Disrupting Democracy: The Role of Mis- and Disinformation in Shaping Political Participation

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Introduction

In recent years, public discourse has been flooded with concerns over misinformation and fake news, with widespread apprehension that it threatens the health of democratic societies (Reglitz, 2022). Research underscores that organized misinformation campaigns, such as those targeting public health and climate change, have undermined trust in institutions and factual information, eroding the foundations of democratic decision-making (Lewandowsky et al., 2023). Reports and studies increasingly highlight that many citizens feel that misinformation is pervasive, fueling concerns about its impact on individuals in society (Ashikuzzaman, 2024). This apprehension is magnified by the visibility of fake news on social media platforms, which not only spreads false information, but also fosters fear of manipulation and distrust in media narratives (Benton, 2023). This rising tide of mis- and disinformation blurs the line between fact and fiction, creating confusion and challenging people's trust in credible information sources.

The consequences of these perceptions of mis- and disinformation are significant. Citizens who believe mis- and disinformation are rampant may become cynical, doubting even trustworthy sources of information, which can erode confidence in both media and political institutions (Pinkleton & Austin, 2004). Furthermore, mis- and disinformation often exacerbate polarization, as individuals seek out echo chambers that reinforce their beliefs, creating an environment of deep-seated mistrust. Scholars argue that this erosion of trust, when widespread, can weaken democratic participation, as disillusioned citizens may withdraw from civic activities or avoid electoral participation altogether (Jones-Jang et al., 2020, p. 1308; Bennett & Livingston, 2018).

The focus on participation is particularly pressing because one of the goals of disinformation campaigns is often to undermine civic engagement and democratic participation (Colomina et al., 2021). For instance, during the 2016 U.S. presidential election, Russian-backed

misinformation campaigns sought to suppress voter turnout by targeting marginalized communities with false information about voting processes (Howard et al., 2018). By fostering confusion and mistrust, such campaigns can dissuade citizens from engaging in the political process, ultimately weakening democratic systems. Additionally, perceptions of mis- and disinformation—even when actual exposure is relatively low—may have an outsized impact on behavior. Media coverage often amplifies the visibility of fake news, creating a perception that misinformation is pervasive and making subjective considerations, such as fear of manipulation, as consequential as objective exposure (Tsfati et al., 2020). Examining these perceptions and their effects is crucial for understanding how mis- and disinformation campaigns may indirectly erode democratic stability through their impact on participation.

Existing research predominantly focuses on the experimental effects of false information on subsequent beliefs about false narratives and how corrective or fact-checking messages moderate misperceptions (Hameleers & van der Meer, 2019; Nyhan & Reifler, 2010; Thorson, 2016; cf., Van Duyn & Collier, 2019). Additionally, many empirical works have illustrated the descriptive nature of mis- and disinformation by analyzing its content and the scope of its spread (Jones-Jang et al., 2020, p. 3109). Although these studies address critical aspects of how false information spreads and its immediate effects on individual beliefs, they fall short of capturing the broader societal impacts of the persistence of misinformation. Notably, while much attention has been paid to its prevalence and influence on trust and polarization, limited research examines its effects on political participation. Thus, in an attempt to address one of these broader societal implications, the following research question is proposed: "What is the effect of perceptions of mis- and disinformation on political participation?"

I argue that higher levels of perceptions of mis- and disinformation will lead to lower levels of political participation, as citizens become less trusting of and more cynical towards both media and democratic institutions. Mis- and disinformation foster confusion, eroding confidence in

reliable information sources and creating feelings of disempowerment. This feeling of cynicism, confusion and distrust is closely tied to diminished political efficacy. Citizens may feel that their participation is futile, which may result in withdrawal from political processes altogether. This disengagement, driven by diminished political efficacy and reduced trust, undermines collective civic engagement, which is vital for the proper functioning of democratic systems.

To investigate this issue, I will be using data from the Europinions survey (Goldberg et al., 2021), which measures public perception of mis- and disinformation across European countries. By analyzing this data, I investigate the relationship between perceptions of mis- and disinformation and political participation. Finding an answer to the research question is important, as it provides insights into how public distrust and negative perceptions of media information may influence citizens' political behaviors and attitudes. This is especially crucial in today's media environment, where the spread of mis- and disinformation poses a significant threat to the integrity of democratic processes and political participation. Understanding these dynamics could help policymakers and researchers develop strategies to mitigate the impact of mis- and disinformation and regain public trust in political institutions.

Literature review and theory

Understanding Mis- and disinformation: Definitions, Drivers and Impacts

The impact of mis- and disinformation on democratic processes has become a major concern among scholars. Misinformation refers to false or misleading information shared without intent to deceive, while disinformation involves deliberately false information spread to manipulate or deceive, often for political purposes (Karlova & Fisher, 2013; Wardle & Derakhshan, 2017). Though often grouped under terms like "fake news," distinguishing between these concepts is essential to understanding their distinct effects on public opinion and political participation. Misinformation, as Vraga & Bode (2020) note, encompasses factually incorrect information that arises without manipulative intent, contributing to growing distrust in media and challenges to maintaining an informed public (Ahmed et al., 2021). Disinformation, by contrast, is a calculated effort to deceive, frequently aimed at fostering distrust and polarization (Hameleers et al., 2022). Wardle & Derakhshan (2017) further highlight the varied manifestations of these phenomena, such as false content and imposter content, underscoring their complex social and political consequences.

Misinformation has become an increasingly pervasive issue in the digital age, amplified by the large amount of unfiltered information available on the Internet and social media platforms. While exposure to unreliable information on mainstream websites remains limited (e.g., only 5% of French survey respondents visited such websites), misinformation is predominantly encountered on social media, where information dissemination is rapid, largely unregulated, and often tied to current events (Beauvais, 2022). During the COVID-19 pandemic, for example, fake news on social media surged by 900% within three months, with platforms like Facebook and Twitter accounting for 88% of its spread, compared to negligible contributions from traditional media like television or print press (Beauvais, 2022, pp. 1-2).

Social media's relatively uncurated environment, where algorithmic amplification and inconsistent moderation allow influencers and content creators to rival traditional gatekeepers such as scientists and journalists, has disrupted traditional hierarchies of information and reshaped public discourse. This transformation has exacerbated the spread of misinformation, driven by psychological and cognitive factors. False news spreads faster and more broadly than accurate news, often because it appeals to human tendencies to prioritize novel and emotionally charged content. On platforms like Twitter, false news is 70% more likely to be retweeted, with the top 1% of false news cascades reaching up to 100,000 people (Beauvais, 2022, pp. 2-3). The persistence of misinformation is further fueled by uncertainty. Fake news often leverages unresolved issues or delayed corrections, exploiting users' neglect of fact-checks and debunks. This dynamic allows false narratives to persist, even when challenged, as users rarely share corrections as widely as initial rumors. Confirmation bias and intuitive reasoning also play significant roles, with individuals tending to seek out, believe and share information aligning with their pre-existing beliefs or political affiliations (Druckman et al., 2012, p. 432). Studies show that partisanship influences perceptions of misinformation, with those at political extremes more likely to accept false narratives (Beauvais, 2022, p. 3).

The theory of motivated reasoning further explains the formation and persistence of mis- and disinformation. Kunda (1990) distinguishes between two motivations: 1) the desire to reach an accurate conclusion, and 2) the desire to reach a particular conclusion. Some scholars argue that misinformation arises not from a specific conclusion but from the need to maintain consistent beliefs (Festinger, 1957). This theory is extended by recognizing that deliberate deception by third parties, such as disinformation campaigns, plays a critical role in spreading falsehoods, often targeting individuals' cognitive biases and belief systems (Lewandowsky et al., 2017). Additionally, a lack of analytic reflection can heighten susceptibility to

misinformation, as individuals who rely less on analytic thinking are less able to discern truth from falsehood (Arechar et al., 2023). Ultimately, the belief in mis- and disinformation results from a closed mind, incorrect inferences, or deliberate deception, as individuals, especially those less inclined to engage in reflective thinking, are motivated to uphold their beliefs and follow misleading advice.

Finally, the role of elite figures and disinformation underscores the complex nature of misinformation. Prominent individuals, including politicians and celebrities, frequently act as "super-spreaders" of false information, significantly amplifying its reach. Disinformation further complicates the landscape, often motivated by political or financial goals. This phenomenon highlights the importance of understanding the cues, formats, and motivations behind fake news to combat its detrimental effects on public trust and information integrity (Beauvais, 2022, p. 3).

Perceived Mis- and Disinformation and its Influence on Democratic Outcomes

The widespread effects of misinformation extend beyond distorted individual beliefs, influencing critical democratic outcomes such as voting behavior and political participation. For example, being misinformed may lead to suboptimal vote choices, with individuals basing decisions on false or misleading claims that align with their pre-existing biases, and voting 'incorrectly', meaning their choices do not align with their own interests, values, or policy preferences when provided with accurate information (Lau et al., 2013).

Objective measures of misinformation, such as the prevalence of false narratives in public discourse, underscore its broader implications, with heightened exposure correlating to increased polarization, reduced institutional trust, and weakened public support for evidence-

based policymaking (Lewandowsky et al., 2017). However, recent research emphasizes the importance of perceptions of misinformation rather than actual exposure in understanding its effects on political attitudes and behaviors.

Individuals' awareness or belief that they have encountered mis- or disinformation may have more significant implications for their perceptions of the political system than actual exposure itself. For example, Jones-Jang et al. (2021) suggest that it is not the exposure to specific instances of misinformation, but rather individuals' perception of such exposure, that impacts their views on the political system (such as political cynicism). This distinction highlights a key theoretical insight: it is not necessarily mis- or disinformation itself, but the perception that the political information environment is being corrupted by widespread mis- and disinformation, that drives feelings of distrust and cynicism. In other words, individuals may come to believe that the political system as a whole is being undermined, which can have far-reaching consequences for their attitudes toward democratic institutions. Moreover, ordinary news audiences often lack the ability to accurately assess their actual exposure to mis- and disinformation, making their subjective perceptions of misinformation exposure more influential than any objective measure of actual exposure (Jones-Jang et al., 2021). This gap suggests that individuals' beliefs about the prevalence and impact of misinformation—whether or not those beliefs are accurate—are more likely to shape their evaluations of the political system. For instance, recent evidence shows that exposure to fake news itself does not significantly erode trust in the media, but exposure to elite discourse about fake news can indeed decrease media trust (Jones-Jang et al., 2021). This demonstrates that perceptions are central: the narrative surrounding mis- and disinformation may carry greater weight in shaping attitudes than the mis- and disinformation itself.

This shift to understanding perceptions of misinformation reveals a critical insight: subjective beliefs about the prevalence and influence of misinformation can shape political behavior as

much as, if not more than, the actual presence of false information. These perceptions can also influence how individuals evaluate the legitimacy of democratic processes, with broader implications for political participation and trust in institutions.

Implications for Political Participation

Exposure to misinformation has been shown to fuel political cynicism, defined as distrust in the motivations and intentions of politicians and government institutions (Capella & Jamieson, 1997). This cynicism stems from the belief that politicians prioritize self-interest and power over public needs, resulting in perceptions of empty promises and strategic behavior focused on electoral gain rather than the public good (Citrin, 1997; Erber & Lau, 1990; Schuck et al., 2013). Such views contribute to negative evaluations of politicians' integrity and work ethic (Capella & Jamieson, 1996). Political cynicism is not merely a temporary frustration; it represents a deep-seated distrust in the political system, indicating that citizens feel the government consistently fails to meet their expectations (Miller, 1974; Strama, 1998).

Studies suggest that media exposure to strategic political news—coverage focused on competition and tactics rather than substantive policy—exacerbates these cynical attitudes, particularly during election campaigns, as citizens interpret political events through a lens of skepticism (Capella & Jamieson, 1997; De Vreese & Semetko, 2002). This decrease in trust is linked to a decline in political efficacy, with cynical individuals less likely to believe in the government's legitimacy or electoral fairness (Elenbaas & De Vreese, 2008; Barthel & Moy, 2017). Consequently, the more cynical voters become, the less likely they are to engage in political activity, ultimately distancing themselves from political processes (Pinkleton & Austin, 2004).

Political efficacy is a critical concept in this context, as it refers to individuals' belief in their ability to influence political and social change (Campbell, Gurin & Miller, 1954). It has two key dimensions: internal efficacy, which reflects a person's confidence in their ability to understand and participate in political processes, and external efficacy, which measures their belief in the responsiveness of government institutions (OECD, 2021). Both forms of efficacy are essential for democratic stability, as citizens who feel empowered to engage with and influence politics are more likely to support the democratic system and participate in civic activities (Schulz, 2005). Internal efficacy is positively associated with all forms of political participation, while external efficacy tends to encourage traditional, institutionalized participation but may negatively affect engagement in digital or extra-institutional forms of activism (Prats & Meunier, 2021).

Findings from a two-wave panel survey conducted during the 2018 US midterm elections further highlight the relationship between perceptions of misinformation, political cynicism, and political participation. The study revealed that perceived exposure to misinformation and disinformation before the election significantly predicted increased political cynicism over the campaign period (Jones-Jang et al., 2020). Notably, the indirect relationship between social media news use and political cynicism, mediated by perceptions of misinformation exposure, underscores the critical role of subjective beliefs in shaping trust in political institutions. These findings suggest that the mere perception of misinformation can have profound implications, undermining public trust in political systems and fostering skepticism toward democratic processes.

The erosion of political efficacy caused by cynicism has clear consequences for participation. Internal efficacy, as a predictor of political participation, motivates individuals to engage in both traditional and unconventional forms of civic activity. However, a loss of external efficacy—characterized by the belief that government institutions are unresponsive—may

discourage traditional participation, even while encouraging some individuals to seek alternative, “outside the system” means of political expression (Prats & Meunier, 2021). Political cynicism, exacerbated by perceptions of misinformation, thus poses a dual threat: it reduces both the motivation to engage and the belief in the effectiveness of participation within established democratic systems.

By connecting perceptions of misinformation to political cynicism, efficacy, and ultimately participation, these findings highlight an urgent area for further research. Understanding how perceptions of misinformation shape participation can reveal both vulnerabilities and opportunities in fostering a resilient democratic process, particularly in an era where misinformation concerns continue to escalate. This focus provides the foundation for exploring the nuanced relationship between perceptions of mis- and disinformation and political participation.

Hypotheses

Building on the existing literature, the relationship between perceived mis- and disinformation and political attitudes and behaviors has become a critical area of inquiry. Research has consistently shown that the spread of mis- and disinformation has the potential to erode trust in political institutions and actors, leading to increased political cynicism. This erosion in trust can have significant downstream effects on citizens' political attitudes and behaviors.

A key factor to consider is the motivation behind political participation. Individuals are motivated to engage in political activities when they feel a sense of political efficacy, trust in the democratic process, and belief in their ability to contribute meaningfully to political outcomes. However, high levels of perceived mis- and disinformation may undermine these motivations by creating an environment of uncertainty, skepticism, and frustration. Citizens

may question the integrity of information in the political sphere, leading to feelings of disempowerment and a reduced sense of agency.

Perceptions of mis- and disinformation may also affect individuals' resources and ability to participate. Informed decision-making is a key resource for effective political engagement, and when individuals perceive that the media environment is saturated with misinformation, they may find it challenging to identify reliable information or navigate complex political debates. This cognitive strain can reduce their confidence in participating meaningfully in political processes.

Therefore, perceptions of misinformation are likely to primarily impact citizens' motivation to participate, diminishing their sense of efficacy and trust in the system. Based on these theoretical considerations, the following hypotheses are proposed:

1. Higher levels of perceived misinformation in the media are associated with lower levels of political participation.
2. Higher levels of perceived disinformation in the media are associated with lower levels of political participation.

By testing these hypotheses, this study aims to explore the cascading effects of perceived mis- and disinformation on key elements of democratic engagement. Specifically, it investigates how perceptions of a misleading media environment influence the motivational and cognitive mechanisms underpinning political participation.

Research design

The objective of this study is to find out what the effect of perceptions of mis- and disinformation is on political participation. To answer this question, data from the Europinions Survey will be used, a large-scale survey of European public opinion (Goldberg et al., 2019). This dataset is focused on the nature and composition of attitudes of EU citizens. The design of the panel survey is a multi-wave multi-country study conducted between 2017 and 2019. The study includes ten EU Member States and. The countries included are The Netherlands, Denmark, Germany, Hungary, Spain, Czech Republic, France, Greece, Poland and Sweden. The countries are distributed in three subprojects, which differ in the number of survey waves as well as the content of each respective questionnaire. The surveys were conducted as online questionnaires in the respective country languages, and includes questions on media trust, perceptions of misinformation and disinformation, political participation, political cynicism, and political efficacy, which are central to this research. The Europinions survey provides a uniquely suitable foundation for this study, given that it is one of the few surveys, if not the only one, to measure perceptions of false information in the news media, particularly in a cross-country European context.

The unit of analysis of this study will be The Netherlands. This choice is made to allow for a focused examination of how perceptions of mis- and disinformation specifically affect political participation within the Dutch context. By narrowing the analysis to a single country, the study can control for country-specific variables that may influence political behavior, such as media consumption patterns and political culture. This approach will also help to provide a clearer understanding of how mis- and disinformation influence political participation at the national level. The Netherlands is part of subproject 1 of the Europinions dataset. This means that The Netherlands is part of each survey wave and respective questionnaire.

Table 1. Survey waves

Waves	Sub 1	Sub 2	Sub 3
W1	13 Sep - 1 Oct 2017		
W2	16 - 28 Jan 2018		
W3	12 - 24 Jun 2018		
W4	7 - 27 Dec 2018	7 Dec 2018 – 14 Jan 2019	
W5	5 - 18 Apr 2019	5 - 24 Apr 2019	5 - 24 Apr 2019
W6	27 May - 9 Jun 2019	27 May – 10 Jun 2019	27 May – 5 Jun 2019
W7	1 - 10 Jul 2019	1 - 12 Jul 2019	1 - 12 Jul 2019

Dependent Variable: Political participation

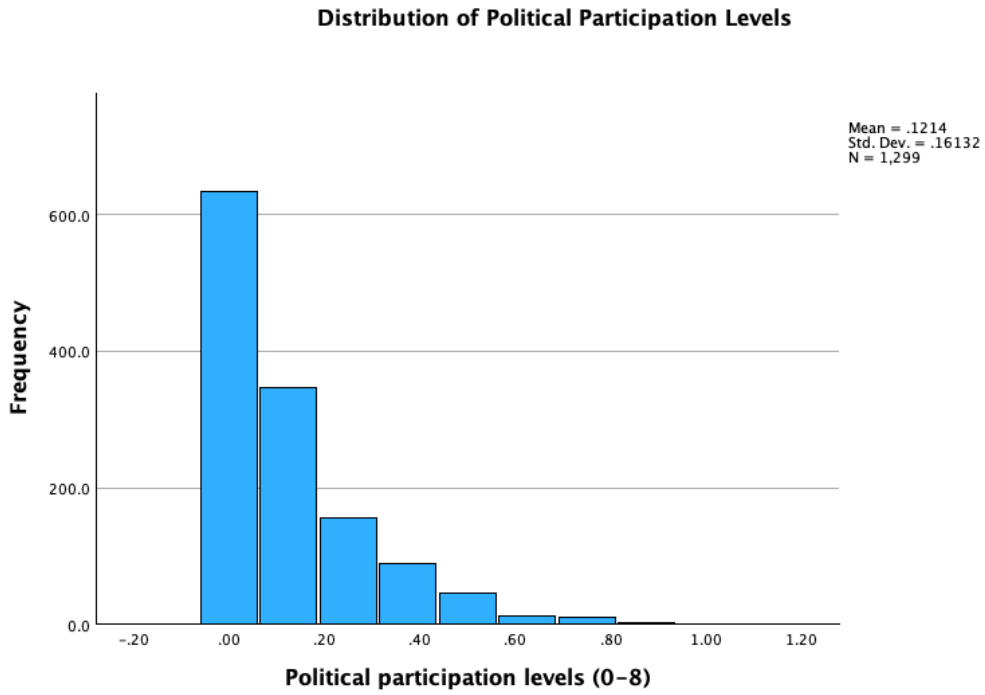
The dependent variable for this research is political participation. In the Europinions survey, measured in wave six, political participation is operationalized as a set of binary indicators measuring whether respondents engaged in specific political or civic activities within the past year. These activities encompass both traditional and digital forms of participation, as well as actions aimed at expressing opinions or influencing societal and political issues. Each activity is coded as [0 = No, 1 = Yes], allowing for an analysis of the extent and nature of individuals' engagement. The specific activities include:

a. Participation in demonstrations, strike actions, or other protest events.
b. Volunteering in a neighborhood organization or community initiative (e.g., a civic organization or urban garden).
c. Maintaining shared facilities in the neighborhood (e.g., kindergartens, parks, or roads).
d. Expressing opinions on political or societal matters via status updates on social media platforms like Facebook.

e. Sharing updates concerning political or societal matters from other users on social media.
f. Contacting a politician to express an opinion (in person, via email, or social media).
g. Signing an online petition.
h. Buying or boycotting products for political, ethical, or environmental reasons.

These items will be analyzed as composite indicators of overall political participation, by summing the individual binary responses across all items to create a single composite variable. This composite variable will be treated as a scale variable, representing the total number of political participation behaviors endorsed by each respondent. Higher values indicate greater levels of participation. As a result, the composite variable is no longer binary, but a scale measure of political participation. By combining traditional and digital forms of participation, this measure captures a comprehensive view of how citizens engage in political and civic activities in contemporary contexts.

Figure 1. Distribution of political participation levels



Independent variables: Perceived mis- & disinformation

The main independent variable in this study is perceived misinformation, operationalized using the 'misinformation' variable from the Europinions survey measured in wave seven. This variable captures respondents' perceptions of the reliability and accuracy of news media in reporting factual information. The survey includes four items, measured on a 7-point Likert scale ranging from 1 (Fully disagree) to 7 (Fully agree), that assesses the extent to which individuals view the news media as a source of misinformation. The specific items are:

a. "The news media do not report accurately on facts that happened"
b. "To understand real-life events, you cannot rely on the news media"
c. "The news media are an unreliable source of factual information"
d. "The news media insufficiently rely on expert sources"

These items collectively provide a comprehensive measure of perceived misinformation by evaluating skepticism toward the news media's factual accuracy, reliability, and use of expertise. The items are strongly correlated, with Pearson's correlation coefficients ranging from 0.621 to 0.744, indicating moderate to strong positive relationships. This consistency is further supported by high corrected item-total correlations (ranging from 0.712 to 0.801) and an excellent overall Cronbach's Alpha of 0.893, reflecting high internal reliability. Given these results, the items will be combined into a single scale by calculating the mean of the individual responses to create a continuous measure of perceived misinformation. This composite variable will capture the overall level of skepticism toward the news media, where higher values indicate stronger perceptions of misinformation.

The other main independent variable is perceived disinformation, operationalized using the 'disinformation' variable from the Europinions survey measured in wave seven. This variable measures respondents' beliefs regarding the intentional manipulation or distortion of information by the news media. It captures perceptions of bias, distrust, and deliberate misinformation. The survey includes four items, each measured on a 7-point Likert scale, ranging from 1 (Fully disagree) to 7 (Fully agree), which assesses the extent to which individuals perceive the media as intentionally misleading or biased. The specific items are:

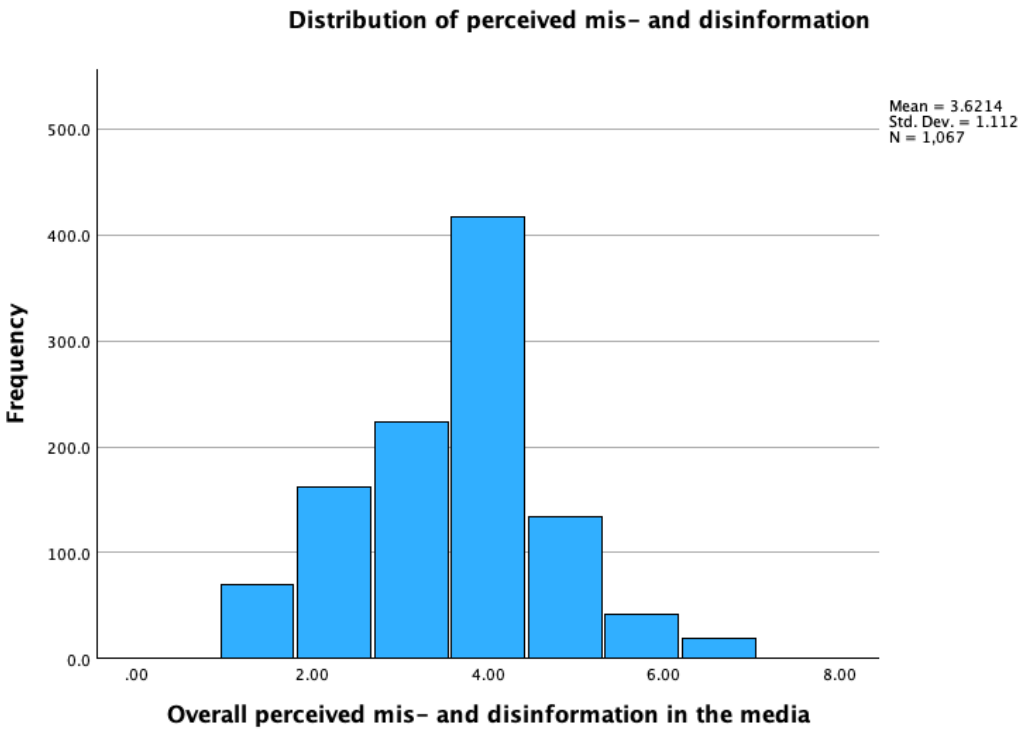
a. "The news media have a bias against my political views"
b. "The news media are an enemy of the ordinary people"
c. "The news media are deliberately lying to the people"
d. "The news media only serve their own interest"

These items collectively measure perceived disinformation by evaluating beliefs that the media actively shape public opinion through bias, lies, or self-serving motives. The four items, which

assess the extent to which individuals view the media as biased, deceptive, or self-interested, demonstrate strong internal consistency, with a Cronbach's alpha of 0.890. This indicates that the items reliably measure the same underlying construct. Each item has a corrected item-total correlation above 0.698, suggesting that all four items are well-aligned and contribute meaningfully to the scale. As with the variable for misinformation, responses will be combined into a composite index that reflects overall perceptions of media disinformation, by calculating the mean individual responses to create a continuous measure of perceived disinformation. This operationalization allows for an in-depth exploration of how individuals perceive the media's role in spreading disinformation, which may influence their political behaviors and attitudes.

Given that the misinformation and disinformation indices are highly correlated, with a Cronbach's Alpha of 0.880 for the combined scale, they will be further combined into a single composite variable. This reflects the conceptual overlap between the two constructs, as both indices measure skepticism toward the media's reliability and intent. The high corrected item-total correlation of 0.788 for each index further supports their integration. To create this combined measure, the mean of the misinformation and disinformation indices will be calculated, resulting in a continuous variable that captures overall perceptions of mis- and disinformation in the media. Higher values on this scale (ranging from 1 to 7) indicate greater perceived skepticism, where 1 represents the lowest level of perceived mis- and disinformation and 7 represents the highest level of perceived mis- and disinformation. This approach ensures a parsimonious model and provides a comprehensive measure of perceived mis- and disinformation while retaining the strong internal reliability of the combined scale.

Figure 2. Distribution of perceived mis- and disinformation in the media



It is important to acknowledge a potential limitation with these measures: the dependent variable is measured in wave six (27 May - 9 June), while the independent variables, which are expected to predict the dependent variable, are measured in wave seven (1-10 July 2019). This sequencing may seem unconventional, as predictors are typically measured before outcomes. However, the temporal gap between the two waves is relatively small (less than a month), which reduces the likelihood of major shifts in political attitudes or behaviors during this period. Moreover, the dataset used in this study is among the best available for investigating this particular relationship, offering detailed measures of political participation and perceptions of mis- and disinformation. While the European Elections in May 2019 could have influenced political participation or attitudes, no major national elections or significant political events occurred between the two waves that would likely have caused substantial changes in respondents' perceptions of mis- and disinformation. Thus, although the timing of the measurements is unconventional, it is reasonable to assume that the influence of perceived mis- and disinformation remains stable across this short interval. This potential

limitation will be revisited and further addressed in the discussion section to ensure the results are interpreted in light of this context.

Model and control variables

To test the hypotheses, I will use statistical models that analyze the relationship between the independent and dependent variable. Specifically, I plan to employ multivariate regression analysis, as it allows for examining the effects of perceived mis- and disinformation while accounting for other relevant factors.

The analysis will include several control variables to account for other factors that might confound the relationship between perceived mis- and disinformation and political participation. Gender is an important consideration, as differences between men and women can shape patterns of political engagement. For example, men and women may gravitate toward different forms of political activity, reflecting broader societal roles and expectations (Coffé & Bolzendahl, 2010). For gender, respondents were asked whether they identified as male or female. This variable has been recoded into a dummy variable, with 0 representing male and 1 representing female, and the sample is evenly split, with 50% of respondents being female and 50% male.

Age is another critical factor, as political participation may vary by age. Older individuals tend to engage more in conventional forms of participation, such as voting or attending political meetings, while younger individuals often favor digital and informal forms of engagement, like social media activism or online petitions (Serra & Smets, 2022).

Education also plays a significant role in shaping political participation. Individuals with higher levels of education are generally more likely to participate in political activities, as education

fosters civic knowledge, critical thinking, and access to participatory networks (Aars & Christensen, 2018). Moreover, education influences media literacy, potentially shaping how individuals perceive and respond to mis- and disinformation in the media. Respondents were asked about the highest degree they had obtained, ranging from 1 ("did not finish primary school") to 18 ("doctorate/promoted"). As an ordinal variable, this measure reflects a ranked order of educational attainment, capturing the progression from lower to higher levels of education. The distribution of education levels is relatively broad, with a mean level of 9.49, suggesting that the average respondent has completed some secondary education or a lower level of post-secondary education. The standard deviation of 4.92 indicates notable variation in educational attainment across the sample.

Ideological orientation, as captured through left-right self-placement, is included to explore how political ideology affects both perceptions of mis- and disinformation and participation patterns. For instance, left-leaning and right-leaning individuals may differ in how they interpret media content and in their likelihood of engaging in specific political activities. Respondents were asked where they would place themselves on a scale from zero to ten, where zero means “left” and ten means “right” (mean = 6.23, std. deviation = 2.121).

Political interest is another vital variable, as it may strongly predict political participation. People who are more interested in politics are generally more motivated to engage in political activities and may also interpret media messages differently, potentially moderating the effects of mis- and disinformation. In the survey, respondents were asked if they are interested in politics on a scale of 1 to 7, where 1 means “Not at all interested” and 7 means “Very interested” (mean = 3.96, std. deviation = 1.604).

Political trust will also be controlled for, due to its established connection to both political participation and perceptions of media reliability. Individuals with higher trust in political institutions, such as the government, the parliament and judiciary, may be more inclined to

participate in civic activities and less susceptible to the demobilizing effects of perceived mis- and disinformation. This variable was measured by asking respondents to what extent they agree or disagree with the following statements on a scale of 1 to 7, where 1 means “Fully disagree”, 4 means “Neither agree nor disagree” and 7 means “Fully agree”:

1. “I trust the parliament”
2. “I trust politicians”
3. “I trust political parties”
4. “I trust the legal system”
5. “I trust the police”
6. “I trust the government”
7. “I trust the EU”

From these separate questions, the responses will be combined into a composite index that reflects overall trust in political institutions by calculating the mean of the individual responses to create a continuous measure of political trust. The seven items, which include trust in institutions such as parliament, politicians, political parties, the judiciary, the police, the national government, and the European Union, exhibit strong internal consistency, with a Cronbach's alpha of 0.947. Pearson's correlations between the items range from 0.499 (between trust in the police and trust in the European Union) to 0.893 (between trust in parliament and trust in the national government), demonstrating substantial inter-item relationships. While trust in the police aligns slightly less strongly with the other items, as reflected in its lower corrected item-total correlation (0.620), it still contributes to capturing the broader construct of institutional trust. The resulting composite index provides a reliable and nuanced measure for analyzing how political trust influences various attitudes and behaviors. The mean of this composite variable is 3.9651 with a standard deviation of 1.26889.

Subjective income will be included as a control variable in the model to account for the potential influence of economic resources on political participation (Cicatiello et al., 2015). Participation in political activities often requires time, access to information, and other resources that may be constrained by an individual's economic circumstances. Subjective income, as measured by respondents' self-reported household standard of living on a 7-point scale (1 = "poor household" to 7 = "rich household"), provides a valuable indicator of perceived economic standing, which can shape opportunities and motivations for participation (mean = 4.33, std. deviation = 1.229).

Cognitive engagement will be included as a control variable in the analysis due to its relevance in shaping how individuals process information and form judgments. It refers to the extent to which individuals enjoy and engage in effortful cognitive activities. People with higher levels of cognitive engagement may be more likely to critically evaluate information, engage in deep processing, and resist simplistic cues or heuristics. Conversely, individuals with lower levels of cognitive engagement may rely more on superficial cues or intuitive judgments when evaluating information. This trait is operationalized using four survey items that assess respondents' satisfaction with engaging in mentally demanding tasks, abstract thinking, and problem-solving. Each item is measured on a 7-point Likert scale ranging from 1 (Very inaccurate) to 7 (Very accurate). The specific items are:

1. "I find satisfaction in deliberating hard and for long hours"
2. "The notion of thinking abstractly is appealing to me"
3. "I really enjoy a task that involves coming up with new solutions to problems"
4. "I like tasks that require much thought and mental effort"

These items have been averaged to create a single continuous variable that captures overall levels of cognitive engagement. Higher values on this composite variable indicate greater enjoyment and satisfaction in engaging with cognitively demanding tasks (mean = 4.2197, std.

deviation = 1.14485). Including cognitive engagement as a control variable is essential because individuals' cognitive styles could influence their susceptibility to misinformation and disinformation. Those with higher levels of cognitive engagement may be less likely to perceive or endorse misinformation due to their tendency to scrutinize information more thoroughly. Controlling for this variable ensures that the relationships observed in the study are not confounded by variations in individuals' cognitive engagement tendencies.

Lastly, "openness" is included in the model as a control variable to account for individual differences in cognitive styles and preferences that might influence how individuals perceive and engage with misinformation and disinformation. This trait reflects a person's tendency to embrace new ideas, enjoy abstract thinking, and have a vivid imagination. Given that openness may affect the way people interpret information and engage with media, it is important to control for this variable to ensure that any relationships observed between perceived misinformation, disinformation, and the outcome variables are not confounded by this cognitive trait. The openness variable was measured using four items from the survey: "Have a vivid imagination," "Am not interested in abstract ideas," "Have difficulty understanding abstract ideas," and "Do not have a good imagination." Each item was scored on a 7-point Likert scale ranging from 1 (Very inaccurate) to 7 (Very accurate). To ensure consistency in the scale, the negatively worded items were reverse-coded. Following this, the responses were averaged to create a single continuous measure of openness (mean = 4.5616, std. deviation = 0.96964). Including this variable in the model helps controlling for individual differences in intellectual curiosity and abstract thinking, which may affect how respondents evaluate media content and form judgments about misinformation.

Including these control variables in the analysis will allow for a more robust and nuanced understanding of how perceived mis- and disinformation influences political participation,

independent of other demographic, ideological, and contextual factors. This approach ensures that the findings are both reliable and generalizable.

With the mentioned control variables, I will run a linear regression. Before running the analysis, it is important to make sure that all assumptions are met. As can be seen in Appendix A, the assumptions for normality, homoscedasticity, linearity and multicollinearity are all met.

Analysis

In hypotheses 1 and 2, I explored the relationships between perceived misinformation (hypothesis 1) and perceived disinformation (hypothesis 2) in the media and political participation. Both hypotheses posited that higher levels of perceived misinformation and disinformation would be associated with lower levels of political participation. The results from the linear regression analysis, presented in Table 1, show that neither perceived misinformation nor perceived disinformation significantly influences political participation.

Table 2. Multiple linear regression model

(constant)	-0.082
	(0.045)
Perceived mis- and disinformation	0.003
	(0.005)
Political trust	0.000
	(0.004)
Openness	0.022*
	(0.005)
Cognitive engagment	0.000
	(0.005)
Gender	0.022
	(0.009)
Age	-0.001
	(0.000)
Political interest	0.030*
	(0.003)
Left-right self-placement	-0.006
	(0.002)
Education	0.004*
	(0.001)

Subjective income	-0.005
	(0.004)
R-square	0.165
Adj. R-square	0.157
F-statistic	20.850
N	1067

Note: OLS regression coefficients with standard errors in brackets.

**p<0.001*

The unstandardized coefficient for perceived misinformation and disinformation (B = 0.003) is positive but small, and the p-value (p = 0.513) is well above the conventional threshold for statistical significance. This high p-value suggests that the observed positive relationships are not statistically significant, indicating that the effect of perceived misinformation and disinformation on political participation is minimal and likely due to chance. Similarly, other control variables such as political trust (B = 0.000, p = 0.936) and subjective income (B = -0.005, p = 0.243) also fail to show significant effects on participation.

While these findings suggest that perceived misinformation and disinformation may not directly influence political participation, they do not rule out the possibility of indirect effects or interactions with other variables, such as political trust, political interest, or individual-level traits. It is conceivable that individuals who perceive high levels of misinformation or disinformation may either feel disillusioned and disengaged or, conversely, become motivated to participate, leading to a neutral overall effect. The results highlight the need to consider additional mechanisms or moderators, such as political efficacy or media literacy, to better understand the relationship.

The overall regression model explains 16.5% of the variance in political participation (R^2 = 0.165, F = 20.850, $p < 0.001$), with a standard error of the estimate of 0.14738. The Durbin-Watson statistic (1.898) indicates no significant autocorrelation in the residuals, supporting the robustness of the model. These findings suggest that while perceived misinformation and disinformation may play roles in shaping attitudes or beliefs, their direct influence on participatory behavior is limited in this model.

To further investigate the relationship between perceived misinformation and disinformation and political participation, I conducted additional analyses by testing the effects of perceived misinformation and disinformation on each individual item included in the political participation index. This approach aimed to uncover whether the lack of significance observed in the overall model might mask item-specific relationships. However, the results of these separate regression analyses revealed no statistically significant relationships between perceived misinformation or disinformation and any single item of political participation. These findings suggest that the lack of association between perceived misinformation/disinformation and political participation is consistent across different forms of participation, such as voting, attending protests, or contacting representatives. This uniform insignificance reinforces the conclusion that perceived misinformation and disinformation do not directly influence political participation in this model. It also highlights that the null results are not an artifact of aggregating diverse forms of participation into a composite index but rather reflect a broader absence of effect. The results of these regressions can be found in appendix B.

Conclusion

Understanding the role of mis- and disinformation in shaping political behavior is essential to addressing their potential societal impacts. This thesis set out to investigate the relationship between perceived misinformation and disinformation in the news media and political participation, focusing on whether higher levels of perceived exposure to such information are associated with lower levels of civic engagement. Given the broader concern over how distorted information can influence public opinion and voting behavior, this study sought to contribute to understanding how these perceptions shape political involvement. Through a comprehensive regression analysis, the research has examined the direct effects of perceived misinformation and disinformation, alongside the influence of key control variables such as political trust, political interest, demographic characteristics, and ideological self-placement. By addressing these relationships, this study adds to the growing body of knowledge on the societal impact of media misinformation and its potential to erode political participation.

The findings challenge the initial hypotheses that higher levels of perceived misinformation and disinformation in the media lead to diminished political participation. The analysis shows that neither perceived misinformation nor perceived disinformation ($B = 0.003$, $p = 0.513$) significantly predict political participation. These results suggest that mis- and disinformation do not directly impact individuals' engagement in political activities. The negligible relationship between these variables and participation implies that the connection between misinformation and political participation may be more complex, potentially mediated by other factors such as political efficacy, emotional responses, or access to alternative, trustworthy sources of information.

It is also important to mention the limitations of this research. Firstly, the timing of the measurement of the independent variable and the dependent variable is unconventional. With the dependent variable measured in wave six and the independent variable measured in wave

seven, the temporal ordering may raise concerns about causal inference and the directionality of the observed relationship.

Secondly, the variables are measured by self-survey reports. Responses of the survey questions may be susceptible to exaggeration or suppression based on normative pressures, which is why some scholars view self-survey reports as unreliable measurements (Huizinga & Elliott, 1986).

Lastly, the operationalization of political participation, while comprehensive, encompasses a wide range of activities with varying levels of political relevance and impact. These include both traditional and digital forms of engagement, such as protesting, volunteering, and social media activism. While this broad scope allows for a nuanced understanding of participatory behaviors, it may dilute the focus on high-stakes activities, such as voting, which are more directly tied to democratic processes. Future research could address this limitation by either narrowing the focus to specific, high-impact behaviors or analyzing distinct forms of participation separately to better capture their relationship with perceptions of misinformation and disinformation.

Overall, these findings contribute to the growing body of literature on the effects of mis- and disinformation on political behavior, offering nuanced insights into their limited direct impact on participation. While misinformation and disinformation remain pressing concerns in contemporary media environments, this study suggests that their influence may not directly translate into diminished political engagement. Instead, their effects might manifest through more indirect pathways, such as shaping political attitudes, fostering polarization, or eroding trust in institutions.

This research underscores the importance of developing a more comprehensive understanding of the mediating and moderating factors that condition the relationship between misinformation, disinformation, and political behavior. Future studies could investigate these

dynamics by exploring specific moderators such as political efficacy, media literacy, and emotional reactions to misinformation, which are particularly relevant due to their potential to shape participatory outcomes. For example, political efficacy—a person's belief in their ability to influence political processes—may act as a key moderator: individuals with high political efficacy might remain politically engaged even when exposed to misinformation, counteracting its potential demobilizing effects, whereas those with low efficacy could become discouraged and disengage. Media literacy could serve as another critical moderator by equipping individuals with the skills to identify and critically evaluate misinformation, reducing its impact on their willingness to participate. Without such skills, individuals may either overestimate the prevalence of misinformation, leading to cynicism, or fail to recognize it, leaving them more susceptible to its influence. Emotional responses, such as anger, fear, or frustration, might also mediate or moderate these relationships differently—anger may drive people to mobilize in protest or other forms of civic action, while fear or hopelessness might suppress participation.

Additionally, cross-national comparisons could provide valuable insights into how contextual factors, such as media environments and political cultures, mediate these effects. For instance, in polarized media environments, misinformation may reinforce echo chambers, exacerbating its influence on partisan participation, whereas in less polarized contexts, access to diverse viewpoints might buffer its effects. Similarly, trust in institutions may moderate how misinformation affects civic engagement: in countries with high institutional trust, misinformation might have weaker effects, as citizens rely on credible sources to guide their behavior, while in low-trust contexts, misinformation could further erode engagement. By delving into these specific factors, future research can clarify how misinformation and disinformation impact political behavior in varied contexts, offering actionable insights for mitigating their societal risks.

By advancing our understanding of these relationships, this study contributes to broader efforts to mitigate the societal risks associated with misinformation and disinformation, ultimately supporting the development of strategies to foster more resilient and informed democratic participation.

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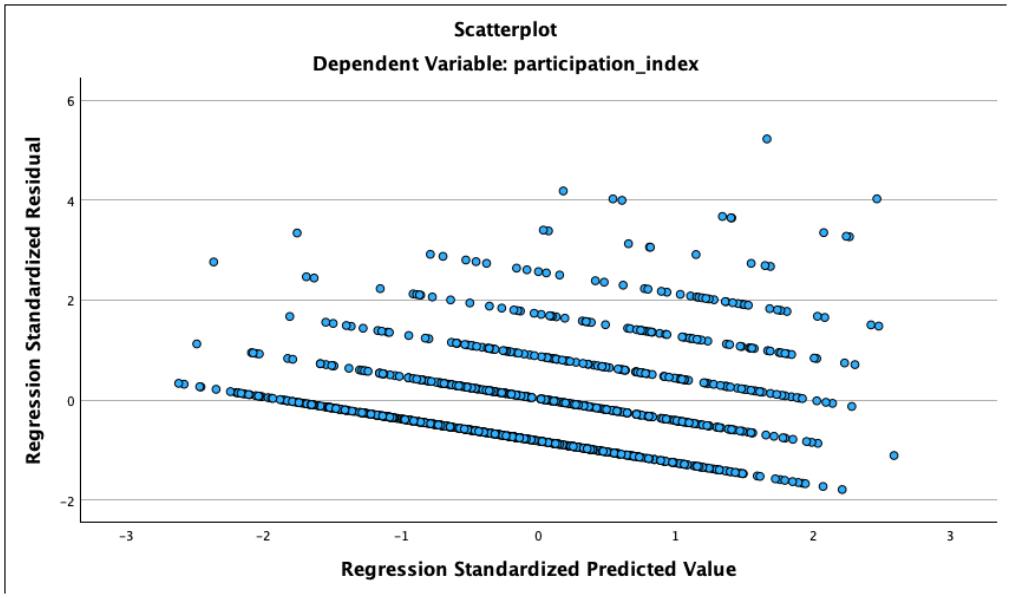
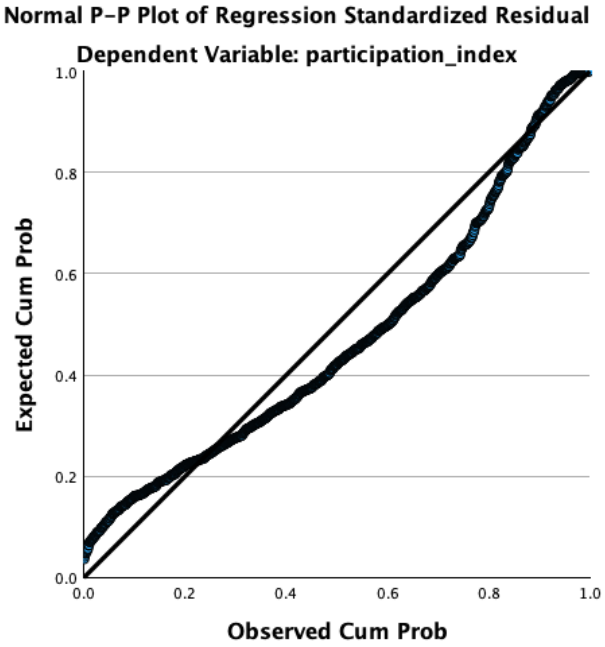
Appendix A

A1 – Homoscedasticity & linearity



A2 – Normality



A3 – Multicollinearity

	VIF
(Constant)	
Perceived mis- and disinformation	1.433
Political trust	1.565
Openness	1.311
Cognitive engagement	1.482
Gender	1.074
Age	1.094
Political interest	1.342
Left-right self-placement	1.064
Education	1.372
Subjective income	1.208

Appendix B

```
COMPUTE participation_index=MEAN(Q38A_w6, Q38B_w6, Q38C_w6, Q38D_w6,
Q38E_w6, Q38F_w6, Q38G_w6,
    Q38H_w6).
EXECUTE.

COMPUTE trust_index=MEAN(Q60A_w6, Q60B_w6, Q60C_w6, Q60D_w6, Q60E_w6,
Q60F_w6, Q60G_w6).
EXECUTE.

COMPUTE misinformation_index=MEAN(Q440A_w7, Q440B_w7, Q440C_w7,
Q440D_w7).
EXECUTE.

COMPUTE disinformation_index=MEAN(Q441A_w7, Q441B_w7, Q441C_w7,
Q441D_w7).
EXECUTE.

COMPUTE combined_index=MEAN(misinformation_index, disinformation_index).
EXECUTE.

COMPUTE openness_composite=(Q71A_w1 + Q71b_reversed + Q71c_reversed +
Q71d_reversed) / 4.
EXECUTE.

COMPUTE cognition_composite=(Q76A_w1 + Q76B_w1 + Q76C_w1 + Q76D_w1) / 4.
EXECUTE.


REGRESSION
```

```
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001)
  /NOORIGIN
  /DEPENDENT participation_index
  /METHOD=ENTER combined_index trust_index openness_composite
cognition_composite Gender_dummy
    age_w1 Q50A_w6 Q34_w6 Q90_w1 Q97_w4
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE COOK.
```

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
trust_index	1299	1.00	7.00	3.9651	1.26889
participation_index	1299	.00	1.00	.1214	.16132
combined_index	1067	1.00	7.00	3.6214	1.11200
cognition_composite	3026	1.00	7.00	4.2197	1.14485
openness_composite	3026	1.00	7.00	4.5616	.96964
Gender_dummy	3026	.00	1.00	.4997	.50008
Leeftijd	3026	17	94	47.89	17.096
Q97: Income (subjective)	1942	1	7	4.33	1.229
Q50A: Political interest general	1299	1	7	3.96	1.604
Q90 Education	3026	1	18	9.49	4.919
Valid N (listwise)	1067				

Casewise Diagnostics[a]

Case Number	Std. Residual	participation_index	Predicted Value	Residual
47	3.118	.63	.1654	.45958
69	3.068	.63	.1729	.45211
123	3.589	.75	.2211	.52893
211	3.061	.63	.1739	.45108
222	4.272	.75	.1204	.62959
289	3.404	.63	.1234	.50165
338	3.299	.75	.2638	.48622
343	3.654	.75	.2114	.53859
348	3.237	.75	.2729	.47711
464	3.335	.75	.2585	.49154
608	3.260	.50	.0196	.48039
686	4.097	.75	.1461	.60388
770	3.995	.75	.1611	.58886
791	5.251	1.00	.2261	.77392
796	3.683	.75	.2072	.54279
823	4.069	.88	.2754	.59964
1067	3.435	.63	.1188	.50618

a. Dependent Variable: participation_index

Regressions on individual participation items:

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001)
  /NOORIGIN
  /DEPENDENT Q38A_w6
  /METHOD=ENTER combined_index trust_index openness_composite
cognition_composite Gender_dummy
    age_w1 Q50A_w6 Q34_w6 Q90_w1 Q97_w4
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN NORMPROB(ZRESID)
```

```
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE COOK.

REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001)
  /NOORIGIN
  /DEPENDENT Q38B_w6
  /METHOD=ENTER combined_index trust_index openness_composite
cognition_composite Gender_dummy
    age_w1 Q50A_w6 Q34_w6 Q90_w1 Q97_w4
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE COOK.

REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001)
  /NOORIGIN
  /DEPENDENT Q38C_w6
  /METHOD=ENTER combined_index trust_index openness_composite
cognition_composite Gender_dummy
    age_w1 Q50A_w6 Q34_w6 Q90_w1 Q97_w4
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN NORMPROB(ZRESID)
```

```
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE COOK.

REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001)
  /NOORIGIN
  /DEPENDENT Q38D_w6
  /METHOD=ENTER combined_index trust_index openness_composite
cognition_composite Gender_dummy
    age_w1 Q50A_w6 Q34_w6 Q90_w1 Q97_w4
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE COOK.

REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001)
  /NOORIGIN
  /DEPENDENT Q38E_w6
  /METHOD=ENTER combined_index trust_index openness_composite
cognition_composite Gender_dummy
    age_w1 Q50A_w6 Q34_w6 Q90_w1 Q97_w4
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  /RESIDUALS DURBIN NORMPROB(ZRESID)
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  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE COOK.

REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001)
  /NOORIGIN
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cognition_composite Gender_dummy
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  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE COOK.
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Results of individual multiple linear regressions

	A.	B.	C.	D.	E.	F.
(Constant)	-0.003 (0.062)	-0.368 (0.122)	0.012 (0.081)	-0.066 (0.072)	-0.047 (0.073)	-0.126 (0.058)
Perceived mis- & disinformation	0.014 (0.007)	0.008 (0.013)	0.010 (0.009)	0.007 (0.008)	0.004 (0.008)	0.010 (0.006)
Trust	0.002 (0.006)	0.019 (0.012)	0.015 (0.008)	-0.009 (0.007)	-0.010 (0.007)	-0.005 (0.006)
Openness	0.008 (0.007)	0.038 (0.014)	-0.003 (0.009)	0.018 (0.008)	0.010 (0.008)	0.007 (0.007)
Cognition	-0.002 (0.007)	0.011 (0.013)	-0.003 (0.009)	-0.004 (0.008)	0.000 (0.008)	0.008 (0.006)
Gender	0.002 (0.013)	0.008 (0.025)	-0.014 0.017	0.037 (0.015)	0.042 (0.015)	0.013 (0.012)
Age	-0.002 (0.00)*	0.000 (0.001)	-0.001 (0.001)	-0.001 (0.000)	-0.001 (0.000)	-0.001 (0.000)
Interest	0.012 (0.004)	0.033 (0.009)*	0.018 (0.006)	0.029 (0.005)*	0.024 (0.005)*	0.017 (0.004)*
Ideology	-0.003 (0.003)	0.001 (0.006)	-0.001 (0.004)	0.002 (0.004)	-0.003 (0.004)	-0.002 (0.003)
Education	-0.001	0.010	-0.002	0.000	0.002	0.001

	(0.001)	(0.003)*	(0.002)	0.002	(0.002)	(0.001)
Income	0.002 0.006	-0.002 (0.011)	-0.002 (0.007)	-0.12 (0.007)	-0.002 (0.007)	0.007 (0.005)
R-square	0.026	0.073	0.017	0.044	0.037	0.040
Adj. R-square	0.017	0.064	0.008	0.035	0.027	0.031
F-statistic	2.818	8.317	1.855	4.862	4.002	4.454
N	1067	1067	1067	1067	1067	1067

Note: OLS regression coefficients with standard errors in brackets.

**p<0.001*