizumic, 2013). Considering the findings of our study, it is plausible that the dimensions had varying effects, suggesting that authoritarian aggression might have played a role in susceptibility to outgroup cues⁹.

Regarding *H4*, our findings contribute to the growing body of research suggesting that RWA and SDO are not consistently triggered by perceived threats. This inconsistency is particularly evident for RWA, as various studies have shown that different types of threats activate the construct, albeit with inconsistent outcomes (e.g., Cohrs et al., 2005; Lavine et al.,

⁹ Upon separately considering the dimensions of RWA in examining hypotheses *H4a* and *H4b*, exploratory analyses indicated that only conventionalism significantly predicted both outcomes (sharing content with ingroup cues: $\beta = .584, p < .001$; sharing content with outgroup cues: $\beta = .510, p < .001$). Authoritarian aggression and submission showed no influence. These findings underscore the importance of investigating RWA from a multi-dimensional perspective.

2002; Hartman et al., 2021). Although there exists a correlation between RWA and specific outcomes, this association is not always dependent on threat activation. This inconsistency is mirrored in our study, which did not confirm the hypothesized interaction effect between right-wing ideology and ingroup threat as posited in the DPM. Numerous studies established a correlation between RWA and right-wing authoritarian behavior, which has been partially influenced by specific types of threats (e.g, Cohrs et al., 2009; Kossowska et al., 2011). However, there remains a lack of consensus regarding the operationalization of threat types. Consequently, it remains unclear which type of threat actually activates RWA, and whether, if effective, it reinforces authoritarian behavior or serves as its initial trigger. Besides, our findings corroborate with recent results demonstrating the lack of interaction effects of RWA and different threat types on selective exposure behavior and selection of disinformation (Klebba & Winter, 2025).

Overall, the discovery that only RWA predicted the outcome variables in the present study corroborated findings that explore the associations between RWA and SDO with various outcomes, including attitudes, behaviors, and societal phenomena. While these constructs are related and often coincide, they can predict different outcomes due to their distinct conceptualizations and underlying psychological mechanisms. Bilewicz et al. (2017) conducted research demonstrating, in two representative studies, that while RWA and SDO positively correlated with outgroup prejudice, they exerted differential effects on hate-speech prohibition. Participants with high SDO scores were more accepting of hate speech, whereas those with high RWA scores supported hate-speech prohibition. Backing the counterintuitive finding, the authors suggested that right-wing authoritarians are particularly vigilant toward norm violations, and consequently, more inclined to punitive measures against counternormative expressions of prejudice, such as hate speech. Another longitudinal panel study grounded in the DPM unveiled that RWA exhibited positive cross-lagged effects on nationalism and

patriotism, whereas SDO displayed a positive cross-lagged effect on nationalism but a negative cross-lagged effect on patriotism (Osborne et al., 2017). The findings led the authors to hypothesize that nationalism and patriotism, as expressions of identification with one's nation, are primarily manifested through RWA. In our view, these findings exemplify the differentiation and autonomy of both constructs concerning the complexity of their impact, highlighting the significance of RWA when examining outcomes involving ingroup/outgroup cues and a salient national identity stimulus.

Beyond testing the hypotheses, we also examined additional sharing intentions. These included news tweets with positive stances toward migration and a general information-sharing variable that covered all (true and false, positive and negative) information on migration presented (see Online Appendix for the additional regression analyses). The data unveiled a consistent trend: RWA generally heightened participants' likelihood of sharing the presented information, irrespective of its valence or verification status. While these models explained less variance than those focused on sharing disinformation with negative stances toward migration or (true and false) information with ingroup and outgroup cues, the influence of RWA was a constant. It was significant across all tested models, underscoring a general susceptibility to sharing such content and emphasizing the need for future research to delve into the motives of right-wing authoritarians in sharing both true and false, as well as positive and negative, information on migration. Understanding these motives could provide valuable insights into the psychology of information sharing and the potential for misinformation. The sharing of true and false information might be due to participants' unawareness of what is verified or disinformation. The sharing of positive and negative stances could stem from different motives, such as sharing positive news tweets on migration out of anger or highlighting the perceived absurdity of the message.

Limitations

As other research has indicated the susceptibility of both constructs to specific ingroup/outgroup cues, it is plausible that our operationalization of the model may have hindered the detection of the processes outlined within the DPM. First of all, we consider the manipulation of ingroup threat and ingroup identification may not have been sufficiently impactful in activating RWA and SDO to an equal extent. Since our manipulation solely focused on ingroup/outgroup threat using a news tweet, which encompassed both dimensions, we are unable to make a nuanced statement about which threat dimension within the news tweet was perceived as threatening by individuals high in RWA and SDO. Moreover, exclusively making the ingroup of participants (in this case, the German nation) salient through the sender's name and the tweet icon may not have significantly impacted the participants. One way of addressing this limitation in future research would be to use the scale on group authoritarianism developed by Stellmacher and Petzel (2005), which combines the measurement of RWA with group identification. However, this type of construct measurement currently exists only for RWA and has not been extensively tested in other studies. Furthermore, during the main study, it is possible that the message cues did not accurately reflect the intended ingroup/outgroup cues or failed to evoke the intended associations among the participants. Despite pretesting the manipulated message cues beforehand, variations in participants' perceptions may have occurred, leading to potential discrepancies in the study results.

Overall, the study could potentially suffer from sampling bias due to the recruitment procedure utilizing an online access panel, which may result in lower participation rates among individuals very high RWA and SDO, as well as those with extreme attitudes. Additionally, the study design incorporated a rather artificial scenario for measuring (dis)information dissemination. Participants were presented with news tweets one at a time, followed by inquiries about their intention to share the information, as well as its credibility. While this quasi-experimental approach aimed to mirror realistic information behavior, it significantly

simplified the complexity of the news-sharing process. Thus, participants may not have accurately report their clicking or sharing behavior. Tracking data would be beneficial and mitigate issues related to social desirability, creating a more naturalistic scenario. Moreover, including all instances of online disinformation on migration was not feasible. However, we endeavored to mitigate this limitation by relying on prominent German fact-checking websites when selecting the most notable instances of disinformation and encompassing a diverse array of narratives.

Suggestions for Future Research

Given that our data did not fully support the DPM processes in new media environments, it is important to thoroughly test the DPM in its traditional field of political psychology, focusing on its original outcome – prejudice against outgroups. It is crucial to determine whether the proposed processes can be empirically validated in this domain. Additionally, the role of RWA in information selection and usage needs closer examination in communication research. Despite inconsistencies regarding our assumptions on RWA and SDO derived from the DPM, our data revealed a relatively consistent pattern for participants' sharing intentions of the news tweets presented: Being male, of younger age, lower educated, on the right of the political spectrum (more conservative), personally involved in the migration topic, and right-wing authoritarian increase the likelihood of sharing (true and false) information with opposing stances toward migration. Therefore, it is necessary to examine whether RWA is a crucial predictor and an actual risk factor for vulnerability to disinformation. What other news cues are associated with RWA's tendency to share news, especially disinformation? Future research should explore other news topics, underlying motives, and message cues to support the development of targeted interventions for this group.

References

- Altemeyer, B. (1981). *Right-wing authoritarianism*. University of Manitoba Press.
- Barberá, P., Jost, J. T., Nagler, J., Tucker, J. A., & Bonneau, R. (2015). Tweeting from left to right: Is online political communication more than an echo chamber?. *Psychological Science*, 26(10), 1531–1542. <https://doi.org/10.1177/0956797615594620>
- Beierlein, C., Asbrock, F., Kauff, M., & Schmidt, P. (2014). *Die Kurzskala Autoritarismus (KSA-3): ein ökonomisches Messinstrument zur Erfassung dreier Subdimensionen autoritärer Einstellungen*. [The brief scale of authoritarianism (KSA-3): An economic measurement instrument to capture three subdimensions of authoritarian attitudes]. *GESIS-Working Papers*, 2014/35. GESIS–Leibniz-Institut für Sozialwissenschaften. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-426711>
- Bilewicz, M., Soral, W., Marchlewska, M., and Winiewski, M. (2017). When authoritarians confront prejudice. Differential effects of SDO and RWA on support for hate-speech prohibition. *Political Psychology*, 38(1), 87–99. <https://doi.org/10.1111/pops.12313>
- Brundidge, J. (2010). Encountering “difference” in the contemporary public sphere: The contribution of the internet to the heterogeneity of political discussion networks. *Journal of Communication*, 60(4), 680–700. <https://doi.org/10.1111/j.1460-2466.2010.01509.x>
- Cohrs, J. C., Moschner, B., Maes, J., & Kielmann, S. (2005). The motivational bases of right-wing authoritarianism and social dominance orientation: Relations to values and attitudes in the aftermath of September 11, 2001. *Personality and Social Psychology Bulletin*, 31(10), 1425–1434. <https://doi.org/10.1177/0146167205275614>
- Cohrs, J. C., & Ibler, S. (2009). Authoritarianism, threat, and prejudice: An analysis of mediation and moderation. *Basic and Applied Social Psychology*, 31(1), 81–94. <https://doi.org/10.1080/01973530802659638>

- Colleoni, E., Rozza, A., & Arvidsson, A. (2014). Echo chamber or public sphere? Predicting political orientation and measuring political homophily in Twitter using big data. *Journal of Communication*, 64(2), 317–332. <https://doi.org/10.1111/jcom.12084>
- Coppini, D., Duncan, M. A., McLeod, D. M., Wise, D. A., Bialik, K. E., & Wu, Y. (2017). When the whole world is watching: A motivations-based account of selective expression and exposure. *Computers in Human Behavior*, 75, 766–774. <https://doi.org/10.1016/j.chb.2017.04.020>
- Daunt, K.L., Greer, D.A., Jin, H.S. and Orpen, I. (2023), Who believes political fake news? The role of conspiracy mentality, patriotism, perceived threat to freedom, media literacy and concern for disinformation, *Internet Research*, 33(5), 1849–1870. <https://doi.org/10.1108/INTR-07-2022-0565>
- Duckitt, J. (1989). Authoritarianism and group identification: A new view of an old construct. *Political Psychology*, 10(1), 63–84. <https://doi.org/10.2307/3791588>
- Duckitt, J., & Bizumic, B. (2013). Multidimensionality of right-wing authoritarian attitudes: Authoritarianism-conservatism-traditionalism. *Political Psychology*, 34(6), 841–862. <https://doi.org/10.1111/pops.12022>
- Duckitt, J., & Sibley, C. G. (2009). A dual-process motivational model of ideology, politics, and prejudice. *Psychological Inquiry*, 20(2–3), 98–109. <https://doi.org/10.1080/10478400903028540>
- Duckitt, J. (2022). Authoritarianism: Conceptualization, research, and new developments. In G. G. Sibley & D. Osborne (Eds.), *The Cambridge handbook of political psychology*. Cambridge University Press.
- Frischlich, L., Hellmann, J. H., Brinkschulte, F., Becker, M., & Back, M. D. (2021). Right-wing authoritarianism, conspiracy mentality, and susceptibility to distorted alternative

news. *Social Influence*, 16(1), 24–64.

<https://doi.org/10.1080/15534510.2021.1966499>

Garrett, K. R. (2009). Politically motivated reinforcement seeking: Reframing the selective exposure debate. *Journal of Communication*, 59(4), 676–699.

<https://doi.org/10.1111/j.1460-2466.2009.01452.x>

Goel, S., Anderson, A., Hofman, J., & Watts, D. J. (2016). The structural virality of online diffusion. *Management Science*, 62(1), 180–196.

<https://doi.org/10.1287/mnsc.2015.2158>

Hart, W., Albarracín, D., Eagly, A. H., Brechan, I., Lindberg, M. J., & Merrill, L. (2009).

Feeling validated versus being correct: A meta-analysis of selective exposure to information. *Psychological Bulletin*, 135(4), 555–588. <https://doi.org/10.1037/a0015701>

Hartman, T. K., Stocks, T. V. A., McKay, R., Gibson Miller, J., Levita, L., Martinez, A. P., Mason, L., McBride, O., Murphy, J., Shevlin, M., Bennett, K. M., Hyland, P., Karatzias, T., Valli, F., & Bentall, R. P. (2021). The authoritarian dynamic during the COVID-19 pandemic: effects on nationalism and anti-immigrant sentiment. *Social Psychological and Personality Science*, 12(7)1–12.

<http://doi.org/10.1177/1948550620978023>

Henry, K. B., Arrow, H., & Carini, B. (1999). A tripartite model of group identification: Theory and measurement. *Small Group Research*, 30(5), 558–581.

<https://doi.org/10.1177/104649649903000504>

Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO₇ scale. *Journal of Personality and Social Psychology*, 109(6), 1003–1028.

<https://doi.org/10.1037/pspi0000033>

- Himmelboim, I., McCreery, S., & Smith, M. (2013). Birds of a feather tweet together: Integrating network and content analyses to examine cross-ideology exposure on Twitter. *Journal of Computer-Mediated Communication*, 18(2), 154–174.
<https://doi.org/10.1111/jcc4.12001>
- Jacobson, S., Myung, E., & Johnson, S. L. (2016). Open media or echo chamber: The use of links in audience discussions on the Facebook pages of partisan news organizations. *Information Communication and Society*, 19(7), 875–891.
<https://doi.org/10.1080/1369118X.2015.1064461>
- Klebba, L.-J., & Winter, S. (2024). Crisis alert: (Dis)information selection and sharing in the COVID-19 pandemic. *Communications*, 49(2), 318–338. <https://doi.org/10.1515/com-mun-2022-0020>
- Klebba, L.-J., & Winter, S. (2025). The influence of threat and right-wing authoritarianism on the selection of online (dis)information – a conceptual replication and extension of Lavine et al. (2005). *Human Communication Research*, 51(1), 52–56.
<https://doi.org/10.1093/hcr/hqae016>
- Knobloch-Westerwick, S., & Kleinman, S. B. (2012). Preelection selective exposure: Confirmation bias versus informational utility. *Communication Research*, 39(2), 170–193.
<https://doi.org/10.1177/0093650211400597>
- Knobloch-Westerwick, S., Mothes, C., & Polavin, N. (2020). Confirmation bias, ingroup bias, and negativity bias in selective exposure to political information. *Communication Research*, 47(1), 104–124. <https://doi.org/10.1177/0093650217719596>
- Kossowska, M., Trejtowicz, M., de Lemus, S., Bukowski, M., Hiel, A. V., and Goodwin, R. (2011). Relationships between right-wing authoritarianism, terrorism threat, and attitudes towards restrictions of civil rights: A comparison among four European

- countries. *British Journal of Psychology*, 102(2), 245–259.
<https://doi.org/10.1348/000712610X517262>
- Lavine H., Lodge M., Polichak J., & Taber C. (2002). Explicating the black box through experimentation: Studies of authoritarianism and threat. *Political Analysis*, 10(4), 343–361. <https://doi.org/10.1093/pan/10.4.343>
- Liang, H. (2018). Broadcast versus viral spreading: The structure of diffusion cascades and selective sharing on social media. *Journal of Communication*, 68(3), 525–546.
<https://doi.org/10.1093/joc/jqy006>
- Marwick, A. E., & Boyd, D. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media and Society*, 13(1), 114–133.
<https://doi.org/10.1177/1461444810365313>
- Olaru, G. O. (2023). The rapid diffusion of fake news: An analysis of content on migration, refugees, and conflict on international fact-checking platforms. *Connectist: Istanbul University Journal of Communication Sciences*, 65, 61–87.
<https://doi.org/10.26650/CONNECTIST2023-1404666>
- Osborne, D., Milojev, P., & Sibley, C. G. (2017). Authoritarianism and national identity: Examining the longitudinal effects of SDO and RWA on nationalism and patriotism. *Personality and Social Psychology Bulletin*, 43(8), 1086–1099.
<https://doi.org/10.1177/0146167217704196>
- Peng, Y. (2022). Politics of COVID-19 vaccine mandates: Left/right-wing authoritarianism, social dominance orientation, and libertarianism. *Personality and Individual Differences*, 194, 111661. <https://doi.org/10.1016/j.paid.2022.111661>
- Pingree, R. J. (2007). How messages affect their senders: A more general model of message effects and implications for deliberation. *Communication Theory*, 17(4), 439–461.
<https://doi.org/10.1111/j.1468-2885.2007.00306.x>

- Rios, K., Sosa, N., & Osborn, H. (2018). An experimental approach to intergroup threat theory: Manipulations, moderators, and consequences of realistic vs. symbolic threat. *European Review of Social Psychology*, 29(1), 212–255.
<https://doi.org/10.1080/10463283.2018.1537049>
- Shin, J. E., & Thorson, K. (2017). Partisan selective sharing: The biased diffusion of fact-checking messages on social media. *Journal of Communication*, 67(2), 233–255.
<https://doi.org/10.1111/jcom.12284>
- Sidanius, J., & Pratto, F. (2004). Social dominance theory: A new synthesis. In J. T. Jost, & J. Sidanius (Eds.), *Political psychology* (pp. 315–332). Psychology Press.
<https://doi.org/10.4324/9780203505984-18>
- Sindermann, C., Elhai, J. D., Moshagen, M., & Montag, C. (2020). Age, gender, personality, ideological attitudes and individual differences in a person's news spectrum: How many and who might be prone to “filter bubbles” and “echo chambers” online? *Helvion*, 6(1), e03214. <https://doi.org/10.1016/j.helivon.2020.e03214>
- Stellmacher, J. & Petzel, T. (2005). Authoritarianism as a group phenomenon. *Political Psychology*, 26(2), 245–274. <https://doi.org/10.1111/j.1467-9221.2005.00417.x>
- Stephan, W. G., Ybarra, O., & Rios, K. (2015). Intergroup threat theory. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (2nd ed., pp. 255–278). Psychology Press.
- Stroud, N. J. (2010). Polarization and partisan selective exposure. *Journal of Communication*, 60(3), 556–576. <https://doi.org/10.1111/j.1460-2466.2010.01497.x>
- Valentino, N. A., Banks, A. J., Hutchings, V. L., & Davis, A. K. (2009). Selective exposure in the internet age: The interaction between anxiety and information utility. *Political Psychology*, 30(4), 591–613. <https://doi.org/10.1111/j.1467-9221.2009.00716.x>

Wittenberg, C., & Berinsky, A. J. (2020). Misinformation and its correction. In N. Persily, & J. Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform* (pp. 163–198). Cambridge University Press.

<http://doi.org/10.1017/9781108890960>

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.

<http://doi.org/10.1080/10584609.2019.1686095>

Figure 1

A Simplified Version of The Dual Process Motivational Model of Ideology and Prejudice (DPM)

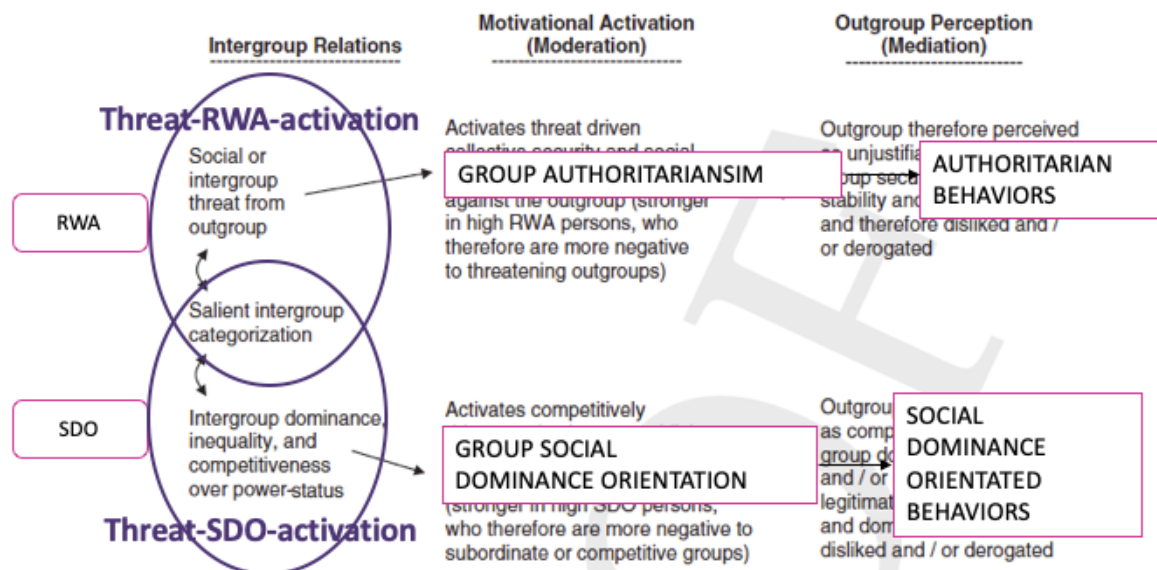


Figure 2

Research model and hypotheses derived from the DPM

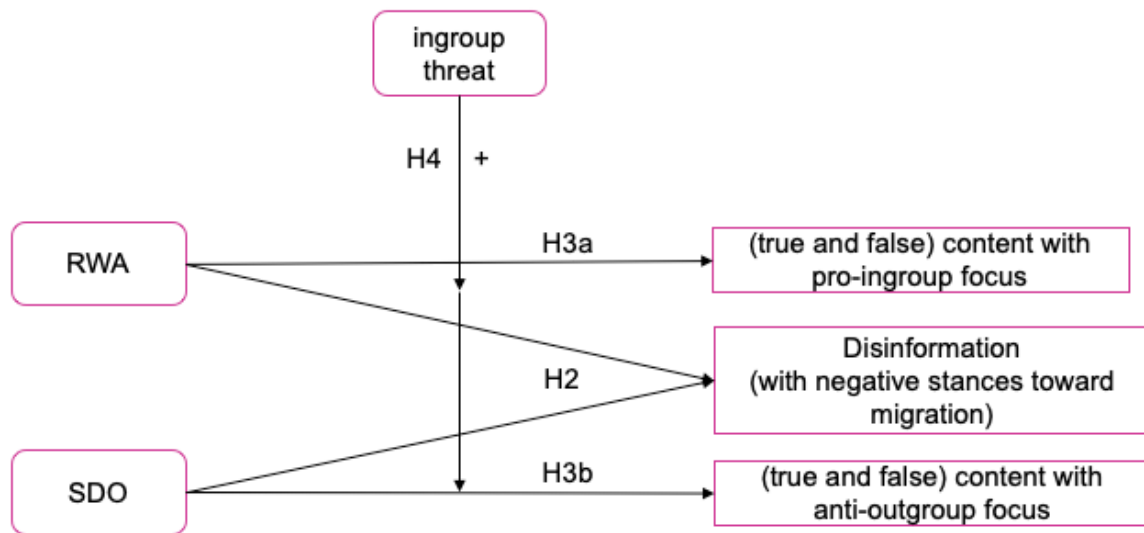


Table 1

Pairwise Correlations: Participants' Attitude Toward Migration, Topic Relevance, Right-Wing Authoritarianism (RWA), Social Dominance Orientation (SDO), and Political Leaning, (N = 1152)

Variables	Attitude toward migration	Topic relevance	RWA	SDO	Political leaning (left – right)
Attitude toward migration	1	.237***	–.332***	–.374***	–.425***
Topic relevance	.237***	1	–.104	–.150***	–.076***
RWA	–.332***	–.104***	1	–.350***	.330***
SDO	–.374***	–.150***	.350***	1	.3689***
Political leaning (left–right)	–.425***	–.076***	.330***	.368***	1

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2

Hierarchical Multiple Regression Analyses Including Variables on Participants' Disinformation Sharing (with negative stances toward migration), (True and False) Information Sharing (with Ingroup Cues), and (True and False) Information Sharing (with Outgroup Cues) as Dependent Variables (N = 1152)

	Disinformation sharing (with negative stances toward migration)			(True and false) information sharing (with ingroup cues)			(True and false) information sharing (with outgroup cues)		
	<i>B</i> (<i>SE_B</i>)	β	ΔR^2	<i>B</i> (<i>SE_B</i>)	β	ΔR^2	<i>B</i> (<i>SE_B</i>)	β	ΔR^2
Step 1			.125			.133			.121
Gender (0 = male; 1 = female)	-.12 (.10)	-.03		-.22 (.10)	-.06*		-.16 (.10)	-.05	
Age	-.02 (.00)	-.13***		-.01 (.00)	-.10***		-.02 (.00)	-.15***	
Education	-.30 (.06)	-.14***		-.31 (.07)	-.13***		-.28 (.06)	-.13***	
Political leaning	.20 (.03)	.21***		.21 (.03)	.21***		.20 (.03)	.20***	
Topic Relevance	.20 (.03)	.10***		.12 (.03)	.10***		.13 (.03)	.11***	
			.067			.069			.061
Step 2									
RWA	.63 (.07)	.27***		.66 (.07)	.27***		.63 (.07)	.26***	
SDO	.11 (.07)	.05		.11 (.08)	.05		.05 (.07)	.02	
Total R^2			.192			.200			.177

* $p < .05$. ** $p < .01$. *** $p < .001$.

Appendix C: Online Appendix of Manuscript 3

**A Dual Process Motivational Bias? The Impact of Right-Wing Ideological Attitude
Dimensions and (Ingroup) Threat on the Sharing of Online Information with Ingroup/Out-
group Cues**

Supplemental Materials:

ONLINE APPENDIX

Table of Contents

Appendix A: Threat Treatment.....	182
Appendix A: Control Treatment	185
Appendix A: Overview of News Tweets (Sharing Task)	188
Appendix B: Additional Hierarchical Regression Analyses.....	200

Appendix A: Threat Treatment

News Tweet



rudolf_k
@rudolf_k



Flüchtlinge nehmen uns nicht nur unsere Jobs weg und bekommen alles umsonst, sie zerstören auch unsere deutschen Traditionen!



12:04 PM · Apr 4, 2023



[Text Translation]

Refugees not only take our jobs and get everything for free, but they also destroy our German traditions!

Article

Bahn, Hartz-IV und weitere Vergünstigungen für Flüchtlinge – Wie dadurch gute Integration verhindert werden könnte

Die Liste der Sonderrechte für Geflüchtete ist lang. Vom Angebot für kostenlose Fernzüge, über die Miete, die vom Jobcenter bezahlt wird, bis hin zur Grundsicherung. Bereits seit 2015 genießen Flüchtlinge staatlich gestützte und von Steuerzahlern finanzierte soziale Vorteile. Das hat nicht nur finanziell negative Auswirkungen auf die deutsche Gesellschaft, sondern ebenfalls Einfluss auf deutsche Werte und Traditionen. Durch die genannten Vergünstigungen ist es den Geflüchteten möglich, ohne richtige Arbeit ihr Leben zu finanzieren. Im Gegensatz zu deutschen Rentnern ist dieser Sachverhalt nicht nur ungerecht, da die Flüchtlinge teilweise mehr Geld zu Verfügung haben als deutsche Bürgerinnen und Bürger, die ihr Leben lang in unsere deutschen Rentenkassen eingezahlt haben, sondern verhindert regelrecht die Integration.

Ohne einen Arbeitsplatz mit regelmäßigem Kontakt zu deutschen Mitarbeitern und Mitarbeiterinnen, fehlen die Möglichkeiten deutsche Gepflogenheiten kennenzulernen. So ist es nicht verwunderlich, dass Traditionen, wie der deutsche Karneval und Weihnachten, von den Flüchtlingen nicht angenommen werden – oder sogar eingeschränkt und korrumpiert werden. Die Missachtung und bewusste Verletzung deutscher Werte wurde vor allem in der Silvesternacht 2015/16 in Köln deutlich, als Frauen durch Gruppen junger Männer mit offensichtlichem Migrationshintergrund sexuell belästigt wurden.

Das Ereignis beweist, es ist nicht unwahrscheinlich, dass weitere Übergriffe dieser Art auch auf Weihnachtsmärkten, Karnevalsumzügen und weiteren traditionsreichen Veranstaltungen in Deutschland geschehen können. So zeigte eine aktuelle soziologische Studie eine Zunahme an Gewaltverbrechen, die im Zusammenhang mit der Einwanderung von Flüchtlingen nach Deutschland steht. Allein die Sorge vor Angriffen führt zu einer Minderung der Freude an solchen Festen mit langer Tradition, die tief im deutschen Brauchtum verwurzelt sind. Eine Möglichkeit die Auswirkungen dieses fortlaufenden Prozesses des Identitätsverlusts der deutschen Kultur zu verhindern, wäre eine Chancengleichheit von Flüchtlingen und Deutschen zu schaffen. Eine soziale und finanzielle Bevorzugung der Geflüchteten ist hierbei der falsche Weg. Politische Veränderungen in diese Richtung sind allerdings nicht in Sicht.

[Translation]

Train, Hartz IV, and Other Benefits for Refugees – How They Could Hinder Successful Integration

The list of special rights for refugees is long, including free long-distance train travel, rent covered by the job center, and basic social security. Since 2015, refugees have enjoyed government-supported and taxpayer-funded social benefits. This has not only financially impacted German society negatively but also affected German values and traditions. These benefits allow refugees to sustain themselves without proper employment. Unlike German pensioners, this situation is unfair because refugees sometimes have more money at their disposal than German citizens who have contributed to the pension system all their lives. Moreover, it hinders integration.

Without a job that involves regular contact with German colleagues, refugees lack opportunities to learn about German customs. It is no surprise that traditions such as German Carnival and Christmas are not adopted by refugees – or are even restricted and corrupted. The disregard

and deliberate violation of German values were particularly evident on New Year's Eve 2015/16 in Cologne when women were sexually harassed by groups of young men with apparent migration backgrounds.

This incident suggests that further assaults of this kind could occur at Christmas markets, Carnival parades, and other traditional events in Germany. A recent sociological study showed an increase in violent crimes linked to the influx of refugees to Germany. The mere concern about attacks diminishes the enjoyment of such long-standing traditions deeply rooted in German customs. One way to prevent the ongoing process of cultural identity loss in Germany would be to create equal opportunities for refugees and Germans. Social and financial favoritism of refugees is the wrong approach. However, political changes in this direction are not in sight.

Appendix A: Control Treatment

News Tweet



Das aktuelle Tageblatt 
@AktTageblatt

...

Urlaub vor der Haustür: Das Elbsandsteingebirge ist eines der spektakulärsten Wandergebiete Europas und bietet nicht nur bizarre Felsformationen der Sächsischen Schweiz, sondern auch viel Kultur!



10:00 AM · Jun 20, 2023

69 Retweets 21 Quote Tweets 420 Likes



[Text Translation]

Vacation Close to Home: The Elbe Sandstone Mountains are one of Europe's most spectacular hiking areas, offering not only the bizarre rock formations of Saxon Switzerland but also plenty of culture!

Article

Deutschlands Naturschönheiten: Wandern in der Sächsischen Schweiz

Das Elbsandsteingebirge ist eines der spektakulärsten Wandergebiete Europas. Etwa 1200 Kilometer markierter Wanderwege führen durch üppig grüne Wälder und mystische Täler, über luftige Höhen und vorbei an bizarren Felsformationen zu immer neuen, atemberaubenden Panoramen. Als Sächsische Schweiz wird der deutsche Teil des Elbsandsteingebirges in Sachsen bezeichnet. Die durch bizarre Felsformen geprägte Landschaft liegt südöstlich von Dresden bei der Elbe im Landkreis Sächsische Schweiz-Osterzgebirge. Künstler der Romantik ließen sich von der wilden Schönheit der Felsen inspirieren, so der Maler Caspar David Friedrich für sein Werk „Der Wanderer über dem Nebelmeer“. Der Komponist Carl Maria von Weber siedelte seine bekannte Oper Freischütz mit der Wolfsschluchtszene in der Nähe von Rathen an. Richard Wagner ließ sich hier für den Lohengrin inspirieren – damit ist das Elbsandsteingebirge eng mit der deutschen Kultur verzahnt.

Die touristische Erschließung begann im Wesentlichen erst im 19. Jahrhundert – was vor allem den finanziellen Aufschwung der Region mit sich brachte. In diesem Zusammenhang verkehrte in der Sächsischen Schweiz auch eine der ersten Oberleitungsbus-Linien weltweit, die von Königstein ausgehende Bielatalbahn (in Betrieb von 1901 bis 1904).

Was aber das Wandern im Elbsandsteingebirge zu einem eindringlichen und unvergesslichen Erlebnis macht, ist die schiere natürliche Vielfalt der Region. Auf engstem Raum treffen die unterschiedlichsten Landschaftsformen aufeinander: Felsen, Tafelberge, Ebenen, Schluchten und Täler. Sie alle verführen zu einer Reise durch eindrucksvolle Reste einer Urnatur. Die Nationalparkregion besteht aus dem Nationalpark (93,5 Quadratkilometer) und dem umgebenden Landschaftsschutzgebiet (287,5 Quadratkilometer). Er enthält besonders geschützte Zonen, die sogenannten „Kernzonen“. Wandern darf man fast überall. Doch je nachdem, wo man sich aufhält, gelten besondere Regeln. Über 1100 Kilometer markierte Pfade, Steige und Wege laden in der Nationalparkregion zum Wandern ein. 400 Kilometer davon im Nationalpark. Hier darf das Gebiet auf Wegen betreten werden.

[Translation]

Germany's Natural Beauties: Hiking in the Saxon Switzerland

The Elbe Sandstone Mountains are one of Europe's most spectacular hiking areas. Around 1,200 kilometers of marked trails lead through lush green forests and mystical valleys, over airy heights and past bizarre rock formations, to ever-new breathtaking panoramas. The German part of the Elbe Sandstone Mountains in Saxony is known as Saxon Switzerland. This landscape, characterized by its bizarre rock formations, lies southeast of Dresden on both sides of the Elbe River in the district of Sächsische Schweiz-Osterzgebirge. Artists of the Romantic era were inspired by the wild beauty of the rocks, including the painter Caspar David Friedrich, for his work "The Wanderer above the Sea of Fog." Composer Carl Maria von Weber set his famous opera "Der Freischütz," with its Wolf's Glen scene, near Rathen. Richard Wagner also drew inspiration from this area for "Lohengrin," thus intertwining the Elbe Sandstone Mountains with German culture.

Tourism development in the region began mainly in the 19th century, bringing significant financial growth to the area. One notable historical aspect is that Saxon Switzerland was home to

one of the world's first trolleybus lines, the Bielatalbahn, which operated from Königstein from 1901 to 1904.

What makes hiking in the Elbe Sandstone Mountains an intense and unforgettable experience is the sheer natural diversity of the region. In a compact area, a variety of landscapes converge: rocks, table mountains, plains, gorges, and valleys. All these features invite travelers to explore the impressive remnants of primeval nature. The national park region consists of the National Park (93.5 square kilometers) and the surrounding protected landscape area (287.5 square kilometers). It includes particularly protected zones, the so-called "core zones." Hiking is allowed almost everywhere, but specific rules apply depending on the area. Over 1,100 kilometers of marked trails, paths, and routes invite hikers to explore the national park region, with 400 kilometers of these trails within the National Park itself, where visitors must stay on designated paths.

Appendix A: Overview of News Tweets (Sharing Task)

News Tweet: Negative Disinformation with Ingroup Cue



[Text Translation]

Immigrants are vandalizing Christmas trees: We need to protect the symbols of Christian Christmas.

News Tweet: Negative Disinformation with Ingroup Cue

[Text Translation]

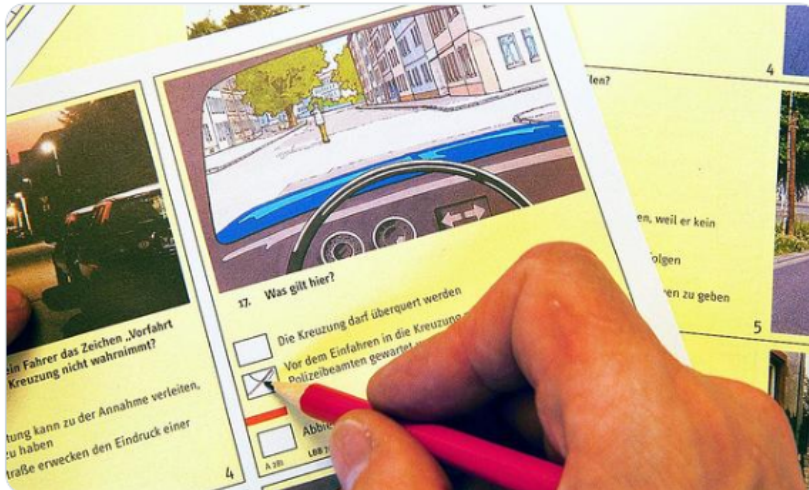
After a series of thefts by refugees: German grocery stores need to be protected.

News Tweet: Negative Disinformation with Outgroup Cue**Das aktuelle Tageblatt** ✓

@AktTageblatt

...

Flüchtlinge = Schnorrer? Asylsuchende erhalten die Fahrerlaubnis gratis.



10:00 AM · Jun 22, 2023

77 Retweets **17 Quote Tweets** **492 Likes**

[Text Translation]

Refugees = freeloaders? Asylum seekers receive driver's licenses for free.

News Tweet: Negative Disinformation with Outgroup Cue**Das aktuelle Tageblatt** ✓

@AktTageblatt



Privatversicherung für Asylbewerber: Im Gegensatz zu vielen deutschen gesetzlich Versicherten erhalten Geflüchtete in deutschen Kliniken alle Privilegien von Privatpatienten.



10:00 AM · Jun 22, 2023

69 Retweets **21** Quote Tweets **420** Likes

[Text Translation]

Private insurance for asylum seekers: Unlike many German citizens with public health insurance, refugees receive all the privileges of private patients in German clinics.

News Tweet: Negative Verified Information with Ingroup Cue

Das aktuelle Tageblatt 
@AktTageblatt



**Mehr Schutz vor illegalen Einwanderern nötig:
Vermehrter Einsatz von Rasterfahndungen zur
Sicherung des deutschen Staates.**



10:00 AM · Jun 19, 2023

69 Retweets **21** Quote Tweets **420** Likes



[Text Translation]

More protection against illegal immigrants needed: Increased use of dragnet investigations to secure the German state.

News Tweet: Negative Verified Information with Ingroup Cue

Das aktuelle Tageblatt 
@AktTageblatt

...

Deutsche Kinder besser schützen: Zweifel an Sinnhaftigkeit internationaler Klassen mit geflüchteten Kindern.



10:00 AM · Jun 19, 2023

140 Retweets 48 Quote Tweets 481 Likes



[Text Translation]

Better protection for German children: Doubts about the usefulness of international classes with refugee children.

News Tweet: Negative Verified Information with Outgroup Cue



Das aktuelle Tageblatt 

@AktTageblatt



Deutschland für Sozialtourismus immer beliebter:
Ämter bezahlen Gaskosten der Geflüchteten.



10:00 AM · Jun 20, 2023

140 Retweets **48** Quote Tweets **481** Likes



[Text Translation]

Germany increasingly popular for social tourism: Authorities cover refugees' gas costs.

News Tweet: Negative Verified Information with Outgroup Cue

Das aktuelle Tageblatt 
@AktTageblatt

...

Kostenloses und unbegrenztes Bahnfahren für Geflüchtete: Ein Privileg, welches die Mobilität von Deutschen durch Überlastung des Bahnverkehrs einschränken könnte.



10:00 AM · Jun 20, 2023

64 Retweets 32 Quote Tweets 422 Likes



[Text Translation]

Free and unlimited train travel for refugees: A privilege that could limit mobility for Germans due to increased strain on the railway system.

News Tweet: Positive Verified Information



[Text Translation]

Integration is more successful when families can build a life together in Germany.

News Tweet: Positive Verified Information

Das aktuelle Tageblatt 
@AktTageblatt



Die Integration von Geflüchteten ist in Deutschland eine Erfolgsgeschichte: Warum Deutschland von Zuwanderung profitiert.



10:00 AM · Jun 20, 2023

64 Retweets **32** Quote Tweets **422** Likes



[Text Translation]

The integration of refugees in Germany is a success story – Why Germany benefits from immigration.

News Tweet: Positive Disinformation

Das aktuelle Tageblatt 
@AktTageblatt

...

Deutschland geht es besser denn je: Wie Deutschland vom enormen Zustrom Geflüchteter nicht nur finanziell, sondern auch kulturell profitiert.



10:00 AM · Jun 22, 2023

64 Retweets **32** Quote Tweets **422** Likes



[Text Translation]

Germany is better than ever: How Germany benefits not only financially but also culturally from the significant influx of refugees.

News Tweet: Positive Disinformation

Das aktuelle Tageblatt 
@AktTageblatt

...

Wir haben es geschafft: Das Wundermittel Integration sorgt in Deutschland für wirtschaftliche Rekordhöhen des Bruttoinlandsprodukts.



10:00 AM · Jun 22, 2023

140 Retweets **48** Quote Tweets **481** Likes



[Text Translation]

We did it: The miracle of integration is driving record-high GDP growth in Germany.

Appendix B: Additional Hierarchical Regression Analyses

Measures

Sharing of (true and false) positive information on migration. To assess participants' likelihood to share (true and false) information with positive stances on migration, we computed the overall mean score of the likelihood of sharing ($M = 2.48$, $SD = 1.68$, $\alpha = .910$) for these information tweets on a 7-point scale ("How likely is it that you would share the tweet with your contacts?" ranging from 1 = highly unlikely to 7 = highly likely).

Sharing of (true and false) negative information on migration. Likewise, we utilized the same procedure to determine the likelihood of sharing (true and false) negative information ($M = 2.58$, $SD = 1.76$, $\alpha = .948$).

Sharing of (positive and negative) disinformation on migration. We conducted the same procedure to calculate the likelihood of sharing (positive and negative) disinformation ($M = 2.44$, $SD = 1.58$, $\alpha = .889$).

Sharing of all (true and false, positive and negative) information on migration. We followed the same procedure to calculate the likelihood of sharing all (true and false, positive and negative) information we presented ($M = 2.54$, $SD = 1.58$, $\alpha = .944$).

Results

We conducted additional hierarchical regression analyses with the dependent variables: (1) (true and false) positive information sharing, (2) (true and false) negative information sharing, (3) (positive and negative) disinformation sharing, and (4) all (true and false, positive and negative) aka general information sharing. As predictors, the following variables were entered: (1) gender, age, education, political leaning and topic relevance (as control variables); (2) RWA and SDO. All three regression models were significant (see Table 1).

The first hierarchical regression analysis with (1) (true and false) information sharing with opposing (negative) stances toward migration as the dependent variable revealed that gender ($\beta = -.05, p < .05$), age ($\beta = -.13, p < .001$), education ($\beta = -.14, p < .001$), political leaning ($\beta = .21, p < .001$), topic relevance ($\beta = .11, p < .001$), and RWA ($\beta = .28, p < .001$) significantly predicted the sharing of (true and false) information with opposing stances toward migration, whereas SDO had no significant influence ($\beta = .03, p = .266$). Being male, of lower age, lower educated, on the right side of the political spectrum, personally involved in the migration topic, and right-wing authoritarian significantly increased the likelihood of sharing such information. The regression model explained 20.7% of the variance (Total $R^2 = .207$).

The second hierarchical regression analysis with (2) (true and false) information sharing with supporting (positive) stances toward migration as the dependent variable revealed that gender ($\beta = -.11, p < .001$), age ($\beta = -.13, p < .001$), topic relevance ($\beta = .19, p < .001$), and RWA ($\beta = .16, p < .001$) significantly predicted the sharing of (true and false) information with supporting stances toward migration, whereas education ($\beta = .03, p = .348$), political leaning ($\beta = -.02, p = .447$), and SDO had no significant influence ($\beta = -.03, p = .407$). Being male, of lower age, personally involved in the migration topic, and right-wing authoritarian significantly increased the likelihood of sharing such information. The regression model explained 7.3% of the variance (Total $R^2 = .073$).

The third hierarchical regression analysis with (3) (positive and negative) disinformation sharing as the dependent variable revealed that gender ($\beta = -.07, p < .05$), age ($\beta = -.15, p < .001$), education ($\beta = -.11, p < .001$), political leaning ($\beta = .15, p < .001$), topic relevance ($\beta = .13, p < .001$), and RWA ($\beta = .26, p < .001$) significantly predicted the sharing of disinformation with supporting (positive) and opposing (negative) stances toward migration, whereas SDO had

no significant influence ($\beta = .03, p = .396$). Being male, of lower age, lower educated, on the right side of the political spectrum, personally involved in the migration topic, and right-wing authoritarian significantly increased the likelihood of sharing such information. The regression model explained 15.7% of the variance (Total $R^2 = .157$).

The fourth hierarchical regression analysis with (4) general information sharing as the dependent variable revealed that gender ($\beta = -.08, p < .01$), age ($\beta = -.14, p < .001$), education ($\beta = -.11, p < .001$), political leaning ($\beta = .15, p < .001$), topic relevance ($\beta = .15, p < .001$), and RWA ($\beta = .26, p < .001$) significantly predicted the sharing of all (true and false, negative and positive) information we presented, whereas SDO had no significant influence ($\beta = .03, p = .620$). Being male, of lower age, lower educated, on the right side of the political spectrum, personally involved in the migration topic, and right-wing authoritarian significantly increased the likelihood of sharing such information. The regression model explained 16.1% of the variance (Total $R^2 = .161$).

Table 1

Hierarchical Multiple Regression Analyses Including Variables on Participants' (True and False) Information Sharing with Negative and Positive Stances Toward Migration, Disinformation Sharing with Negative and Positive Stances Toward Migration, and General Information Sharing as Dependent Variables (N = 1152)

	(True and false) information sharing (negative stances toward migration)			(True and false) information sharing (positive stances toward migration)			Disinformation sharing (positive and negative stances toward migration)			General information sharing		
	<i>B</i> (<i>SE_B</i>)	β	ΔR^2	<i>B</i> (<i>SE_B</i>)	β	ΔR^2	<i>B</i> (<i>SE_B</i>)	β	ΔR^2	<i>B</i> (<i>SE_B</i>)	β	ΔR^2
Step 1			.138			.054			.099			.102
Gender (0 = male; 1 = female)	-.19 (.10)	-.05*		-.35 (.10)	-.11***		-.21 (.09)	-.07*		-.24 (.09)	-.08**	
Age	-.02 (.00)	-.13***		-.02 (.00)	-.13***		-.02 (.00)	-.15***		-.02 (.00)	-.14***	
Education	-.30 (.06)	-.14***		-.06 (.06)	-.03		-.22 (.06)	-.11***		-.22 (.06)	-.11***	
Political leaning	.20 (.03)	.21***		-.02 (.03)	-.02		.13 (.03)	.15***		.13 (.03)	.15***	
Topic Relevance	.13 (.03)	.11***		.21 (.03)	.19***		.14 (.03)	.13***		.16 (.03)	.15***	
			.069			.019			.059			.059
Step 2												
RWA	.64 (.07)	.28***		.34 (.07)	.16***		.53 (.06)	.26***		.54 (.06)	.26***	
SDO	.08 (.07)	.03		-.06 (.07)	-.03		.06 (.07)	.03		.03 (.07)	.02	
Total R^2			.207			.073			.157			.161

* $p < .05$. ** $p < .01$. *** $p < .001$.

Curriculum Vitae

Curriculum Vitae

PERSONAL INFORMATION

Lea-Johanna Klebba, PhD

📍 University of Kaiserslautern-Landau, Fortstr. 7, 76829 Landau, Germany

WORK EXPERIENCE

- Since 04/2019 **Doctoral candidate**
Department of Media Psychology, RPTU Kaiserslautern Landau, Germany
Member of the Institute of Communication Psychology and Media Education
- 04/2019 – 10/2024 Research assistant, Department of Media Psychology, RPTU Kaiserslautern Landau, Germany
- 10/2017 – 04/2019 PhD candidate with a doctoral scholarship (Christoph-Martin-Wieland Graduate Forum), Media and Communication Science: Empirical Communication Research and Methods (Chair: Prof. Dr. Patrick Rössler), University of Erfurt, Germany
- 02/2017 – 04/2019 Editorial department's assistant (Redaktion Vorschule), Kinderkanal (KiKA) von ARD und ZDF (kids tv channel), Erfurt
- 11/2016 – 10/2018 Student assistant, Media and Communication Science: Empirical Communication Research and Methods (Chair: Prof. Dr. Patrick Rössler), University of Erfurt, Germany
- 04/2016 – 10/2016 Intern of the Goethe-Institute (Information and Library) in Toronto, Canada
- 05/2015 – 03/2016 Student assistant, Media and Communication Science (Dr. Markus Seifert), University of Erfurt, Germany
- 04/2014 – 09/2014 Student Assistant, Marketing and Communication (Chair: Prof. Dr. Simone Besemer), Baden-Wuerttemberg Cooperative State University (DHBW), Ravensburg, Germany

EDUCATION AND TRAINING

- 2017 **Master of Arts**
Communication Science: Politics and Society
University of Erfurt, Germany
- 2014 B.A., Economics of media and communication, Baden-Wuerttemberg Cooperative State University (DHBW), Ravensburg, Germany
- 2011 Abitur, Gymnasium am Mühlenweg, Wilhelmshaven, Germany

ADDITIONAL INFORMATION

- Publications**
- Klebba, L.-J., & Winter, S. (2025). The influence of threat and right-wing authoritarianism on the selection of online (dis)information – a conceptual replication and extension of Lavine et al. (2005). *Human Communication Research*, 51(1), 52–56. <https://doi.org/10.1093/hcr/hqae016>
- Klebba, L.-J., & Winter, S. (2024). A matter of trust? Analyzing the relationship between attitudes toward COVID-19 countermeasures and right-wing ideology in Germany. *Analyses of Social Issues and Public Policy*, 24(3), 1155–1173. <https://doi.org/10.1111/asap.12427>
- Klebba, L.-J., & Winter, S. (2024). Crisis alert: (Dis)information selection and sharing in the COVID-19 pandemic. *Communications*, 49(2), 318–338. <https://doi.org/10.1515/commun-2022-0020>
- Conference Presentations**
- Klebba, L.-J., & Winter, S. (2024, September). *A Matter of Trust? Analyzing the Relationship Between Attitudes Toward COVID-19 Countermeasures and Right-Wing Ideology in Germany*. Paper presented at annual meeting of German Psychological Society, Vienna, Austria.
- Klebba, L.-J., & Winter, S. (2024, July). *A Dark Triangle? The Impact of Right-Wing Ideological Attitude*

Curriculum Vitae

Dimensions and (Ingroup) Threat on the Sharing of Online Disinformation. Paper presented at annual meeting of the International Society of Political Psychology, Santiago de Chile, Chile.

Klebba, L.-J., & Winter, S. (2023, September). *Uncovering A Dangerous Link? How Right-Wing Ideological Attitude Dimensions and (Ingroup) Threat May Fuel Online Disinformation Sharing.* Paper presented at the Media Psychology Conference of the German Psychological Society, Luxembourg, Belgium.

Klebba, L.-J., & Winter, S. (2022, July). *The Influence of Threat and Right-Wing Authoritarianism on the Selection of Online (Dis)Information - A Pre-Registered Test of the Threat-RWA-Activation Hypothesis.* Paper presented at the annual Meeting of the International Society of Political Psychology, Athens, Greece.

Klebba, L.-J. & Winter, S. (2022, May). *The Influence of Threat and Right-Wing Authoritarianism on the Selection of Online (Dis)Information - A Pre-Registered Test of the Threat-RWA-Activation Hypothesis.* Paper presented at the annual meeting of the International Communication Association (ICA), Paris, France.

Klebba, L.-J. & Winter, S. (2021, September). *A fatal affair? Is right-wing authoritarianism (RWA) reactive to threat?* Poster presented at the Media Psychology conference of the German Psychological Society DGPs. Aachen, Germany.

Klebba, L.-J. & Winter, S. (2021, May). *Threat alert: (Fake) News selection and sharing during the COVID-19 pandemic.* Paper presented at the annual conference of the International Communication Association. Virtual Event.

Klebba, L.-J. & Winter, S. (2020, January). *Information selection in times of crisis. The effect of threat on selective information selection and further information seeking.* Presentation at the conference of 24 Hours of Political Psychology. Hagen, Germany.

Klebba, L.-J. (2019, Dezember). *Informationsauswahl in Krisenzeiten. Der Effekt von Bedrohung auf die selektive Informationssuche und weitere Informationsauswahl.* Conference presentation (Napoko-Network of young researchers in the field of political communication), Wien, Austria.

Projects

Since 10/2022

05/2020 – 05/2021

Right wing authoritarianism, perceived threat through losing money, and intergroup conflicts (cooperation with and funded by the department of Health Communication, University of Erfurt)
‘#opinionleading #manipulation #mobilization: Contents and communication strategies of vegan influencers on Instagram’ (funded by seed money grants from the Institute of Communication Psychology and Media Education. Principal Investigator (with Kira Thiel, Leibniz Institute for Media Research | Hans Bredow Institute)

Awards and Academic Functions

2020

Teaching award, Digital courses, University of Koblenz-Landau

2018-2019

Doctoral scholarship (Christoph-Martin-Wieland Graduate Forum), University of Erfurt

2017

Member of the network “Communication and Digital Media, University of Erfurt

2016

DAAD scholarship for working and study experiences abroad

2010

Award for Young Journalists, young leaders GmbH

Statutory Declaration

[Eidesstattliche Erklärung]

Hiermit erkläre ich eidesstattlich, dass ich, Lea-Johanna Klebba,

- die Dissertation selbst angefertigt und alle Hilfsmittel in der Arbeit angegeben habe,
- dass ich die Dissertation noch nicht als Prüfungsarbeit für eine staatliche oder andere wissenschaftliche Prüfung eingereicht habe und
- die gleiche oder eine andere Abhandlung nicht bei einer anderen Hochschule als Dissertation eingereicht habe.

Eine Auflistung der Beiträge, die ich bei den gemeinsam verfassten Publikationen erbracht habe, sind den angehängten CRediT-Tabellen zu entnehmen.

Landau, den 25.11.2024

Manuscript 1:

Klebba, L.-J., & Winter, S. (2024). Crisis alert: (Dis)information selection and sharing in the COVID-19 pandemic. *Communications*, 49(2), 318–338. <https://doi.org/10.1515/commun-2022-0020>

CRedit Role	Author 1: [Lea-Johanna Klebba]	Author 2: [Stephan Winter]	Author 3: [Name]	Author 4: [Name]	Author 5: [Name]
1. Conceptualization	☒ equal	☒ equal	☐ --	☐ --	☐ --
2. Data curation	☒ --	☐ --	☐ --	☐ --	☐ --
3. Formal analysis	☒ --	☐ --	☐ --	☐ --	☐ --
4. Funding acquisition	☒ equal	☒ equal	☐ --	☐ --	☐ --
5. Investigation	☒ --	☐ --	☐ --	☐ --	☐ --
6. Methodology	☒ --	☐ --	☐ --	☐ --	☐ --
7. Project administration	☒ --	☐ --	☐ --	☐ --	☐ --
8. Resources	☒ equal	☒ equal	☐ --	☐ --	☐ --
9. Software	☒ --	☐ --	☐ --	☐ --	☐ --
10. Supervision	☒ equal	☒ equal	☐ --	☐ --	☐ --
11. Validation	☒ --	☐ --	☐ --	☐ --	☐ --
12. Visualization	☒ --	☐ --	☐ --	☐ --	☐ --
13. Writing – original draft	☒ --	☐ --	☐ --	☐ --	☐ --
14. Writing – review & editing	☐ --	☒ --	☐ --	☐ --	☐ --

Unterschrift Prof. Dr. Stephan Winter

Manuscript 2:

Klebba, L.-J., & Winter, S. (2025). The influence of threat and right-wing authoritarianism on the selection of online (dis)information – a conceptual replication and extension of Lavine et al. (2005). *Human Communication Research*, 51(1), 52–56.
<https://doi.org/10.1093/hcr/hqae016>

CRedit Role	Author 1: [Lea-Johanna Klebba]	Author 2: [Stephan Winter]	Author 3: [Name]	Author 4: [Name]	Author 5: [Name]
1. Conceptualization	☒ equal	☒ equal	☐ --	☐ --	☐ --
2. Data curation	☒ --	☐ --	☐ --	☐ --	☐ --
3. Formal analysis	☒ --	☐ --	☐ --	☐ --	☐ --
4. Funding acquisition	☒ equal	☒ equal	☐ --	☐ --	☐ --
5. Investigation	☒ --	☐ --	☐ --	☐ --	☐ --
6. Methodology	☒ lead	☒ supporting	☐ --	☐ --	☐ --
7. Project administration	☒ --	☐ --	☐ --	☐ --	☐ --
8. Resources	☒ equal	☒ equal	☐ --	☐ --	☐ --
9. Software	☒ --	☐ --	☐ --	☐ --	☐ --
10. Supervision	☒ equal	☒ equal	☐ --	☐ --	☐ --
11. Validation	☒ --	☐ --	☐ --	☐ --	☐ --
12. Visualization	☒ --	☐ --	☐ --	☐ --	☐ --
13. Writing – original draft	☒ --	☐ --	☐ --	☐ --	☐ --
14. Writing – review & editing	☐ --	☒ --	☐ --	☐ --	☐ --

Unterschrift Prof. Dr. Stephan Winter

Manuscript 3:

Klebba, L.-J., Winter, S., & Reese, G. (under review). A Dual Process Motivational Bias? The Impact of Right-Wing Ideological Attitude Dimensions and (Ingroup) Threat on the Sharing of Online Information with Ingroup/Outgroup Cues.

CRedit Role	Author 1: [Lea-Johanna Klebba]	Author 2: [Stephan Winter]	Author 3: [Gerhard Reese]	Author 4: [Name]	Author 5: [Name]
1. Conceptualization	☒ equal	☒ equal	☒ equal	☐ --	☐ --
2. Data curation	☒ --	☐ --	☐ --	☐ --	☐ --
3. Formal analysis	☒ --	☐ --	☐ --	☐ --	☐ --
4. Funding acquisition	☒ equal	☒ equal	☒ equal	☐ --	☐ --
5. Investigation	☒ --	☐ --	☐ --	☐ --	☐ --
6. Methodology	☒ lead	☒ supporting	☒ supporting	☐ --	☐ --
7. Project administration	☒ --	☐ --	☐ --	☐ --	☐ --
8. Resources	☒ equal	☒ equal	☒ equal	☐ --	☐ --
9. Software	☒ --	☐ --	☐ --	☐ --	☐ --
10. Supervision	☒ equal	☒ equal	☒ equal	☐ --	☐ --
11. Validation	☒ --	☐ --	☐ --	☐ --	☐ --
12. Visualization	☒ --	☐ --	☐ --	☐ --	☐ --
13. Writing – original draft	☒ --	☐ --	☐ --	☐ --	☐ --
14. Writing – review & editing	☐ --	☒ equal	☒ equal	☐ --	☐ --

 Unterschrift Prof. Dr. Stephan Winter

 Unterschrift Prof. Dr. Gerhard Reese