

Hannah Richardsen

# Conspiratorial Thinking: A Statistical Analysis of Individual-Level Conditions and its Impact on Satisfaction with Democracy

Master's thesis in European Studies

Supervisor: Anna Brigevich

May 2023



Hannah Richardsen

# **Conspiratorial Thinking: A Statistical Analysis of Individual-Level Conditions and its Impact on Satisfaction with Democracy**

Master's thesis in European Studies  
Supervisor: Anna Brigevid  
May 2023

Norwegian University of Science and Technology  
Faculty of Humanities  
Department of Historical and Classical Studies





# Sammendrag

Konspirasjonsteorier har vært til stede i det moderne samfunn helt tilbake til antikkens Hellas. I dag er konspirasjonsteorier, uten tvil, mer synlige og normaliserte i samfunnet. Dette kan sees gjennom stormingen av Capitol-bygningen i USA, så vel som alle konspirasjonsteoriene som dukket opp under Covid-19-pandemien. Denne oppgaven undersøker hva som betinger konspirasjonstenkning på individnivå, samt hvordan konspirasjonstenkning påvirker hvor tilfreds individer er med demokratiet de lever i. Oppgaven består derfor av to analyser, som begge bruker en flernivåmodell. I den første analysen blir tre forskjellige varianter av konspirasjonstenkning behandlet som avhengige variabler (generell konspirasjonstenkning, anti-vitenskapelig konspirasjonstenkning og Covid-19 konspirasjonstenkning). I denne analysen fremstår faktorer som autoritarisme, mellommenneskelig tillit, politisk tillit, politisk maktesløshet, religiøsitet og utdanning som sterke forutsetninger for konspiratorisk tenkning. Analysen viser også at når det kommer til hva som påvirker konspirasjonstenkning finnes det også ulikheter. Her er alder og radikal høyreposisjoneringens påvirkning på Covid-19s konspirasjonstenkning et godt eksempel. Dette fremhever at det er noe faktorer som er innholds og kontekst avhengige, og forholdene burde studeres videre for å forstå hvorfor visse faktorer påvirker konspiratorisk tenkning. I den andre analysen blir det klart at konspiratorisk tenkning, uavhengig av kontekst og innhold, har negativ innvirkning på tilfredsheten med demokratiet. Her er de samme konspiratoriske tenkevariablene fra den første analysen brukt, bare at de her er behandlet som uavhengige variabler og tilfredshet med demokratiet er den avhengige variabelen. Det faktum at konspirasjonstenkning har en sterk negativ innvirkning på hvor tilfreds individer er med demokratiet de bor i, indikerer at konspirasjonsteorier utgjør en trussel mot demokratiet som styreform. Dette fordi forskning har vist at lavere grad av tilfredshet med demokrati som styreform kan føre til et ønske om reformer i en ikke-demokratisk retning.



# Abstract

We know that conspiracy theories have been present in modern societies since the ancient Greeks. Today, conspiracy theories are more visible and normalized in society. This can be seen through the storming of the Capitol building in the United States and all the conspiracy theories surfacing during the Covid-19 pandemic. This thesis examines what conditions conspiratorial thinking on an individual level, as well as how conspiratorial thinking impacts satisfaction with democracy. The thesis, therefore, consists of two analyses using a multilevel model. In the first analysis, three different variances of conspiratorial thinking are treated as dependent variables (general conspiratorial thinking, anti-science conspiratorial thinking, and Covid-19 conspiratorial thinking). In this analysis, factors such as authoritarianism, interpersonal trust, political trust, political powerlessness, religiosity, and education emerge as robust predictors for conspiratorial thinking. However, it also becomes evident that there are differences in what conditions conspiratorial thinking, and here age and radical right positioning impact Covid-19's conspiratorial thinking differently. This shows that there are context and content-dependent factors and relationships. These should be studied further to understand why certain factors impact conspiratorial thinking. In the second analysis, it becomes clear that conspiratorial thinking, regardless of context and content, has a negative impact on satisfaction with democracy. Here the same conspiratorial thinking variables from the first analysis have been used; only they are treated as independent variables, and satisfaction with democracy is the dependent variable. The fact that conspiratorial thinking has a strong negative impact on satisfaction with democracy arguably indicates that conspiracy theories threaten democracy. This is because research has shown that lower levels of satisfaction with democracy can lead to a wish for reforms in a non-democratic direction.





# Acknowledgments

First, I would like to express my deepest gratitude to my supervisor Anna Brigevich. Thank you for believing in me and for all your vital feedback throughout this process. You have truly made this process more enjoyable and continue to inspire me.

I would also like to thank my fellow master students, especially everyone in Krampesal. Thank you for making me laugh, showing tough love, and making this process more bearable. I want to make a special thanks to my best friends, Ingeborg and Marie. These past five years would not have been the same without you.

I also want to thank my fiancée. Thank you for always being there and pushing me. Knowing that I always get to go home to you (and takeaway) has made the longest days worth it. Lastly, I would also like to thank my mom and little brother. Thank you for your constant love and support.

Hannah Richardsen

Trondheim, 15<sup>th</sup> of May 2023

# Table of contents

Tables.....	xii
Graphs.....	xii
1 Introduction.....	1
1.1 Previous research.....	2
1.2 Research questions and methodology.....	3
1.3 Structure of the thesis.....	4
2 Literature review.....	5
2.1 Conspiracy theories.....	5
2.1.1 Characteristics of conspiracy theories.....	6
2.1.2 Motivational factors of conspiratorial thinking.....	6
2.2 Factors conditioning conspiratorial thinking.....	7
2.2.1 Psychological factors.....	7
2.2.2 Ideology and political factors.....	10
2.2.3 Demographic factors.....	12
2.3 Conspiracy theories regarding health crises and COVID-19.....	13
2.3.1 Explaining beliefs in medical conspiracy theories.....	14
2.3.2 Factors conditioning Covid-19 conspiratorial thinking.....	15
3 Method.....	18
3.1 European Social Survey.....	18
3.2 Variables and operationalization.....	18
3.2.1 Dependent variables.....	18
3.2.2 Independent variables.....	19
3.3 Descriptive statistics.....	22
3.4 Multilevel model.....	23
4 Empirical analysis.....	24
4.1 Psychological factors.....	26
4.2 Ideology and political factors.....	28
4.3 Demographic factors.....	29
5 The impact of conspiracy theories on satisfaction with democracy.....	33
5.1 Literature review.....	33
5.2 Method.....	34
5.2.1 European Social Survey.....	34
5.2.2 Dependent variable.....	34
5.2.3 Independent variables.....	34
5.3 Descriptive statistics.....	38

5.4	Multilevel model.....	39
6	Empirical analysis of satisfaction with democracy .....	40
6.1	Results .....	41
7	Conclusion .....	44
7.1	Effects and consequences of conspiracy theories .....	44
7.2	Results .....	45
7.2.1	First analysis.....	45
7.2.2	Second analysis.....	47
7.3	Limitations of my research and avenues for future research .....	48
8	Bibliography.....	50

## Tables

Table 1 – Descriptive statistics .....	22
Table 2 – Multilevel models.....	25
Table 3 – Descriptive statistics .....	38
Table 4 – Multilevel models.....	41

## Graphs

Graph 1 - Obedience 's impact on conspiratorial thinking .....	27
Graph 2 - Education 's impact on conspiratorial thinking .....	30
Graph 3 - Conspiratorial thinking 's impact on satisfaction with democracy .....	43

# 1 Introduction

January 6<sup>th</sup>, 2021, the Capitol building in the United States was stormed by angry protesters claiming that the election was stolen from Donald Trump (Moskalenko, 2021, p. 179). After the attack, news outlets across America named QAnon, a political movement with its own conspiracy theory, as one of the groups responsible for the storming of the Capitol (Moskalenko & McCauley, 2021, p. 142). According to QAnon, a satanic cabal of pedophiles and cannibals, consisting of individuals like Hillary Clinton, Tom Hanks, and Lady Gaga, controls the world's governments and the media (Moskalenko & McCauley, 2021, p. 142). Moreover, Donald Trump is believed to be one of the few people in power who works behind the scenes to bring down this cabal. This is an example of how conspiracy theories can lead to real-life consequences. In simple terms, conspiracy theories can be defined as significant events and circumstances resulting from the secret actions of a malevolent group that covers up information for their benefit (Jolley, Mari, & Douglas, 2020, p. 231). Conspiracy theories can have serious consequences leading to individuals committing extremist violence, disengaging from politics, or refusing to take part in actions necessary to reduce threats like climate change (Butter & Knight, 2020, p. 2). Even though many look at conspiracy theories as entertainment or alternative explanations, they have the potential to have a tangible impact on individuals and society.

Conspiracy theories are not only heavily present in America. In Central Europe, one can see how populist leaders like Viktor Orbán and Róbert Fico have employed conspiracy theories surrounding the international financier George Soros as a tool to whip up political support (Plenta, 2020, p. 512). What was once a conspiracy theory mainly endorsed by far-right extremists and conspiracy-oriented media has now evolved into a tool for the political elites (Plenta, 2020, p. 513). This exemplifies how conspiracy theories can migrate from the margins of society to public life and the center of politics.

The literature shows that individuals who believe in one conspiracy theory, are more likely to believe other conspiracy theories and that conspiracy theories have become increasingly popular (Goertzel, 1994). Moreover, recent studies demonstrate that most people believe in at least one conspiracy theory (Butter & Knight, 2020, p. 1). Because conspiracy theories are so widespread and have been for a while, as well as having potential violent side effects, they are interesting to study.

More recently, the number of conspiracy theories surrounding the Covid-19 pandemic has increased. The World Health Organization's (WHO) emergency committee declared a global health emergency based on the virus outbreak in China on the 30th of January 2020 (Velavan & Meyer, 2020, p. 278). Since then, Covid-19 became a global pandemic, and as of April 2023, there have been over 762 million confirmed cases and almost 7 million deaths (World Health Organization, 2023). After the outbreak of the Coronavirus, we have seen a wave of unverified stories about its origins, and possible cures (Shahsavari, Holur, Wang, Tangherlini, & Roychowdhury, 2020, p. 280). As a result, myths and conspiracy theories around the virus have been spreading rapidly across the globe (Gemenis, 2021, p. 230). This becomes evident when looking at how the WHO has its own site dedicated to busting myths surrounding the virus and preventing the spread of misinformation (World Health Organization, 2022). Hence, studying Covid-19 related

conspiratorial thinking is fascinating, as it is a highly silent issue that has spread worldwide. Additionally, it has been established that believing in conspiracy theories undermines trust and willingness to adhere to authorities. Most experts say that for Covid-19 to be handled, individuals must follow governmental recommendations (Pummerer et al., 2022, p. 49). Research also suggests that believing in Covid-19 conspiracy theories undermines engagement in pro-health behaviors and support for public health policies (Earnshaw et al., 2020, p. 850). Therefore Covid-19 conspiratorial thinking potentially makes it even harder for governments to deal with the pandemic.

## 1.1 Previous research

Even though conspiracy theories are not a new phenomenon, they are a relatively new topic in political science; first appearing as a topic of study after the Second World War (Giry & Tika, 2020, p. 108). Today most of the research on conspiracy theories in political science is quantitative. However, more qualitative approaches are also gaining ground (Giry & Tika, 2020, p. 110). The interest in studying the psychological reason behind conspiratorial thinking has also increased, resulting in a crossing between political science and social psychology (Giry & Tika, 2020, p. 110). The research so far on conspiracy theories agrees on a couple of things. First, conspiracy theories are not a marginal phenomenon and can be found across the social ladder (Goertzel, 1994). This is in line with the findings that conspiratorial thinking is also present among the political and intellectual elite and that conspiracy theories are widespread among the general public in the West (Butter & Knight, 2020, p. 4; Giry & Tika, 2020; Jolley & Douglas, 2014). Second, as already briefly mentioned, scholars agree that once people believe in one conspiracy theory, they are more likely to believe in several (Andrade, 2020; Douglas et al., 2019; Adam M. Enders & Smallpage, 2019; Goertzel, 1994; Swami, Chamorro-Premuzic, & Furnham, 2010). The research varies when it comes to individual factors that condition conspiratorial thinking. I review these factors more closely in Chapter 2.

The second part of this thesis explores the relationship between conspiratorial thinking and satisfaction with democracy. The storming of the Capitol building shows how conspiracy theories can lead to harmful actions, but research has also highlighted the negative effects conspiracy theories can have on democracy (Ardévol-Abreu, Zúniga, & Gámez, 2020; Adam M. Enders & Smallpage, 2019; Giry & Tika, 2020; Papaioannou, Pantazi, & Prooijen, 2022; Sutton & Douglas, 2020). This research looks at how conspiratorial thinking has a negative impact, among other things, on the intention to vote and decreases the trust in democratic institutions.

Even though the research on conspiratorial thinking has expanded in recent years, there are still gaps in the field, that this thesis aims to fill. This thesis continues the trend of examining the factors that condition conspiratorial thinking. However, in contrast to previous research, I do not examine just one form of conspiratorial thinking but three different ones. Namely general conspiratorial thinking, anti-science conspiratorial thinking, and Covid-19 conspiratorial thinking. This allows me to look for robust predictors that can be generalized for conspiratorial thinking. In addition, this allows me to compare Covid-19 conspiratorial thinking with other types to evaluate if it has unique properties, such as an appeal to a broader audience. To my knowledge, there is not much research comparing Covid-19 conspiratorial thinking to other conspiracies. This thesis also moves on from the individual factors conditioning conspiratorial thinking to examine how conspiratorial thinking can impact satisfaction with democracy. As

highlighted, research suggests that conspiracy theories can harm democracy. Thus, I more specifically examine how conspiratorial thinking affects satisfaction with democracy. This is a unique relationship to explore, as this has yet to be done extensively. Looking at satisfaction with democracy makes it possible to view how conspiracy theories can be a threat to democratic regimes, as research shows how individuals who are less satisfied with democracy are more likely to wish for reform and often more autocratic regimes (Quaranta & Martini, 2016; Singh & Mayne, 2023). To summarize, my research enriches the field through examining the conditions that lead to conspiratorial thinking across content and context and shows how this type of thinking can threaten democratic regimes if it remains unchecked.

## 1.2 Research questions and methodology

The aim of this thesis is two-fold and is concerned with two sets of research questions. First: what conditions conspiratorial thinking on a personal level? Are different conspiracy theories conditioned by various factors? Second: does conspiratorial thinking impact satisfaction with democracy? What implication does this have for democratic regimes? To be able to answer these research questions, this thesis follows a quantitative research design using data from the 2020 European Social Survey (ESS). For both analyses, a multilevel regression analysis is utilized. In Chapter 3, the ESS round 10 and the multilevel model will be presented, as well as the operationalization and justification of the variables for the first model. Then in Chapter 5, the new variables for the second analysis will be operationalized and justified.

In the first analysis, three models with three different dependent variables that tap into different forms of conspiratorial thinking are evaluated: general conspiratorial thinking, anti-science conspiratorial thinking, and Covid-19 conspiratorial thinking. The independent variables for the first analysis fit into three main categories: psychological, political/ideological, and demographic factors. The findings and results are examined and discussed in Chapter 4. However, a few of the findings deserve extra attention. First, I found that when it comes to Covid-19 conspiratorial thinking, individuals with both higher and lower levels of education are more likely to engage in it. This was not the case with general conspiratorial thinking. This is illustrated in Graph 2, where it also becomes evident that, at the extreme, individuals with the highest level of education are more likely to engage than individuals with the lowest levels. This is intriguing as most of the previous research only highlights the relationship between lower levels of education and conspiratorial thinking. This also shows how Covid-19 conspiratorial thinking differs from general conspiratorial thinking. Further, the way the age and internet use variables impact Covid-19 conspiratorial thinking is interesting. Age is only significant in the Covid-19 model, and it indicates that younger individuals are more likely to engage in conspiratorial thinking here. Again, this shows how Covid-19 conspiracy theories differ from the other. Even though not statistically significant, the age variable in models 1 and 2 indicates that older age predicts more conspiratorial thinking. On another note, despite the difference, this thesis also finds that many of the individual factors that condition conspiratorial thinking do so similarly across all three models. Therefore, one can speak of some robust predictors, but there are also content- and context-dependent differences.

The ESS round 10 dataset is also used for the second model. However, the three conspiratorial thinking variables are flipped on their heads. Satisfaction with democracy becomes the dependent variable, and the three conspiratorial thinking variables now become key predictors. Again, a multilevel model is used. The results are presented and

discussed in Chapter 6. In this second analysis, it is highly evident that conspiratorial thinking negatively impacts individuals' satisfaction with democracy, as all three variables of conspiratorial thinking are significant in the second model. And as it has a negative impact on satisfaction with democracy, one could argue that it also can be perceived as a threat to democracy, as lower levels of satisfaction with democracy can lead to more individuals wanting less democratic reforms (Singh & Mayne, 2023).

It also becomes apparent in Graph 4 and Table 4 that the Covid-19 conspiratorial thinking variable has the most significant negative impact on satisfaction with democracy. The findings from the first and second analyses show how Covid-19 conspiratorial thinking sets itself apart from the other conspiracy theories in this thesis. This reinforces that we must further examine Covid-19 conspiratorial thinking alongside and in comparison to other conspiracy theories.

### 1.3 Structure of the thesis

This thesis is structured in the following way. Chapters 2-4 are dedicated to analyzing factors conditioning conspiracy theories. Chapter 2 includes a literature review of conspiracy theories. Here conspiracy theories will be defined, as well as their characteristics and motivational factors behind believing them. Then the most widely accepted psychological, political/ideological, and demographic predictors for conspiratorial thinking, as well as my hypothesis, will be examined. Chapter two finishes with a review of the literature on Covid-19 conspiracy theories, as well as how I expect Covid-19 conspiratorial thinking to differ from the other conspiratorial thinking variables. Moving on chapter 3 is the first methodological chapter of this thesis. Here the three dependent variables of conspiratorial thinking are operationalized, together with the independent variables. The results from the first analysis are discussed in Chapter 4.

The thesis will then turn to the second analysis, and chapter 5-6 is dedicated to this. Chapter 5 reviews the previous literature on conspiracy theories and their impact on democracy and presents the hypothesis for the second analysis. In Chapter 5, the dependent variable, satisfaction with democracy, will be operationalized together with the independent variables. The same three variables on conspiratorial thinking from the first analysis are included as independent variables. The results from the second analysis are discussed in Chapter 6. Lastly, chapter 7 consists of the conclusion, and the main findings from the thesis will be summarized, together with the limitations of the thesis and suggestions for further research.



## 2 Literature review

### 2.1 Conspiracy theories

As mentioned, the research on conspiracy theories in political science is a young topic. Not much research was done before 2012, and the research was rather theoretical than empirical (Giry & Tika, 2020, p. 110). This is quite interesting, as conspiracy theories in themselves are not a new thing. There is evidence of conspiracy theories being prominent in ancient Greece, where they spread quickly throughout society (Andrade, 2020, pp. 505,507). Today, conspiracy theories have become more popular and visible, both in the academic literature and society in general. Mainly quantitative methods have been used when researching conspiracy theories, such as polls, questionnaires, and internet data. At the same time, newer studies are gaining ground using quantitative methods dealing with interviews and empirical observations (Giry & Tika, 2020, p. 110).

A conspiracy theory can be defined as an explanation of events (historical, ongoing, or future) that claims that a small group of powerful individuals are acting in secret for their own benefit at the expense of the common good (Norris, Garnett, & Grömping, 2020; Stoeckel & Ceka, 2022; Sutton & Douglas, 2020). The explanations of events contradict what is commonly accepted as the truth (Norris et al., 2020, p. 108). This will be referred to as the more minimalistic definition and will be used in this thesis when measuring conspiracy theories in general. This is a minimalistic definition, because it does not demand that the group is specified, and it encapsulates a broader spectrum of conspiracies. This is compared to the more specific definition highlighted below. By using this more general and thin definition, it will be possible to see if there is a difference between conspiratorial thinking based on the context and contents of different conspiracy theories.

One can also define conspiracy theories by the following markers; a) they are oppositional; b) they describe acts that are malevolent or forbidden; c) agency is ascribed to individuals and groups, as opposed to impersonal or systemic forces; d) they are epistemically risky; e) are socially constructed, not just adopted by individuals, but shared with social objectives in mind (Douglas & Sutton, 2023, p. 282). By oppositional, it means that conspiracy theories are set up to oppose what the public has accepted as truth (Douglas & Sutton, 2023; Norris et al., 2020). This does not exclude theories that officials endorse; the only premise is that it opposes widely accepted facts. The premise that conspiracy theories are malevolent or forbidden emphasizes how the interests of the conspiring group are against the public interest (Douglas & Sutton, 2023; Norris et al., 2020, p. 108). Thirdly, this definition states that specific individuals or groups possess agency and are behind events, as opposed to events being driven by systemic forces. This entails that the group or individuals behind the conspiracy are believed to possess the power needed for the conspiracy theory to be true (Douglas & Sutton, 2023), regardless of if this is the case. This definition also highlights how conspiracy theories are epistemically risky, meaning that their existence is threatened and that they often are prone to being false (Douglas & Sutton, 2023). Another aspect of this element is that if one tries to disprove it, it just solidifies their belief that there is a conspiracy against them (Norris et al., 2020, p. 108).

Lastly, conspiracy theories are social constructs, meaning that they are inherently social in both their content and purpose (Douglas & Sutton, 2023, p. 775; Prooijen & Vugt, 2018).

Individuals believe in them because they create unity and because individuals wish to achieve social goals, such as changing power dynamics or exposing certain groups. This emphasizes the collective nature of conspiracy theories instead of viewing them as being primarily individual. This is the more maximalist definition, as it is more specific. The reason for including these two different definitions of conspiracy theories is to show that conspiracy theories can be defined in different ways. Because this thesis is quantitative, the minimalistic definition will be used for the purposes of more effective operationalization. The more maximalist definition is better reserved for qualitative studies.

When looking at the different ways to define a conspiracy theory, it becomes clear that the challenge when dealing with them is that some of them have been proven accurate, even at high political levels (e.g., Watergate). This makes it more challenging to know which theories one should deal with as conspiracies and which to consider accurate. It is also important to note that none of the definitions used above says anything about the level of truth in conspiracy theories. This thesis does not focus on the level of truth of the theories being examined, but on conspiratorial thinking.

### 2.1.1 Characteristics of conspiracy theories

In addition to the definitions highlighted above, there are also different characteristics one can speak of when looking at conspiracy theories. Previous scholars argue that conspiracy theories have three characteristics; a) "they locate the source of unusual social and political phenomena in unseen, intentional, and malevolent forces"; b) "they typically interpret political events in terms of a Manichean struggle between good and evil"; c) "most conspiracy theories suggest that mainstream, accounts of political events are a ruse or an attempt to distract the public from a hidden source of power" (Oliver & Wood, 2014, p. 954).

Conspiracy theories are also, to a varying degree, speculative, complex, and resistant to falsification (Douglas, Sutton, & Cichocka, 2017, p. 538). Being resistant to falsification means that when evidence is presented against the conspiracy theory in question, it is only interpreted as evidence of the conspiratorial effort to suppress it (Andrade, 2020, p. 509). This is a crucial part of conspiracy theories because it makes them harder to debunk. Furthermore, trying to convince individuals that their belief is wrong or not grounded in facts can lead to solidifying their beliefs, potentially leading to a vicious circle where efforts to minimize the spread of conspiracies might increase them and, therefore, pose a more significant threat to society. This makes it difficult to convince people that their respective conspiracy theories are untrue.

### 2.1.2 Motivational factors of conspiratorial thinking

In the literature on the motivation behind conspiratorial thinking, three motivational factors consistently emerge; epistemic motives, existential motives, and social motives (Douglas & Sutton, 2023; Douglas et al., 2017; Douglas et al., 2019; Earnshaw et al., 2020; Jolley et al., 2020; Mulukom et al., 2022; Norris et al., 2020; Sternisko, Cichocka, & Bavel, 2020; Uscinski et al., 2020). The epistemic motive is rooted in how conspiracy theories help individuals make sense of the world around them or specific events (Uscinski et al., 2020, p. 2). Conspiracy theories that cater to the epistemic motive help individuals make sense of a situation if the information is unavailable or conflicting. They can also find meaning in events that inherently seem random (Douglas et al., 2017, p. 538). Simply put, conspiracy theories might offer an opportunity for individuals to keep their beliefs when facing uncertainty. Research suggests that belief in conspiracy theories might satisfy some of the

epistemic motives for individuals in the short term. However, it turns out that it is more of a false promise, as conspiracy theories seldom fulfill this epistemic motive in the long-term (Douglas et al., 2017, p. 539).

The existential motive behind believing in conspiracy theories serves the need to feel safe (Earnshaw et al., 2020, p. 850; Uscinski et al., 2020, p. 2). Earlier works on conspiracy theories suggest that individuals are attracted to them because they can offer compensatory satisfaction when they feel threatened (Douglas et al., 2017, p. 539) and compensate for feelings of loss of control (Douglas & Sutton, 2023). This means that conspiracy theories can help individuals who feel anxious and powerless to regain control. The lack of control might encourage a desire to make sense of whatever situation or environment individuals are facing through conspiracy theories (Imhoff et al., 2022). As with epistemic motives, conspiracy theories seldom fulfill this existential need, and research even suggests that it might make people feel more threatened (Douglas & Leite, 2016; Douglas et al., 2017). Here it becomes clear that the existential motive is about feelings of powerlessness and lack of safety.

Lastly, the social motive taps into individuals' need to belong to a group and maintain a positive self-image of this group (Earnshaw et al., 2020, p. 850; Uscinski et al., 2020, p. 2). Here research suggests that conspiracy theories are especially appealing to individuals who find the positive image of their in-group to be threatened (Douglas et al., 2017, p. 540). In general, individuals on the losing end of a conflict between their group and others have a more prominent tendency to believe in hostile conspiracies about the other groups or that there is a conspiracy against their group (Douglas et al., 2017). Further political scientists have found that in terms of affiliation, people are more likely to believe in conspiracy theories when they feel involved in the theory. Especially when the conspiracy theory exonerates their in-group and implicates their political opponent (Giry & Tika, 2020, p. 112). This further emphasizes the social aspect of belief in conspiracy theories.

This thesis will use these three factors as an overarching theoretical framework when applicable. The reason for including these factors in the discussion is that they have a strong presence throughout the conspiracy theory literature (Douglas & Sutton, 2023; Douglas et al., 2017; Douglas et al., 2019; Earnshaw et al., 2020; Jolley et al., 2020; Mulukom et al., 2022; Norris et al., 2020; Sternisko et al., 2020; Uscinski et al., 2020). However, as the thesis is not solely focused on motivational factors but rather an array of individual factors that impact conspiratorial thinking, these motivational reasons will only be used when possible. This is also partly due to the challenges of operationalizing these three motivations for a quantitative study.

## 2.2 Factors conditioning conspiratorial thinking

### 2.2.1 Psychological factors

Explanations for why people support conspiracy theories can be placed somewhere between political science and social psychology (Giry & Tika, 2020, p. 110). When examining authoritarianism as a psychological factor, separating it from ideology and conservatism is challenging as these overlap. Despite this, the following section will explore the political psychology behind conspiratorial thinking, what it is motivated by, and how this conditions it.

Conspiratorial thinking can be viewed as the worldview, ideological orientation, or belief system that is distinct from the extent an individual believes a specific conspiracy theory (Stoeckel & Ceka, 2022, p. 6). If one looks at it as a worldview or belief system, it becomes more than just believing in a conspiracy theory. It then becomes a set of dimensional thinking patterns and behaviors that shape how people view and interpret the political realm (Stoeckel & Ceka, 2022, p. 6). In that sense, conspiratorial thinking has the potential to bleed into every aspect of an individual's life and the way individuals perceive the world.

Conspiratorial thinking and the belief in specific theories are also often associated with simplistic black-and-white thinking and detecting nonexistent patterns in random data (Andrade, 2020, p. 509). It is about connecting the dots that can only be seen by the individuals in question and not the general public. On the same note, conspiracy theorists tend to make sense of the world by relying on overly simplistic explanations of events and that significant events need to be explained by prominent causes (Andrade, 2020, p. 509). As a result, individuals who believe in conspiracy theories do not find the mundane explanations of significant events sufficient (Douglas et al., 2017, p. 539). This means that simple and logical explanations are not grand enough to explain outcomes that have widespread consequences (e.g., the AIDS epidemic and the assassination of John. F. Kennedy). The Covid19 pandemic can exemplify this. People do not believe that a pandemic of that scale could be explained by the simple fact that the disease was transferred from bats to humans. Because of its severe consequences, it is easier to comprehend it as a plot from a foreign government. One can argue that seeing patterns, black-and-white thinking, and seeking oversimplistic explanations are all related and have the power to reinforce each other.

There is also the argument that belief in conspiracy theories is conditioned by mainly two innate psychological predispositions, namely the tendency to attribute the source of unexplained or extraordinary events to unseen forces and the second is the attraction to melodramatic narratives as an explanation for major events (Oliver & Wood, 2014, p. 954). This can be tied back to the epistemic motive and is in line with the argument that people seek extensive explanations for significant events and simplistic black-and-white thinking. The argument is that believing in conspiracy theories can contribute to psychological predispositions that everyone can inhabit and that we see daily.

Right-wing authoritarianism is a positive predictive factor for conspiracy thinking (Thórisdóttir, Mari, & Krouwel, 2020, p. 308). Further, the concept of an authoritarian personality has been effective in explaining conspiracy thinking (Grzesiak-Feldman & Irzycka, 2009; Yendell & Herbert, 2022). Authoritarianism consists of three main facets: authoritarian submission, authoritarian aggression, and conventionalism (Passini, 2017, p. 74). The authoritarian submission aspect describes the greater-than-average need for order (Hetherington & Weiler, 2009, p. 3) and being submissive towards the established authorities (Passini, 2017, p. 73). Authoritarian aggression speaks to the fact that individuals who are more authoritarian are more likely to distinguish between in-groups and out-groups and often feel that the out-group challenges their in-group (Hetherington & Weiler, 2009, p. 4 ). This results in aggression toward the targeted out-groups (Passini, 2017, p. 74). Lastly, conventionalism is about the wish to protect and maintain existing social norms (Hetherington & Weiler, 2009, p. 4) and strictly adhere to these conventional norms (Passini, 2017, p. 74).

But how do these different aspects of authoritarianism impact conspiratorial thinking? Starting with authoritarian submission, one would first be inclined to assume that this

would make individuals less likely to believe in conspiracy theories. After all, a lot of the conspiracy theories circulating paint the government and authorities as conspiracists. If authoritarians are submissive to the authorities, then they may be less likely to engage in thinking that challenges the authorities. However, the critical question is who the individual perceives as the rightful authority. If the authoritarian respondent believes that the government is corrupt, they may seek out other figures, such as opposition leaders of populist movements, upon which to confer authority. Uscinki et al. (2020) found that support for Donald Trump was strongly related to believing Covid-19 Conspiracy theories. It is well-known that Trump engaged in several conspiracy theories during his presidency, especially surrounding Covid-19. This shows that if the individuals who believe in conspiracy theories also see that their perceived rightful authority supports their theories, they are fully capable of displaying authoritarian submission behaviors.

Aggression towards outgroups can explain conspiratorial thinking in the sense that if you believe in a conspiracy, you might be more skeptical of outgroups, especially the ones you perceive as a threat to your group. Here theories that involve believing that another group is trying to replace yours or that one specific group of people are conspiring logically would be more impacted by this aspect of authoritarianism. This can be seen through conspiracy theories like the great replacement theory, where some individuals think that white Europeans and Americans are purposely being replaced by non-white immigrants (Rose, 2022). This also taps into the existential motive of authoritarianism. This will naturally lead to aggression towards the out-group that individuals perceive as threatening them. On the other hand, if the conspiracy theory in question is not concerned with other groups of people but rather about small, powerful group such as the government, authoritarian aggression might not be a predictive factor for conspiratorial thinking. However, since most conspiracy theories, in one way or another, accuses a group of people of being a threat to one's in-group, it is natural to think that there is quite a strong correlation between out-group aggression and conspiratorial thinking.

Lastly, conventionalism can be tied to conspiratorial thinking as significant changes or new tendencies can be perceived as a conspiracy to end the way of life one currently has. An example is how one could perceive Covid-19 as a threat with its restrictions and guidelines. To challenge this relationship between conventionalism and conspiratorial thinking, one could also assume that individuals who score high on conventionalism would be opposed to conspiratorial thinking. This, as conspiracy theories, can be perceived as a threat or disturbance to the current situation. As with the two other aspects of authoritarianism, it can explain conspiratorial thinking as well as refute the relationship between authoritarianism and conspiratorial thinking. The thesis will test authoritarianism across three models to see whether the three aspects behave differently based on context and content.

Moving on, individuals who gravitate towards authoritarianism tend to view the world in more concrete and black-and-white terms (Hetherington & Weiler, 2009, p. 3). Meaning they exhibit a higher need for order. This aligns with the tendency of individuals who score higher on levels of authoritarianism to feel more threatened and experience the world as very complicated (Hetherington & Weiler, 2009, p. 34; Osborne, Costello, Duckitt, & Sibley, 2023, p. 1), as well as the submission aspect. Here the need for more simple explanations and the need for safety is activated, which is something conspiracy theories often promise to provide. The wish for simple explanations and safety can be tied back to the epistemic and existential motives for believing conspiracy theories. Based on the research highlighted above, the following hypothesis is presented:

*H1: Individuals with higher levels of authoritarianism are more likely to engage in conspiratorial thinking.*

As mentioned at the beginning of this section, it can be hard to separate authoritarianism and ideology. This is evident when it becomes clear that authoritarianism and ideological extremism share a common underlying psychology, such as the already mentioned tendency to utilize black-and-white thinking and the belief in simple solutions (Prooijen, Krouwel, & Pollet, 2015, p. 571). This common underlying psychology allows for the possibility for individuals belonging to both the radical left and right to believe in the same or similar conspiracy theories. Finally, it has been argued that when it comes to motivation, conservatism and conspiracy theories share the epistemic motive aimed at threat reduction (Thórisdóttir et al., 2020). This might explain why one often finds radical right and conservative people more prone to conspiratorial thinking (Imhoff et al., 2022). I return to the relationship between ideology and conspiratorial thinking below.

Individuals who exhibit high levels of conspiratorial thinking have been known to express higher interpersonal distrust (Yendell & Herbert, 2022, p. 238), especially expressing distrust toward those who represent the system (Lantian, Wood, & Gjoneska, 2020, pp. 156-157). Low interpersonal trust was also established by Goertzel's famous study in 1994 to predict conspiracy thinking (Goertzel, 1994, p. 731), and it is agreed upon that low interpersonal trust is a solid predictor (Thórisdóttir et al., 2020, p. 305). Counter to this, Oliver & Wood (2014, p. 961) found no consistent relationship between interpersonal trust and conspiracism. This is contested as generally low interpersonal trust predicts conspiratorial thinking (Thórisdóttir et al., 2020, p. 305). This relationship is logical because most of the conspiracy theories out there, paint other individuals or groups as suspicious and conspiring. Therefore, it is natural that low interpersonal trust is correlated with conspiratorial thinking. Based on the research highlighted above, the following hypothesis is presented:

*H2: Individuals with higher levels of interpersonal distrust are more likely to engage in conspiratorial thinking.*

### 2.2.2 Ideology and political factors

The thesis will now focus on ideology and its relationship to conspiratorial thinking. It is first necessary to note that research suggests that conspiracy theories have a presence across the entire political spectrum and up and down the social ladder (Giry & Tika, 2020, p. 111; Oliver & Wood, 2014, p. 959), which means that no one is immune to them. This also makes it more challenging to pinpoint what types of people are more likely to believe in conspiracy theories. On the other hand, this also indicates how conspiracy theories and beliefs can unify people across the ideological spectrum. In addition, one can find a strong presence of conspiracy theories in the political realm, where they thrive and are highly salient (Imhoff et al., 2022, p. 392).

A correlation has been established between ideological positions, mainly radical ones, and belief in conspiracy theories. Research indicates that conspiracy theories may play a role in ideological processes (Sutton & Douglas, 2020, p. 118). Political extremism and conspiracy theories have been found to be strongly related. This is because they both share a highly structured thinking style aimed at making sense of societal events (Prooijen et al., 2015, p. 570). It has also been found that respondents who endorsed multiple conspiracies generally did so in ideologically consistent ways (Oliver & Wood, 2014, p. 957), which

means that the theories they endorsed were all in line with their ideological positioning. This indicates that most individuals who endorse multiple conspiracy theories will not endorse the same ones as individuals on the other side of the political spectrum. It is crucial to remember that this study was done only on American respondents. This thesis will examine how radical ideological positioning affects conspiratorial thinking regardless of content and context.

Some scholars argue that there is a U-shaped pattern when it comes to ideology and conspiracy theories (Thórisdóttir et al., 2020, p. 308). This u-shaped pattern has not only been found in the United States but also in several European countries (Imhoff et al., 2022, p. 393). This can be explained by the already highlighted standard features among the radical left and right (Imhoff et al., 2022; Prooijen et al., 2015). Here the thought is that both the radical left and right are more likely to engage in conspiratorial thinking than mainstream individuals. However, this is not a symmetrical relationship, as one can see the tendency of the radical right to be more heavily connected with conspiracy thinking and beliefs. This U-shaped relationship indicates that radical individuals are more prone to conspiratorial thinking, further strengthening the finding that extreme political ideology predicts higher levels of conspiratorial thinking (Prooijen et al., 2015).

One cross-cultural study of 26 countries found that conspiracy belief was associated with the extreme left and especially extreme right-wing beliefs (Imhoff et al., 2022, p. 392). Research has also been conducted on the more multidimensional understanding of political ideology, namely Duckitt's dual model with right-wing authoritarianism (R.W.A) and social dominance orientation (S.D.O). In some cases, R.W.A. has proved to be a positive predictor of conspiracy mentality, but this link is not always present (Thórisdóttir et al., 2020, p. 308). Further, one European study found a strong negative correlation between belief in conspiracy theories and voting for the progressive left, libertarian, and centrist parties. While on the other hand, there was a strong positive correlation between conspiracy theories and voting for populist anti-immigrant parties (Thórisdóttir et al., 2020, p. 309). This points to a strong relationship between radical right ideology and conspiratorial thinking.

However, there are cases where conspiracy beliefs have been more prominent among the radical left, as in Hungary, Romania, and Spain (Imhoff et al., 2022, p. 395). The same study also showed that high levels of conspiracy thinking and beliefs are mainly related to the left wing when this left-wing position favors authoritarianism and focuses less on ecological and liberal values. Here authoritarianism again emerges as a predictor for conspiratorial thinking. This highlights how the radical left and right have standard features and are both prone to conspiracy thinking. However, most of the research suggests that the radical right generally has a stronger connection to conspiratorial thinking. Based on this, the following hypothesis is presented:

*H3: Individuals on the far-right side of the political spectrum are more likely to engage in conspiratorial thinking.*

Another trend that emerges in the literature is that political trust correlates with belief in conspiracy theories. Pummerer et al. (2022, p.51) found that belief in the conspiracy that the government was involved in the pandemic, and exploited it, was related to lower institutional trust. This relationship seems to be reasonably established, as it was also found that low political trust is not only connected to firmer conspiracy beliefs but also that there is some evidence arguing that individuals being exposed to conspiracy theories reported reduced trust in government (Thórisdóttir et al., 2020, p. 305). In addition,

conspiracy theories often arise from political events where low political trust has been stimulated (Douglas et al., 2019, p. 10). All these examples show how there seems to be a correlation between political trust and belief in conspiracy theories, resulting in the following hypothesis:

*H4: Individuals with lower levels of political trust are more likely to engage in conspiratorial thinking.*

Lastly, there is also a relationship between feelings of political powerlessness and conspiratorial thinking. Perceiving the presence of conspiracies has been found to increase support for autocratic regimes, partly due to feelings of political powerlessness (Papaioannou et al., 2022, p. 1). Further, another study found that feelings of political powerlessness were higher when people were exposed to conspiracy theories regarding the government (Jolley & Douglas, 2014, p. 48). Similarly, it was consistently found that conspiracy beliefs negatively influenced the external system regarding the dimension of political efficacy (Ardévol-Abreu et al., 2020, p. 563). Here the research shows a relationship between feelings of political powerlessness and conspiratorial thinking, and this relationship will be further tested in this thesis. Based on the previous research, the following hypothesis is presented:

*H5: Individuals with higher levels of political powerlessness are more likely to engage in conspiratorial thinking.*

### 2.2.3 Demographic factors

The thesis will now focus on the demographic factors that can be said to impact conspiratorial thinking. Education, income, religion, and social media will be examined here.

The link between education and conspiratorial thinking is wildly disputed (Giry & Tika, 2020, p. 112). Scholars argue that it is well-established that conspiracy theories are negatively related to education (Thórisdóttir et al., 2020, p. 306), and Imhoff et al. (2022, p.399) confirm this. Conspiratorial thinking has also been related to lower levels of rational thinking (Andrade, 2020; Sutton & Douglas, 2020, p. 120). In one study done in America, the authors looked at what conditions the predispositions that lead to conspiracy thinking; they found education to be one of the most consistent variables, and the trend was that less educated individuals scored higher on the predisposition variables (Oliver & Wood, 2014, p. 960). Nevertheless, research suggests that when it comes to medical conspiracy theories in particular, a higher level of education does not necessarily mean that individuals are immune to conspiracy beliefs (Andrade, 2020, p. 511). This shows how there is a consensus about education and conspiracy theories, but there are anomalies, especially when it comes to medical conspiracy theories. This thesis aims to examine whether education has the same effect on conspiratorial thinking in general or if it differs when looking at Covid-19 conspiratorial thinking. Lower levels of income have also been linked to people being more likely to believe in conspiracy theories (Douglas et al., 2017, p. 540; Douglas et al., 2019; Mulukom et al., 2022). Again, this thesis will examine if lower income levels have a similar impact on conspiratorial thinking, regardless of the context and content. Since one knows that education and income are correlated, I expect them to behave similarly, and therefore the following hypothesis can be presented:

*H6: Individuals with lower income and education levels are more likely to engage in conspiratorial thinking.*



The impact of religion is also fascinating to examine. There have been some instances in certain countries where one can see a connection between belief in conspiracy theories and religiosity. There were some differences in the results of these studies. However, the results suggest that strong religiosity or a solid commitment to certain religious beliefs can lead to a stronger belief in conspiracy theories (Klofstad, Uscinski, Connolly, & West, 2019, p. 3; Mulukom et al., 2022, p. 6). Religion and conspiracy theories are connected in several ways. For example, religions can use conspiracy theories to discredit other religions, and religious traditions share structural similarities, such as apocalyptic traditions and hidden forces (Yendell & Herbert, 2022, p. 230). In addition, religion and conspiracy thinking can arguably be connected by the will to seek out great explanations for significant events and simplistic black-and-white thinking. Here the epistemic motive for conspiratorial thinking is also relevant, as both religion and conspiratorial thinking can be said to be motivated by the need and want to make sense of the world and events.

Studies have shown that religious minorities are more likely to believe in conspiracy theories that appeal specifically to their communities, such as conspiracy theories about AIDS or purported Zionist control over Islamist terrorism (Giry & Tika, 2020, p. 113). This finding can be tied back to the social motive of conspiratorial thinking, as conspiracy theories have been proven to be especially appealing for individuals who feel that their in-group is threatened (Douglas et al., 2017, p. 540). The research highlighted above indicates a relationship between religion and conspiratorial thinking. The thesis will test if religiosity impacts the measures of conspiratorial thinking used in this analysis differently. Here I expect that increased religiosity will predict higher conspiratorial thinking on a general basis.

The internet can also be considered an essential factor in more recent conspiracy theories (Andrade, 2020, p. 508). It gives people a forum and platform where they can communicate and reinforce their worldviews with each other. Studies have also found that people who trust and use social media as a source of information predict conspiratorial thinking (Mulukom et al., 2022, p. 7). Similarly, it was found that people who get their news from social media and use it frequently are more likely to believe in some types of conspiracy theories (Adam M Enders et al., 2021). It was also found that this relationship was conditional on the predisposition of conspiratorial thinking. Meaning that social media is strongly related to conspiracy beliefs when conspiratorial thinking intensifies (Adam M Enders et al., 2021). All these studies paint a picture of social media being connected to beliefs in conspiracy theories, especially for individuals who use social media as a platform for information. This leads to the following hypothesis for this thesis:

*H7: Individuals who frequently use social media as a source of news and information are more likely to engage in conspiratorial thinking.*

## 2.3 Conspiracy theories regarding health crises and COVID-19

Different factors that can be thought to impact conspiratorial thinking have been examined above, the thesis will now turn to what the research suggests impact Covid-19 conspiratorial thinking. Covid-19 is a highly salient issue and will be used as one of the dependent variables in the first analysis. As mentioned, by April 12th, 2023, the WHO reports that there have been over 762 million confirmed cases and almost 7 million deaths of Covid-19 globally (World Health Organization, 2023). It shows how this has been a global pandemic, naturally resulting in Covid-19 becoming a highly salient and visible issue in most places. The following section will first look at medical conspiratorial thinking in general, before moving on to Covid-19 conspiratorial thinking.

It is helpful to remember that conspiracy theories surrounding a health crisis or a virus are not unique to Covid-19. Conspiracy theories about vaccines can be traced back to the first smallpox vaccines, where people believed that the vaccine might give them horns (Andrade, 2020, p. 506). Moreover, despite the skepticism surrounding the Covid-19 vaccine, many people are generally opposed to vaccines. Vaccines aside, AIDS has also been subjected to different conspiracy theories, and among them is the belief that the US government invented the virus to reduce the black population (Andrade, 2020, p. 507). In addition, the Ebola virus has also been the target of many conspiracy theorists. One can even speak of a tendency of conspiracy theories to appear during virus outbreaks and times of crisis (Andrade, 2020, p. 510; Gemenis, 2021, p. 230). All this goes to show that medical conspiracy theories have been well established prior to the outbreak of the Covid-19 pandemic.

One trait of medical conspiracy theories is that they are most likely false, but they are not presented in a way that makes them seem outrageously bizarre (Andrade, 2020, p. 508). They often have some level of truth, or previous events make it plausible that they might be true. An example of this is how African Americans do, in more considerable proportions, believe that the government designed AIDS. This can be explained by the fact that the government did engage in human experiments with African Americans in the Tuskegee Study of Untreated Syphilis (1930-1970) (Andrade, 2020, p. 508). The fact that some conspiracy theories have been proven true is not just limited to medical conspiracies, and it strengthens their credibility in general. Conspiracy theories about health-related issues are also, often, more than just medical conspiracy theories. The theories often operate in the grander picture and involve some of the usual perpetrators in conspiracy thinking (i.e., Illuminati, governments, the Free Masons, etc.) (Andrade, 2020, p. 509).

### 2.3.1 Explaining beliefs in medical conspiracy theories

Do the same factors condition beliefs in medical conspiracy theories as conspiracy theories in general? The research points to the fact that medical conspiracy theories do more harm than good and overall lead to poor health behaviors (Andrade, 2020, p. 511). One interesting finding is that authoritarianism and conservatism seem less important when looking at medical conspiracy beliefs (Gemenis, 2021, p. 231). This was evident when looking at how partisanship did not predict beliefs in conspiracy theories surrounding the Zika virus. This could be explained by the lack of politicization at the time (Klofstad et al., 2019). This finding is interesting, as conspiracy theories generally have been tied to authoritarianism and conservatism. Therefore, this allows Covid-19 conspiracy theories to be conditioned by different factors than general belief in conspiracy theories. It is essential to remember that the Covid-19 pandemic has been highly politicized, which might affect the relationship between authoritarianism and Covid-19 conspiratorial thinking. This is evident when looking at studies done on partisanship and Covid-19; it did have a role in some countries (US and Canada) but not in others (UK) (Gemenis, 2021, p. 231). This can then be explained by the different levels of politicization surrounding the Covid-19 pandemic.

As mentioned, conspiracy theorists seem to need extensive explanations for significant events (Douglas et al., 2017), which is also something one can see regarding medical conspiracy theories. This can be exemplified by how the source of a virus is often accused of being the result of a government scheme instead of natural causes. In a similar vein, outbreaks or instances of diseases that do not lead to death have a smaller chance of being perceived as intentionally released/created, as it is not viewed as severe as if people die (Andrade, 2020, p. 510)—strengthening the notion that significant events need extensive

explanations, which conspiracy theories provide. These feelings tap into the epistemic and existential motives of conspiratorial thinking, as medical conspiracy theories might help explain events and function as a safeguard in times of uncertainty. Even though this will not be done in this thesis, for future research, it would have been interesting to examine the link between levels of Covid-19 conspiratorial thinking and the percentage of deaths caused by Covid-19. The research above suggests that diseases leading to death have a bigger chance of attracting conspiracy theories (Andrade, 2020).

### 2.3.2 Factors conditioning Covid-19 conspiratorial thinking

Before looking at potential explanations for believing in conspiracy theories about Covid-19, it is helpful to gauge which ideas are out there. An overview made in 2020 at the beginning of the pandemic, looking at the right-wing media, found the following conspiracy theories to be circling: Covid-19 was created in a Chinese lab, Bill Clinton has previously developed and patented the Covid-19 virus, and America is using the pandemic to attack China from within (Gogarty & Hagle, 2020). In addition, several conspiracy theories about Covid-19 claim that the pandemic is orchestrated to introduce a new millennium of suppression, control, and surveillance (Sturm & Albrecht, 2021, p. 123). These latter theories lean more towards apocalypticism than distrust or skepticism and are arguably more extreme.

Uscinski et al. found in their study that beliefs that the pandemic has been exaggerated and deliberately created and released were the product of the following psychological predispositions: "to reject information coming from experts and other authority figures" and "to view major events as the product of conspiracies, as well as partisan and ideological motivations" (p.1). This links belief in Covid-19 conspiracy theories to anti-elitism. It also questions authoritarianism's predictive power on Covid-19 conspiratorial thinking. Further, they found that partisan motivations are the most decisive explanatory factors behind COVID-19 conspiracy beliefs (Uscinski et al., 2020, p. 2). They also found that support for Donald Trump is strongly related to the belief that the COVID-19 threat has been exaggerated, even when accounting for partisanship and ideology (Uscinski et al., 2020, p. 2). Their study used a representative survey of adults in the United States, examining the prevalence and correlation of beliefs in two distinctive COVID-19 conspiracy theories. In addition, the belief in Covid-19 conspiracy theories has also been linked to attitudes such as prejudice and a reduction in intentions to vaccinate (Mulukom et al., 2022, p. 2). Social media platforms have also significantly contributed to the sharing and spreading of misinformation and conspiracy theories about Covid-19 (Mulukom et al., 2022, p. 7). This aligns with the previously highlighted relationship between social media and belief in conspiracy theories.

Considering the existential and epistemic motives mentioned earlier (Douglas et al., 2017), one can argue that the Covid-19 pandemic involves both. Here one study found that higher levels of uncertainty and lack of personal control were associated with believing in Covid-19 conspiracy theories (Mulukom et al., 2022, p. 4). Here the lack of control over the pandemic and its restrictions might activate existential motives, as they easily can be seen as a threat to one's way of life. Simultaneously the lack of information and uncertainty in the beginning, mixed with vast amounts of fake news making it hard to grasp the situation, taps into the epistemic motive and the wish to make sense of it all. In the same study, right-wing ideology was highlighted as another significant driver of believing in Covid-19 conspiracy theories, which aligns with the research on conspiracy theories reviewed above.

Interestingly, distrust in one's government has also been associated with Covid-19 conspiracy theories (Mulukom et al., 2022). However, in the United States, belief in Covid-19 conspiracy theories correlated with more trust in President Trump but less trust in the local government (Earnshaw et al., 2020). This relationship between confidence in President Trump and a stronger belief in Covid-19 conspiracy theories can be explained by the politicization of the pandemic and the fact that Trump has advocated some of the theories. Therefore, one could assume that the general trend is that distrust in government and institutions is related to a stronger belief in Covid-19 conspiracy theories. Distrust in government has already been highlighted as a general predictor of believing in conspiracy theories (Thórisdóttir et al., 2020). Therefore, it has the potential to be a robust predictor of conspiratorial thinking.

Another study found that beliefs about conspiracy theories are more correlated than the values associated with established political ideologies and that conspiracy beliefs and skepticism about the pandemic are best explained by the belief in unrelated political and medical conspiracy theories (Gemenis, 2021, p. 229). This is in line with the previously established trend that belief in one conspiracy theory condition beliefs in more and makes it more likely that one will believe in several ones (Goertzel, 1994). Lastly, Covid-19 conspiracy beliefs were similar to conspiracy beliefs in general (Mulukom et al., 2022, p. 10). This challenges the narrative above that medical conspiracy theories and ideas differ from other conspiracy theories. Covid-19 conspiracy theories are conspiracy theories, and therefore the motives behind believing in them might inherently be the same as in general conspiracy theories. However, the same study highlights how there might have been a shift regarding Covid-19 conspiracy beliefs, as one before Covid-19 talked about a correlation between a conspiratorial worldview and a conservative/right-wing attitude. However, during the pandemic, the president and the leader of the conservative party in the US pushed these ideas (Mulukom et al., 2022, pp. 10-11). This has resulted in Covid-19 conspiracy theories increasing their presence among less extreme voters. This potential shift, therefore, makes it interesting to see whether the same factors condition Covid-19 conspiracy theories and conspiracy theories in general or if there are significant discrepancies.

I expect the Covid-19 conspiratorial thinking variable to be impacted similarly by the independent variables as the other dependent variables in the analysis, except for education and ideological positioning. When looking at education, the earlier hypothesis expects that lower levels of income correlate with higher levels of conspiratorial thinking. However, as mentioned, when it comes to medical conspiracy theories, higher levels of education did not necessarily mean that one was immune to conspiratorial thinking (Andrade, 2020, p. 511). A study done in Romania found similar trends when looking at what predicts belief in Covid-19 conspiracy theories. Here they found that individuals who were high school and college students were more likely to believe in Covid-19 conspiracy theories (Stoica & Umbres, 2021, p. 255). For this analysis, I expect a curvilinear relationship between education and Covid-19 conspiratorial thinking, meaning that higher and lower education levels predict conspiratorial thinking.

Second, I also expect the ideological positioning variable to behave differently. As mentioned above, the literature generally agrees that the radical right is more likely than the radical left and mainstream individuals to believe in conspiracy theories (Imhoff et al., 2022; Thórisdóttir et al., 2020). However, there were some instances in Eastern Europe where the radical left was a stronger predictor for conspiratorial thinking (Imhoff et al., 2022, p. 395). Sturm & Albrecht (2021) found in their research on Covid-19 conspiracies

in America that the pandemic has led to widespread skepticism regarding officials' truths and that shared political goals have the potential to unite distinct millennial and conspiracists group with different political attitudes. As with conspiracy theories in general, the radical right has endorsed several Covid-19 conspiracy theories. However, one also sees how the radical left has joined this. Especially on the left, there have been conspiracies surrounding the pandemic linking it to climate change and anti-capitalism (Sturm & Albrecht, 2021, p. 129). Therefore, I expect that radical left individuals are more likely to engage in Covid-19 conspiratorial thinking.

## 3 Method

### 3.1 European Social Survey

The dataset chosen for this thesis is the European Social Survey (ESS) round 10 from 2020. The ESS has been conducted since 2001 and is a cross-national survey that is academically driven (European Social Survey, n.d.). The survey measures beliefs, attitudes, and behavior patterns in over thirty nations. The main reason for choosing this dataset is that it included one question to tap into conspiratorial thinking in general, but also more specific towards COVID-19 and anti-science. As it is from 2020, it is from the height of the pandemic, allowing examining conspiratorial thinking about the pandemic during it. As it includes three different questions that tap into conspiratorial thinking, it makes it possible to see whether there is a difference between the factors making individuals more likely to engage in conspiratorial thinking. Also, having three different measures of conspiratorial thinking allows the opportunity to see which factors can be generalized to conspiratorial thinking. In addition, the data set also includes a cluster of questions that tap into the psychological, ideological/political, and demographic factors discussed earlier. This dataset also makes it possible to look at the individual and country level.

For this analysis, the following countries have been kept in the dataset: Bulgaria, Switzerland, Czechia, Estonia, Finland, France, Greece, Croatia, Hungary, Italy, Lithuania, Netherlands, Norway, Portugal, Slovenia, and Slovakia. These countries represent both Western and Eastern Europe and non-EU members. This makes it possible to look at differences within the EU, western and Eastern Europe, and outside the EU (even though this is limited to just Norway and Switzerland). This thesis will not do this, as the focus is on the individual level. However, the dataset allows for it. The only exception is that an Eastern Europe dummy variable is included in the second analysis. The descriptive table with the number of observations for each of the variables is presented in Table 1, and the number of observations for the models is presented in Table 2.

### 3.2 Variables and operationalization

#### 3.2.1 Dependent variables

Research on conspiracy theory and its potential consequences and impact on society and individuals are relatively new (Giry & Tika, 2020, p. 110). In Stoeckel and Ceka (2022), conspiratorial thinking is operationalized by these three following questions: a) actually, it is not the government that runs the country: we do not know who pulls the strings; b) the people think they govern themselves, but they don't, c) I often feel that crucial matters are decided behind the scenes, by people we never even hear about. This way of measuring taps into the minimalist definition of conspiracy theory in terms of a secret group pulling the string (Norris et al., 2020; Stoeckel & Ceka, 2022; Sutton & Douglas, 2020). As already mentioned, it is this minimalist definition the thesis focuses on, and arguably the three following variables all taps into this. The first dependent variable measures general conspiratorial thinking, and the following ESS question has been chosen: "A small secret

group of people is responsible for making all major decisions in world politics.” The second dependent variable measures anti-science conspiratorial thinking: “Groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public.” Lastly, the following question from the ESS round 10 has been included to measure Covid-19 conspiratorial thinking: “Coronavirus is the result of deliberate and concealed efforts of some government or organization.” All three dependent variables are on a 5-point scale and have been flipped so that 1=strongly disagree and 5=agree strongly.

### 3.2.2 Independent variables

To examine which variables impact and condition conspiratorial thinking, the thesis will present and operationalize the independent variables used for the models in the following section.

Authoritarianism can be measured by focusing on three main elements; submission, conventionalism, and aggression (Hetherington & Weiler, 2009, p. 33). First, the submission aspect of authoritarianism is about people being submissive to established authorities (Passini, 2017, p. 73). To be able to tap into this, the following two questions from the ESS10 have been chosen: “To what extent do you agree or disagree that obedience and respect for authority are the most important values children should learn” and “What (your country) needs the most is loyalty towards its leaders.” These variables are both on a 1-5 scale which has been flipped so that 1 = disagree strongly and 5 = agree strongly. The reason for choosing these questions is that they both tap into the wishes of individuals to be obedient and how important this is for them. Also, the importance of teaching your children obedience variable is one of the standard ways to measure authoritarianism (Hetherington & Weiler, 2009, p. 48).

The aggression aspect of authoritarianism is rooted in the aggression towards other groups perceived as the target by the established government (out-groups) (Passini, 2017, p. 74). Here the following variable from the ESS10 has been chosen: “To what extent do you think (country) should allow people of a different race or ethnic group from most people in your country to come and live here?”. This variable is on a 1-4 scale which has been flipped so that 1 = allow none and 4 = allow many to come and live here. This taps into aggression and hostility towards an outgroup. Lastly, conventionalism can be viewed as the want and need to adhere strictly to the conventional norms and values within a community (Passini, 2017, p. 74). For this thesis, this has been operationalized through the following ESS10 question: “To what extent do you agree or disagree that gay men and lesbians should be free to live their own life as they wish.” This variable has been chosen because it taps into the wish/need for things to stay the same and conservatism. This is on a 1-10 scale and has also been flipped so that 1 = disagree strongly and 10 = agree strongly.

Interpersonal trust was also highlighted as a psychological factor. Low interpersonal trust has been related to higher levels of conspiratorial thinking (Lantian et al., 2020; Thórisdóttir et al., 2020). To test this relationship in this analysis, the following question from ESS10 has been chosen: “Generally speaking would you say that most people can be trusted, or that you can’t be too careful in dealing with people?”. This is on a 0-10 scale, where 0 = you cannot be too careful, and 10 = most people can be trusted. This measures the level of trust between individuals.

Ideology and conspiratorial thinking have been linked previously in this thesis. When operationalizing ideology for this thesis, the following question from the ESS round 10 has been chosen: “In politics people sometimes talk of ‘left’ and ‘right’ in politics. Using this

card, where would you place yourself on this scale, where 0 means the left and 10 means the right". This variable has been coded into two dummy variables. Before this was done, 0-2 were decided to equal radical left, and 7-10 to equal radical right, and everything in between was dropped. Then the radical left dummy variable was created where 1 = radical left, and then the radical right dummy where 1 = radical right. As previously mentioned, radical ideology and conspiratorial thinking seem to be connected (Prooijen et al., 2015). Moreover, conspiracy theories are more prevalent on the radical right than on the radical left (Thórisdóttir et al., 2020). When relying on self-reported positioning on the left-right scale, the challenge is that individuals might differ in what they consider far left and right. The chosen variables tap into the respondent's ideological positioning.

The literature has also shown how political trust and conspiratorial thinking correlate negatively. Lower institutional trust was related to covid-19 conspiracy theories, (Pummerer et al., 2022), and low political trust seemed to be stimulated when conspiracy theories arose (Douglas et al., 2019). To tap into institutional and political trust, the following questions from ESS10 have been chosen: "Please tell me on a score of 0-10 how much you personally trust each of the institutions I read out; (country's) politicians and political parties". These are two continuous variables where 0 = no trust at all and 10 = complete trust.

Lastly, as already examined, research suggests that there is a relationship between political powerlessness and conspiratorial thinking (Ardévol-Abreu et al., 2020; Jolley & Douglas, 2014; Papaioannou et al., 2022) and that feelings of political powerlessness were higher when exposed to conspiracy theories (Jolley & Douglas, 2014, p. 48). To be able to test for the relationship between political powerlessness and conspiratorial thinking, the following questions from the ESS have been chosen: "How much would you say the political system in your country allows people like you to have a say in what the government does," and "how much would you say that the political system in your country allows people like you to have an influence on politics?". Both questions are continuous on a five-point scale where 1 = not at all and 5 = great. A factor analysis showed that both variables had an Eigenvalue of 1, meaning they both load onto the same underlying factor. Therefore, they have been combined into one single variable.

This analysis also consists of several demographic variables. The first one to be examined is education. In general, the research is relatively consistent on the negative relationship between conspiracy theories and education (Imhoff et al., 2022; Oliver & Wood, 2014; Sutton & Douglas, 2020; Thórisdóttir et al., 2020). However, it was also interesting to see that when looking at medical conspiracy theories, higher levels of education did not necessarily make people immune to conspiracy theories (Andrade, 2020). The link between educating and conspiratorial thinking is disputed in the research (Giry & Tika, 2020, p. 112). To test this relationship, the variable has been operationalized through the following question from the ESS10: "About how many years of education have you completed, whether full-time or part-time? Please report these in full-time equivalents and include compulsory years of schooling". This is a continuous variable on a 51-point scale, where lower values equal lower education, and higher values equal higher levels of education. This variable has also been squared so that it is possible to see if higher and lower levels of education can predict conspiratorial thinking, which means that the analysis includes two education variables. I expect a curvilinear relationship between education and Covid-19 conspiratorial thinking.



Income is also included, and here the research shows that lower income levels correlate with individuals being more susceptible to conspiracy theories (Douglas et al., 2017; Douglas et al., 2019; Mulukom et al., 2022). This variable has been operationalized through the ESS10 question: "Please tell me which letter describes your household's total income, after tax and compulsory deductions, from all sources? If you don't know the exact figure, please give an estimate". This is also a continuous variable, where lower levels equal lower levels of income and vice-versa. This does not say anything specific about the individuals' finances. However, working on the assumption that it does say something about how comfortable people live, it is used to tap into income.

Religiosity and religion have also been shown to predict conspiratorial thinking to varying degrees in different countries (Mulukom et al., 2022). Religiosity and conspiratorial thinking are also connected through psychological dispositions, as they both give agency to unseen forces (Oliver & Wood, 2014). To tap into this, the following question from the ESS10 has been chosen: "Apart from special occasions such as weddings and funerals, about how often do you attend religious service nowadays?". This question is on a 1-7 scale and flipped so that 1 = never and 7 = every day.

Another variable highlighted in the literature is social media. The literature suggests that social media is a crucial factor in newer conspiracy theories (Andrade, 2020) and that relying on social media for news and using it frequently correlated with belief in conspiracy theories (Adam M Enders et al., 2021; Mulukom et al., 2022). The following question from ESS10 aims to operationalize this: "On a typical day, about how much time do you spend using the internet on a computer, tablet, smartphone, or other device. Whether for work or personal use?". Here the respondents were asked to answer in hours and minutes. This is not an ideal variable as it does not ask if the respondents use social media as a primary source of information or if they use social media at all. However, using this variable makes it possible to see whether there is a relationship between internet use and conspiratorial thinking. Furthermore, if individuals use social media as their primary information source, they will arguably spend more time on the internet.

Lastly, in addition to the abovementioned variables, the analysis includes a set of control variables: gender and age. Here the ESS10 provides questions that determine the respondent's age and gender. Age is a continuous variable varying from 15-90, where higher levels equal older age, while gender has been dummy-coded so that 1 = male and 2 = female. One study did not find age to significantly predict belief in conspiracy theories (Swami, 2012, p. 7). However, age has been found to have a significant effect on the belief in financial conspiracy theories as well as a significant effect on participants' belief in simple political solutions (Prooijen et al., 2015, pp. 572-573). The relationship indicates that older individuals are more likely to believe conspiracy theories. Age seems to be a contested factor when predicting conspiratorial thinking (Giry & Tika, 2020, p. 113). When it comes to gender, men seem to endorse climate conspiracy theories more than women (Prooijen et al., 2015, p. 572); this was also the case when looking at Covid-19 conspiracy theories in the united states (Mulukom et al., 2022, p. 4). There are also differences here; studies done in the united kingdom, Germany, and Switzerland on Covid-19 conspiracy theories showed no differences in gender (Mulukom et al., 2022, p. 4). Both the effect of gender and age on conspiratorial thinking is therefore disputed.

### 3.3 Descriptive statistics

Table 1 reports the descriptive statistics of the variables in the first analysis.

**Table 1 – Descriptive statistics**

Variable	Number of respondents	Mean	Standard deviation	Min	Max
General conspiratorial thinking	24,121	2.863	1.225	1	5
Anti-science conspiratorial thinking	24,414	2.746	1.162	1	5
COVID-19 conspiratorial thinking	24,005	2.746	1.223	1	5
Obey	27,395	3.549	1.164	1	5
Loyal to leader	26,863	2.918	1.104	1	5
Outgroup aggression	27,048	2.455	0.916	1	4
Conventionalism	27,004	3.782	1.164	1	5
Interpersonal trust	27,558	4.970	2.529	0	10
Radical right	24,266	0.180	0.384	0	1
Radical left	24,266	0.116	0.320	0	1
Trust politicians	27,395	3.662	2.494	0	10
Trust political parties	27,324	3.605	2.448	0	10
Political powerlessness	26,894	2.137	0.898	1	5
Education	27,179	12.966	4.050	0	50
Education squared	27,179	184.514	115.945	0	2500
Income	21,560	5.432	2.689	1	10
Religiosity	27,410	2.515	1.434	1	7
Internet use	19,732	222.060	179.733	0	1440
Age	27,423	52.387	17.444	15	90
Gender	27,647	1.542	0.498	1	2
Country	27,647	8.887	5.627	1	19

### 3.4 Multilevel model

For the analysis of this thesis, a multilevel regression model has been chosen. This makes it possible to look at the interaction between the micro (individual) and macro (country etc.) levels in the data (Robson & Pevalin, 2016, p. 6), making it possible to explain how an individual's level predictors vary and affect the dependent variable in different contexts (Robson & Pevalin, 2016, p. 7). More specifically, a multilevel model allows the intercept to vary for each country-level group (Robson & Pevalin, 2016, p. 22). This means that the country-specific contexts are controlled for in the analysis. However, this analysis is more concerned with the individual level, so the country-level differences will not be addressed.

Before the analysis was run, an intraclass correlation coefficient (ICC) test was performed to see how much of the variation in the dependent variables could be attributed to the differences between the country-level variable (Robson & Pevalin, 2016, p. 30). The ICC can range from 0 to 1. Here 0 indicates perfect interdependence on the second level (Sommet & Morselli, 2017, p. 212), meaning that the country-level variables have no impact on variations on the individual level variable. 1 indicates the opposite, that there is a perfect interdependence on the country-level variable variation only varies between the country-level (Sommet & Morselli, 2017, p. 212). If the ICC is over 5%, a multilevel model is merited. The ICC test was performed on the three empty models, with the following results: in the general conspiracy thinking model, the national level accounts for 12%; in the anti-science conspiracy thinking model, the national level accounts for 9% and in the Covid-19 conspiracy thinking model the national level accounts for 14%. This shows that there is enough variation that can be contributed to the country level in the analysis that merits using a multilevel model. A regular OLS regression model would have been used if this had not been the case.

## 4 Empirical analysis

The results from this analysis will now be presented. Table 2 shows three multilevel models, one for each dependent variable. Here the coefficient is presented, as well as the standard error in parentheses.

**Table 2 – Multilevel models**

	Model 1 (General conspiratorial thinking)	Model 2 (Anti-science conspiratorial thinking)	Model 3 (COVID-19 conspiratorial thinking)
Obeys	0.009(0.010)	0.023*(0.010)	0.022*(0.010)
Loyal to leader	0.081**(0.011)	0.088**(0.010)	0.077**(0.011)
Outgroup aggression	-0.041**(0.013)	-0.084**(0.013)	-0.087**(0.013)
Conventionalism	-0.100**(0.011)	-0.107**(0.010)	-0.115**(0.011)
Interpersonal trust	-0.034**(0.005)	-0.033**(0.004)	-0.045**(0.005)
Radical right	-0.007(0.027)	0.005(0.025)	0.068**(0.025)
Radical left	-0.099**(0.033)	-0.090**(0.008)	-0.081*(0.032)
Trust politicians	-0.062**(0.009)	-0.070**(0.008)	-0.076**(0.009)
Trust political parties	-0.020*(0.009)	-0.027**(0.008)	-0.023**(0.009)
Political powerlessness	-0.088**(0.014)	-0.091**(0.013)	-0.064**(0.014)
Education	-0.027**(0.009)	-0.056**(0.009)	-0.062**(0.009)
Education squared	0.001*(0.000)	0.001**(0.000)	0.001**(0.000)
Income	-0.030**(0.004)	-0.032**(0.004)	-0.040**(0.004)
Religiosity	0.020*(0.008)	0.027**(0.008)	0.034**(0.008)
Internet use	0.000*(0.000)	0.000(0.000)	0.000(0.000)
Age	0.001(0.001)	0.001(0.001)	-0.004**(0.001)
Gender	-0.014(0.020)	0.020(0.019)	0.003(0.019)
Constant	4.07	4.34	4.68
N	12 300	12 331	12 254
Variance components:			
Country level	0.306	0.220	0.269
Individual level	1.101	1.029	1.051

\*p≤.05

\*\*p≤.01

## 4.1 Psychological factors

Starting with the psychological factors, one can first look at the variables tapping into authoritarianism: obedience, loyalty to the leader, outgroup aggression, and conventionalism. Here the expectation was that individuals who exhibit higher levels of authoritarianism are more likely to engage in conspiratorial thinking (H1). Despite the obey variable not being significant in the first model, authoritarianism arguably is significant across all three models. This is because the loyal to leader variable, which also taps into authoritarian submission, is statistically significant. It was proposed in the literature review that this could be connected to conspiratorial thinking if individuals perceived the authority in question to be the proper authority. However, as there is no way of knowing if the authority in this analysis is considered the rightful one by the respondents, this will only be a speculation and a potential explanation. As the questions for the second and third models open for groups other than the government as the culprit, individuals who believe in these might still perceive the government as the rightful authority. It is intriguing that in the third model (Covid-19 conspiratorial thinking), the obey variable is significant and positively predicts conspiratorial thinking, as research has shown how Covid-19 conspiratorial thinking was related to rejecting information coming from experts and authority figures (Uscinski et al., 2020, p. 2).

The aggression towards the outgroup variable is statistically significant across all three models, indicating that it is a robust predictor of conspiratorial thinking, regardless of content and context. It was proposed earlier that this positive correlation could be explained by the fact that most conspiracy theories perceive another group as threatening to their in-group. Therefore, the results here show that individuals who are more skeptical of individuals outside their in-group are more likely to engage in conspiratorial thinking. Lastly, the conventionalism variable is also statically significant across all three models, implying that individuals concerned with keeping the status quo are more likely to engage in conspiratorial thinking. This aligns with the notion that individuals who perceive significant changes or the distribution of the current norms as a threat to their way of living are more likely to engage in conspiratorial thinking. Conspiracy theories can be a way of resisting perceived threats. Both variables can be linked to the existential motive (Douglas et al., 2017; Earnshaw et al., 2020; Uscinski et al., 2020), as conspiracy theories here can be used to explain the changes that feel threatening or the perceived threat of the out-group.

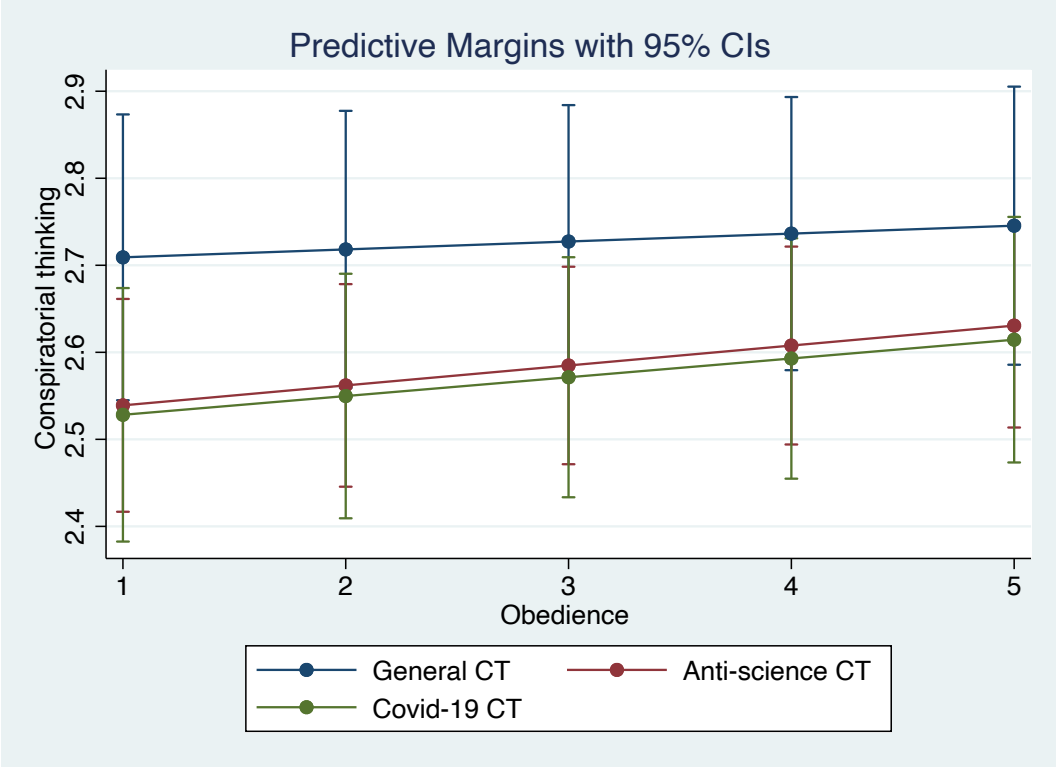
Earlier in the thesis, it was stated that research has found authoritarianism and conventionalism to be less critical predicting factors when looking at medical conspiratorial thinking (Gemenis, 2021, p. 231). In Table 2, the loyal to leader variable has the weakest impact on Covid-19 conspiratorial thinking. However, it is still significant. This might imply that Covid-19 conspiracy theories differ from other classical medical conspiracy theories because authoritarianism is a strong predictor. It would have been interesting to further examine the potentially unique nature of Covid-19 conspiracy theories compared to other medical conspiracy theories.

Circling back to the obey variable in the first model (general conspiratorial thinking), the lack of significance can be explained by individuals believing that one small group is pulling the string; the more classic conspiracist theorist will naturally be more skeptical of the government. As they often feel that the government is part of conspiracies. Moreover, they here do not perceive the government as the proper authority, so it is not vital to obey

them. However, throughout these three models, it is puzzling that authoritarianism strongly predicts conspiratorial thinking as one classically would think that people who believe in conspiracy theories are very anti-authorities and more lone-wolf characters. This might be explained by, as already mentioned, that they could be very attracted to the authoritarian mindset of what they perceive as the proper authorities. The link between mysticism and superstition, and authoritarianism could also explain it. It has been found that authoritarian individuals are superstitious and believe in mystical events or explanations (Eckhardt, 1991, p. 108). Most conspiracy theories would appeal to this thinking. It was found that spirituality in the form of eco-awareness has predicted Covid-19 conspiratorial thinking (Mulukom et al., 2022, p. 5). The fact that authoritarianism is such a strong predictor across all three models makes it a robust predictor of conspiratorial thinking, regardless of content and context.

The obedience variable's impact across the three models is visualized in Graph 1. This graph shows that general conspiratorial thinkers are more conspiratorial than the other groups. However, this graph illustrates how the obedience variable has a slightly more significant impact on anti-science and Covid-19 conspiratorial thinking, as the slope is steeper here. This result is reflected in Table 2, as the slope is less steep on general conspiratorial thinking and is not significant here. Compared to the other two variables of conspiratorial thinking, it is steeper and more significant in Table 2.

**Graph 1 - Obedience 's impact on conspiratorial thinking**



Continuing with the psychological factors, interpersonal trust was also hypothesized to impact conspiratorial thinking. Here the assumption was that individuals with higher levels of distrust are more likely to engage in conspiratorial thinking (H2). Across all three models, this variable is statistically significant and positively predicts conspiratorial thinking. Based on this, it is reasonable to argue that interpersonal trust can predict

conspiratorial thinking across different conspiracy theories. This aligns with earlier research (Lantian et al., 2020; Thórisdóttir et al., 2020). However, this relationship has also been contested, as one study found no relationship between interpersonal trust and conspiracism (Oliver & Wood, 2014). The results from this analysis show a strong relationship between interpersonal trust and conspiratorial thinking, not just to one theory but regardless of which conspiracy theory one believes, strengthening the findings. This is logical as most conspiracy theories inherently hinge upon distrusting a specific group or certain people.

## 4.2 Ideology and political factors

The hypothesis was that individuals on the far-right side of the political spectrum were more likely to engage in conspiratorial thinking (H3). Starting with the first model (general conspiracy thinking), H3 is discarded as the radical right variable is not statistically significant. This is an exciting finding, as research has found that the radical right predicts conspiracy beliefs (Imhoff et al., 2022). However, as this research supports, this link between the radical right and conspiracy thinking is not always present (Thórisdóttir et al., 2020, p. 308). Looking at the radical left variable in the first model, one can see how radical left individuals are less likely than radical right and mainstream voters to endorse general conspiratorial thinking, and it is statistically significant. This is also surprising, as earlier findings emphasized that extreme ideological positioning was strongly related to conspiratorial thinking, partly because they share the same thinking patterns (Prooijen et al., 2015, p. 570). In the first model, neither radical right nor radical left individuals are more likely to endorse general conspiratorial thinking, contradicting earlier thinking and my expectations. The same trends can be found in the second model (anti-science conspiratorial thinking), revealing that neither radical right nor radical left individuals are more likely to engage in this conspiratorial thinking. Again, this is not what was expected; based on the earlier research, one would think that radical right individuals at least would have been more prone to conspiratorial thinking here than mainstream individuals.

Moving on to the third model (Covid-19 conspiratorial thinking), the radical right variable is now statistically significant, and H3 is confirmed. Here the analysis shows how radical right-side people are more likely to believe in the Covid-19 conspiracy theory than radical left and mainstream voters. In addition to H3, it was explicitly hypothesized that radical left individuals would be more likely to believe in Covid-19 conspiracy theories. However, this is not the case, and again radical left individuals are less likely than mainstream and radical right individuals to engage in conspiratorial thinking. The fact that the radical right is only significant in the Covid-19 model is also contrary to the research that suggests that conservatism is not a predictor for conspiratorial thinking (Gemenis, 2021) and that partisanship could not predict belief in conspiracy theories about the Zika virus (Klofstad et al., 2019). On the other hand, this was partly explained due to lack of politicization, and across the board, the Covid-19 pandemic has been highly politicized. This might explain why the radical right variable is significant here.

The fact that H3 is only confirmed in the third model indicates that the radical right variable impacts conspiratorial thinking differently. This is an important finding, as the radical right has been highlighted as quite a robust predictor for conspiratorial thinking, and the notion that conspiratorial thinking belongs to the political periphery has been present. This finding suggests that it is present among mainstream voters in two out of three models, expressing how conspiratorial thinking is not only reserved for more radical individuals.



When looking at political factors in the literature, low political trust has been shown to correlate with conspiratorial thinking (Douglas et al., 2019; Pummerer et al., 2022; Thórisdóttir et al., 2020), resulting in the following hypothesis: individuals with lower levels of political trust are more likely to engage in conspiratorial thinking (H4). In the first model (general conspiratorial thinking), one can see how the trust in politicians and political party variables is statistically significant and behave according to H4. Therefore, the results suggest that individuals with lower political trust are more likely to believe that one small group of powerful people pulls the string. Looking at model 2 (anti-science conspiratorial thinking) and model 3 (Covid-19 conspiratorial thinking), H4 is also confirmed, and the variables behave similarly. Here the findings are in line with the literature. This analysis shows how the relationship between political trust and conspiratorial thinking is consistent throughout the three models, indicating that the content of conspiracy theories does not affect this relationship. Therefore, political trust is a robust predictor for conspiratorial thinking.

Lastly, political powerlessness has also proven to predict conspiratorial thinking (Ardévol-Abreu et al., 2020; Jolley & Douglas, 2014; Papaioannou et al., 2022). Here the expectation was that individuals who feel more politically powerless are more likely to engage in conspiratorial thinking (H5). Looking at all three models, one can see that this variable is statistically significant. In addition, it behaves as predicted in all three, meaning that H5 can be confirmed. This shows how individuals who feel less politically powerful are more likely to engage in conspiratorial thinking, even if the content of the conspiracy theory varies. This means that feelings of political powerlessness can be viewed as a robust predictor for conspiratorial thinking.

Looking at all the ideological and political factors used for this analysis, some factors emerge as robust predictors of conspiratorial thinking, namely political trust and political powerlessness. Some other variables are also statistically significant but are less consistent than these.

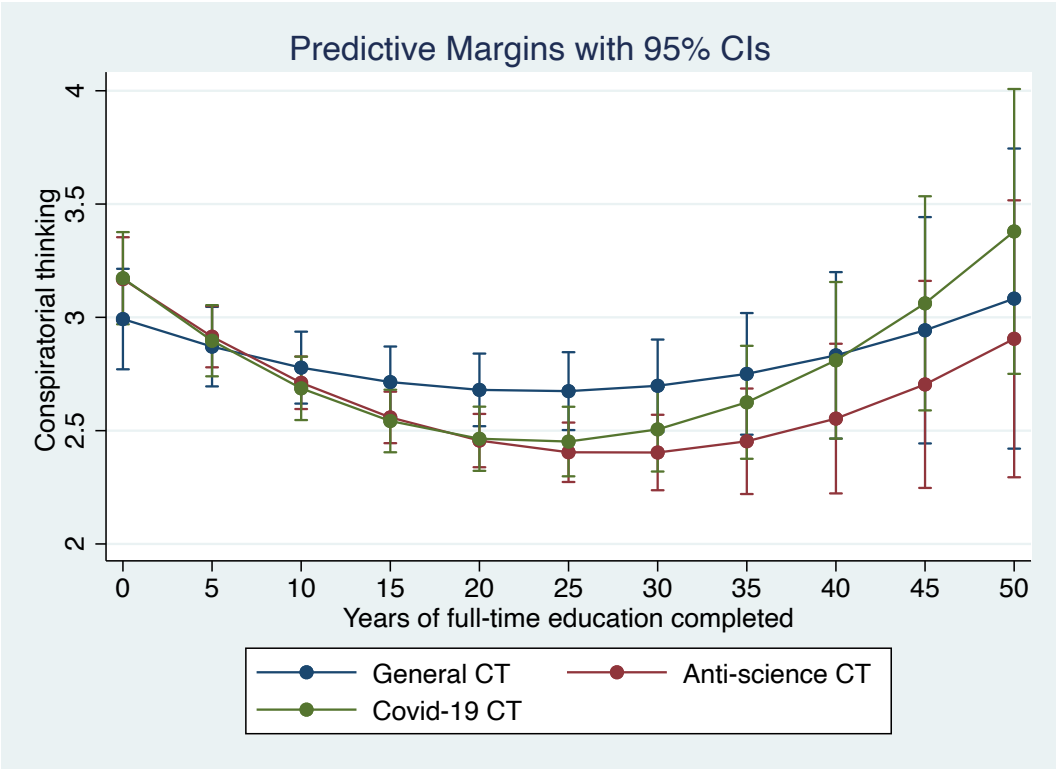
### 4.3 Demographic factors

The thesis will now turn to the demographical factors in the analysis. Starting with the educational variable that was not squared, it behaves as expected across all three models, confirming the education part of H6. When looking at the squared variable, it is also significant across all three models. Here it was hypothesized that I expected to find a curvilinear relationship in the Covid-19 conspiratorial thinking model. The results here show that individuals with higher and lower levels of education are more likely to engage in Covid-19 conspiratorial thinking. This is demonstrated in Graph 2, where one clearly can see the curvilinear relationship. Further, one can also see how with the general conspiratorial thinking and Covid-19 conspiratorial thinking variable, higher levels of education have a more significant impact on conspiratorial thinking than lower levels. Moreover, education has the most significant impact on the Covid-19 conspiratorial thinking variable throughout the three models. This confirms my expectation that, especially for Covid-19 conspiratorial thinking, individuals with higher levels of education are likely to engage in conspiratorial thinking. Even more so than individuals with lower levels of education.

The fact that both education variables are statistically significant throughout all three models emphasizes how it is a robust predictor for conspiratorial thinking. Especially the

curvilinear relationship discussed above is a significant finding. This is because most of the previous research has mainly looked at the correlation between lower levels of education and belief in conspiracy theories. Can this be explained by individuals with higher levels of education being more curious and therefore questioning things and being more open to alternative explanations? On the other hand, one might expect individuals with higher levels of education to be less likely to engage in conspiratorial thinking as they can be perceived as more rational thinkers. In addition, they might be expected to trust science more and therefore be skeptical of alternative explanations. This might be why in the anti-science model, individuals with higher levels were less likely than individuals with lower levels to engage in conspiratorial thinking. However, at the same time, they are still more likely than individuals in the middle of the scale. This emphasizes that there is a relationship between higher-educated individuals and conspiratorial thinking. This relationship should be studied further. This finding shows that conspiracy theories might reach further than previously thought, and it is in line with the notion that conspiratorial thinking is present also amongst the intellectual elite as well (Butter & Knight, 2020, p. 4).

**Graph 2 – Education’s impact on conspiratorial thinking**



It was hypothesized that individuals with lower income levels are more likely to engage in conspiratorial thinking (H7). This was consistent with previous research (Douglas et al., 2017; Douglas et al., 2019; Mulukom et al., 2022). Looking at all three models, one can see that the income variable is statistically significant and behaving as predicted, meaning that the income part of H7 can be confirmed. Lower levels of income positively predict conspiratorial thinking. This also indicates that income can predict conspiratorial thinking

in general, regardless of the content of the theory. Therefore, income is quite a robust demographic factor for predicting conspiratorial thinking.

Moving on to religiosity, research suggests a link between religion and belief in conspiracy theories (Giry & Tika, 2020; Mulukom et al., 2022). In this analysis, no particular religion was examined, but rather the level of religiosity. Across all three models, this variable is statistically significant and moving in the same direction. Therefore it can be seen as a robust predictor for conspiratorial thinking, which means that more religious individuals are more likely to engage in conspiratorial thinking. This can be tied back to the epistemic and social motive of conspiratorial thinking. Religion and conspiracy theories offer explanations of events and offer an in-group that should be protected.

The research has also established a link between the use of the internet and social media as a source of information and belief in conspiracy theories (Adam M Enders et al., 2021; Mulukom et al., 2022). As mentioned earlier, this has been operationalized by looking at how internet use impact conspiracy thinking for this analysis. It was not possible through the ESS10 dataset to find a variable that looked more specifically at social media as the primary source of news and information. Starting with the first model (general conspiracy thinking), this variable is statistically significant, indicating that more internet use predicts general conspiratorial thinking. However, moving on to the second (anti-science conspiratorial thinking) and third model (Covid-19 conspiratorial thinking), it is no longer statistically significant. This shows how internet use can positively predict conspiratorial thinking. However, this is contextual. It is also puzzling as one might expect this to be significant in the Covid-19 model, as a lot of the information about the virus has been spread online, both true and false. Moreover, due to people being inside because of quarantine, it is not unlikely to think that individuals have used more time on the Internet. This finding is limited as the variable does not look at what people use the internet for or what social media they might use. If one were to look at this, the result might differ. This relationship would have been interesting to examine further.

Lastly, age and gender were used as control variables. The research is divided on age, and it has been shown not to affect conspiratorial thinking (Swami, 2012). However, it did have some predicting abilities in one study looking at financial conspiracy theories (Prooijen et al., 2015). Age is not statistically significant in the first (general conspiratorial thinking) and second model (anti-science conspiratorial thinking). Looking at the third model (Covid-19 conspiratorial thinking), age is significant. Here the findings suggest that younger people are more likely to believe that Covid-19 results from a deliberate action by the government or an organization. The fact that age is only significant in the third model tells us that younger people are more prone to Covid-19 conspiratorial thinking and that Covid-19 conspiratorial thinking do here differ from the other variations of conspiratorial thinking. What makes the Covid-19 conspiratorial thinking stand out even more when looking at age's effect is that even though it is not significant in the other models, it indicates that higher levels of age lead to higher levels of conspiratorial thinking. However, in model 3, this effect is reversed, meaning that younger individuals are more likely to engage in Covid-19 conspiratorial thinking. This is another aspect that indicates that Covid-19 conspiracy theories differ in nature from other conspiracy theories. Why is this the case? Can it be explained by the fact that Covid-19 has been such a salient issue, and a lot of the conspiracy theories have been circulating online? During the pandemic, people in general and young people have increased their internet use (De, Pandey, & Pal, 2020, p. 1). However, if this were the case, I would have expected the internet variable to be significant in the Covid-19 model, which it is not. Nevertheless, as discussed previously, this might

have shown up if the variable tapped into social media use and it being one's primary source for information. This relationship between young age and Covid-19 conspiratorial thinking needs further examination. The overall results imply that age has limited predictable power for conspiratorial thinking in general, but it does have significance in some cases. This might be a more context and content-dependent factor.

When looking at the literature on gender and conspiracy theories, there were some diverging findings; in some cases, men were more likely to support them (Mulukom et al., 2022; Prooijen et al., 2015), but one study done on belief in Covid-19 conspiracy theories found no difference between men and women (Mulukom et al., 2022). In this analysis, no statical significant relationship between gender and conspiratorial thinking was present. Amongst the demographic variables, education, income, and religiosity are robust factors that can be said to predict conspiratorial thinking on a more general basis, as they are all consistently significant throughout the three models.

# 5 The impact of conspiracy theories on satisfaction with democracy

Up until this point, the thesis has focused on what conditions conspiratorial thinking; here authoritarianism, low interpersonal trust, low political trust, low perceived political powerlessness, education (both higher and lower levels), lower levels of income, and higher levels of religiosity, all emerged as robust predictors for higher levels of conspiratorial thinking across the board. This chapter will focus on the implications of conspiratorial thinking on satisfaction with democracy. This will be a secondary analysis in this thesis, and it is, therefore, less in-depth than the first one. This second analysis aims to see how conspiratorial thinking impacts satisfaction with democracy and whether it can be perceived as a threat to democracy. Here I assume that higher levels of conspiratorial thinking lead to lower levels of satisfaction with democracy. Then lower levels of satisfaction with democracy can erode the legitimacy of democracy. The previous research on this relationship will be reviewed in this chapter, then the method with the operationalization of the variables will be presented.

## 5.1 Literature review

In general, the research suggests that belief in conspiracy theories can be perceived as a threat to democracy (Papaioannou et al., 2022; Sternisko et al., 2020). It has been proposed that this threat surfaces if one has unchallenged dissemination and uncritical consumption of conspiracy theories (Sutton & Douglas, 2020, p. 119). This is because believing in conspiracy theories might undermine behaviors and attitudes essential for the democratic processes (Ardévol-Abreu et al., 2020, p. 549), such as voting and tolerance. This can be explained by the fact that belief in conspiracy theories may lead individuals to develop more negative perceptions of governmental and institutional actions, distancing themselves from the system as a whole. In line with his reasoning, some remarks have also been made on conspiracy theories being a result of institutions and expectations associated with contemporary democracies (Giry & Tika, 2020, p. 111). This shows that conspiracy theories can arise from dissatisfaction with institutions. These are only some potential explanations for why conspiracist theorists might be less satisfied with democracy. Further, one could think that individuals who are firm believers in conspiracy theories might be dissatisfied because they feel the elite is out to get them and that their voice does not count or that they believe a more autocratic strong leader should replace the current government and elites. However, the focus of this thesis is not to explain why individuals who engage in conspiratorial thinking are less satisfied with democracy but to establish if there is a link to satisfaction with democracy.

It is interesting to examine how conspiratorial thinking impacts satisfaction with democracy. Because by looking at how conspiratorial thinking impacts satisfaction with democracy, one might be able to evaluate the potential dangers conspiratorial thinking can have on democratic regimes. This is because research has shown how higher levels of dissatisfaction with democracy can increase the wish for reform among the public (Quaranta & Martini, 2016). Furthermore, these reforms might foster less democratic regimes, as it has been suggested that democratic rule is more likely to be challenged

when a larger number of individuals are dissatisfied with democracy (Singh & Mayne, 2023, p. 12). Therefore, conspiratorial thinking could be a potential factor in the erosion of legitimacy in democracies if it strongly predicts lower levels of satisfaction with democracy. This leads to the proposed causal chain mentioned earlier; higher levels of conspiratorial thinking lead to lower levels of satisfaction with democracy, and then lower levels of satisfaction with democracy can erode the legitimacy of democracy. Based on the findings in the research highlighted above, the following hypothesis is presented:

*H1: Individuals who engage in conspiratorial thinking are less likely to be satisfied with democracy in their country.*

The argument can also be made that conspiracy theories are not necessarily threatening democratic regimes but rather a sign of health. The point has been made that conspiracy theories in democratic regimes are necessary for the healthy functioning of society because they act like defense lawyer (Giry & Tika, 2020, p. 112). One can see conspiracy theories as a healthy sign that the government is allowed to be challenged and that the people's interests should be taken seriously. However, most of the research suggests that the potential negative impact of conspiracy theories exists and that conspiracy theories being spread on a large scale is something to be cautious about.

## 5.2 Method

### 5.2.1 European Social Survey

Several of the same measures used in the first analysis have been used for the second analysis. Again, the ESS round 10 dataset has been used, and the same countries are included here as well. The supplementary measures that are included will now be shortly presented and operationalized. All the new variables are concerned with satisfaction with democracy and what the research field suggest impacts it. The descriptive table with the number of observations for each variable is presented in Table 3, and the number of observations for the models is presented in Table 4.

### 5.2.2 Dependent variable

To test the relationship between belief in conspiracy theories and their potential impact on democracy, satisfaction with democracy will be used as the dependent variable. The following question from the ESS round 10 has been chosen: "On the whole, how satisfied are you with the way democracy works in your country." This is a continuous variable on an 11-point scale, where 0 = extremely dissatisfied and 10 = extremely satisfied. This question aligns with the tradition of measuring satisfaction with democracy (Linde & Ekman, 2003; Singh & Mayne, 2023). This question makes it possible to tap into the level of satisfaction individuals feel towards democracy in their country.

### 5.2.3 Independent variables

Conspiratorial thinking will be treated as three separate independent variables in this analysis. Here the same three questions as in the first analysis will be used, namely: "A small secret group of people is responsible for making all major decisions in world politics», «Groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public" and "Coronavirus is the result of deliberate and concealed efforts of some government or organization." The justification for choosing these have been elaborated on earlier in the thesis. They have also been kept the same and are coded as described in the first analysis. By using these, it is possible to gauge the impact conspiratorial thinking has

on satisfaction with democracy and whether this differs based on the conspiracy theory in question.

When looking at what conditions satisfaction with democracy, different political and ideological factors emerge. Beginning with ideological positioning and its relationship with satisfaction with democracy. Research suggests a relationship between voting on anti-mainstream parties and being dissatisfied with democracy (Singh & Mayne, 2023, p. 11). There are some diverging findings here, and some studies even find that there is no relationship. However, it has been suggested that individuals who vote for populist radical right parties and those with anti-immigrant attitudes are less satisfied with democracy (Harteveld, Kokkonen, Linde, & Dahlberg, 2021, p. 113). There has been limited research on radical left voters and satisfaction with democracy; however, as already established, there seems to be a link between people voting for anti-mainstream parties and being less satisfied. Therefore one could also expect that radical left voters are less satisfied with democracy. To test this relationship, the second analysis will use the same question from ESS round 10 as in the first: "In politics people sometimes talk of 'left' and 'right' in politics. The variable has been coded and treated the same way as in the first analysis.

Satisfaction with the government has also been linked to higher satisfaction with democracy. Previous research has shown that satisfaction with national institutions and positive evaluations of them have been closely linked to satisfaction with democracy (Karp, Banducci, & Bowler, 2003, p. 273). In addition, there has also been a positive correlation between voters whose preferred parties win and are more satisfied with democracy (Stecker & Tausendpfund, 2016, p. 492). These findings suggest a positive correlation between satisfaction with government and satisfaction with democracy. For this analysis, satisfaction with the government is measured by the following ESS round 10 question: "Now thinking about your country's government, how satisfied are you with the way it is doing its job?" This is a continuous variable on an 11-point scale, where 0=extremely dissatisfied and 10=extremely satisfied. Here I expect that individuals who are satisfied with their government are more likely to be satisfied with democracy.

Research has also been done on the relationship between political representation and satisfaction with democracy. One study found that individuals who believe they enjoy higher levels of representation and that the government listens to them are more likely to be satisfied with democracy (Singh & Mayne, 2023, p. 17). It is also well established in the literature that when citizens feel close to the political elite, arguably because they feel heard and represented, they are more satisfied with democracy (Reher, 2015, p. 172). For this analysis, the sentiment of ordinary people's voices being heard is used to tap into this. As one can expect, individuals who feel that their voice matters most likely also feel that ordinary people's voice matters. The following question has been chosen from the ESS round 10: "In your country the views of ordinary people prevail over the views of the political elite." This is a continuous variable on an 11-point scale, where 0=does not apply at all and 10 = applies. This question arguably makes it possible to tap into whether individuals feel that their voice matters and that the government listens to them.

Lastly, a well-established relationship exists between voting and satisfaction with democracy (Singh & Mayne, 2023, p. 18). Kostelka & Blais (2018) found that voter turnout affects satisfaction with democracy. They also found that voting predicts more satisfaction with democracy. This analysis will test this relationship by operationalizing it through the following ESS round 10 question: "Some people don't vote nowadays for one reason or another. Did you vote in the last election in your country". This is a binary variable, which

has been flipped so that 1=no and 2=yes. I expect this variable to behave similarly for the second analysis; people who do not vote are less satisfied with democracy.

Different economic factors have also been shown to impact satisfaction with democracy. First, higher levels of satisfaction with democracy have been linked to individuals perceiving the macroeconomic conditions as favorable (Singh & Mayne, 2023, p. 19). Higher levels of debt and inflation have increased dissatisfaction among the public, showing that macroeconomic factors impact satisfaction with democracy (Quaranta & Martini, 2016, p. 169). By operationalizing the following question, the analysis will test this relationship: "On the whole how satisfied are you with the present state of the economy in your country?". This is a continuous variable on an 11-point scale, where 0=extremely dissatisfied and 10=extremely satisfied. Being unemployed is another economic variable linked to less satisfaction with democracy (Singh & Mayne, 2023, p. 19; Wagner, Schneider, & Halla, 2009, p. 34). This suggests that unemployed individuals are less satisfied with democracy than employed individuals. Here the country's level of unemployment is not measured, but rather how being unemployed impact satisfaction with democracy. This has been operationalized through the following ESS round10 question: "Have you ever been unemployed and seeking work for a period of more than three months? And if yes, have any of these periods lasted for 12 months or more?". This binary variable has been flipped so that 1=no and 2=yes. For both these variables, I expect them to behave as previously. Namely, lower values on the independent variables predict lower satisfaction with democracy.

The second analysis also includes a set of control variables; age, gender, education, income, and if they live in Eastern or Western Europe. These are the same control variables used in the first analysis besides the Eastern or Western Europe variable. Starting with gender and age, a limited amount of research has been done, and their impact on satisfaction needs to be examined further (Singh & Mayne, 2023, p. 11). Here age and gender are operationalized and treated identically as in the first analysis. Gender is a dummy variable where 1 = male and 2 = female, and age is a continuous variable. Moving on, higher levels of education are widely recognized as a predictor of satisfaction with democracy (Monsicais-Carrillo & Ramos, 2022, p. 663; Stecker & Tausendpfund, 2016, p. 502). Again, the same question as in the first analysis has been used, and education is a continuous variable where higher levels indicate more years of education completed. The only difference is that I do not expect a curvilinear relationship here. Therefore, the squared education variable is not included. I expect the education variable to correlate positively with satisfaction with democracy, as this seems to be the trend in the research.

Regarding income, earlier studies suggest that income erosion can lead to less self-esteem, which is linked to dissatisfaction with the system (Quaranta & Martini, 2016, p. 165). Positive evaluation of personal economic condition has also been found not to be as critical as other factors when looking at what predicts satisfaction with democracy (Linde & Ekman, 2003, p. 401). Income is also operationalized identically to the first analysis and is a continuous variable where higher levels indicate higher levels of income. Here I expect the income variable to behave similarly to previous research, namely higher levels of income correlating with higher levels of satisfaction with democracy. As discussed in the first analysis, this does not explicitly say how much an individual makes but indicates how comfortably people live.

Lastly, looking at the east/west variable, research suggests that individuals living in Western Europe are more satisfied with democracy, even if they were losers of the election.



In comparison, individuals in Eastern Europe who were losers were significantly more likely than not to be dissatisfied with democracy (Linde & Ekman, 2003, p. 402). In addition to this finding, individuals in Central Eastern Europe are less satisfied with democracy (Stecker & Tausenpfund, 2016, p. 499), regardless of being electoral winners or losers. This thesis will examine this relationship, but it will not consider if individuals are electoral winners or losers, but rather just if they live in Eastern or Western Europe. This variable is operationalized by the respondents to the ESS round 10 survey states which country they live in. This has been coded into a dummy variable, where 1=eastern Europe and 0=western Europe. The expectation based on the research is that individuals from Eastern Europe are less satisfied with democracy.

### 5.3 Descriptive statistics

Table 3 shows the descriptive statistics for the variables in the second analysis.

**Table 3 – Descriptive statistics**

Variables	Number of respondents	Mean	Standard deviation	Min	Max
Satisfaction with democracy	27,050	5.245	2.591	0	10
General conspiratorial thinking	24,121	2.863	1.225	1	5
Anti-science conspiratorial thinking	24,414	2.746	1.162	1	5
COVID-19 conspiratorial thinking	24,005	2.746	1.223	1	5
Radical left	24,266	0.116	0.320	0	1
Radical right	24,266	0.180	0.384	0	1
Satisfaction with government	27,150	4.526	2.601	0	10
Political powerlessness	26,574	3.753	2.601	0	10
Voting behavior	27,288	1.756	0.430	1	2
Satisfaction with democracy	27,157	4.788	2.479	0	10
Unemployed dummy	7,117	1.428	0.494	1	2
Age	27,423	52.387	17.444	15	90
Gender	27,647	1.542	0.498	1	2
Education	27,179	12.966	4.050	0	50
Income	21,560	5.432	2.689	1	10
East dummy	27,647	0.497	0.500	0	1
Country	27,647	8.886	5.627	1	19

## 5.4 Multilevel model

As in the first analysis, a multilevel model has been chosen. This was done after an ICC test was performed. The results showed that the national level accounts for 22% of the variation, which merits using a multilevel model as it is higher than the 5% limit set earlier in this thesis. As in the first model, the country level is not analyzed, and the focus is solely on the individual level factors.

## 6 Empirical analysis of satisfaction with democracy

In Table 4, there are two separate multilevel models. The reason for using two models is that the first one does not include the conspiratorial thinking variables, setting a baseline for the other variables. Then the second model includes the conspiratorial thinking variables, which makes it possible to see if they are statistically significant and if they impact how the other variables predict satisfaction with democracy. Also, the inclusion of the three different variables makes it possible to see if conspiratorial thinking's impact on satisfaction with democracy is dependent on context and content. In Table 4, the coefficient is presented, as well as the standard error in parentheses.

**Table 4 – Multilevel models**

	Model 1 (Satisfaction with democracy)	Model 2 (Satisfaction with democracy With conspiratorial thinking)
Radical left	-0.051(0.071)	-0.096(0.076)
Radical right	0.067(0.066)	0.146*(0.070)
Satisfaction with government	0.437**(0.013)	0.407**(0.011)
Political representation	0.122**(0.011)	0.101**(0.011)
Voting behavior	0.081(0.058)	0.280(0.015)
Satisfaction with economy	0.278**(0.014)	0.280**(0.015)
Unemployed dummy	0.044(0.050)	0.097(0.053)
Age	-0.001(0.002)	-0.002(0.002)
Gender	0.032(0.048)	-0.035(0.051)
Education	0.009(0.007)	0.005(0.008)
Income	0.027**(0.010)	0.011(0.011)
East dummy	-0.612**(0.145)	-0.584**(0.125)
General conspiratorial thinking		-0.065*(0.027)
Anti-science conspiratorial thinking		-0.115**(0.029)
COVID-19 conspiratorial thinking		-0.121**(0.027)
Constant	1.32	2.68
N	4856	4136
Variance components:		
Country level	0.271	0.215
Individual level	1.649	1.614

\*p≤.05

\*\*p≤.01

## 6.1 Results

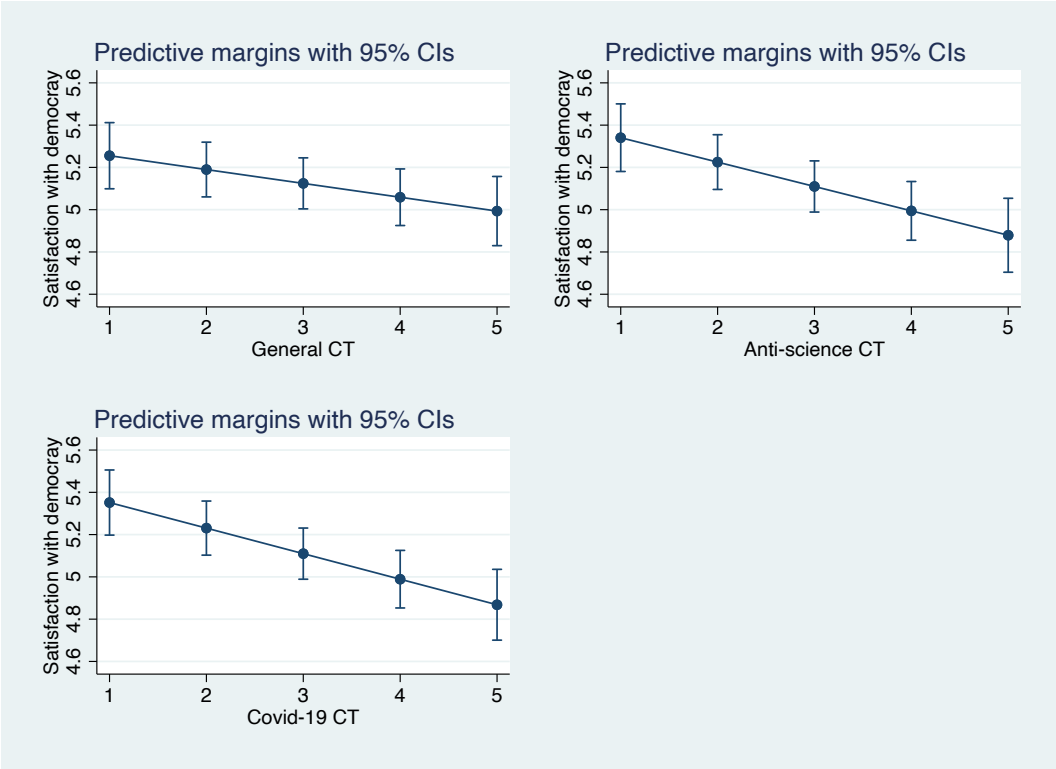
Starting with the radical left and radical right variables, the radical right variable is only statistically significant in the second model (with conspiratorial thinking). This implies that ideology in this analysis only becomes significant when conspiratorial thinking is accounted for. Conspiratorial thinking, therefore, impacts the other factors that can be thought to predict satisfaction with democracy, and this shows its importance. This finding is somewhat contrary to one of the earlier studies that found that radical right individuals were likelier to be less satisfied with democracy (Harteveld et al., 2021, p. 113), as this only is the case in the second model. It was also proposed earlier that radical left voters would also be less satisfied with democracy, as anti-mainstream voters have been proven to be less satisfied with democracy (Singh & Mayne, 2023, p. 11); however, this is not the case in either of the two models in table 4.

Moving on to the other political variables, one can see how satisfaction with the government positively predicts satisfaction with democracy across both models. The inclusion of the conspiratorial thinking variables does not alter this impact notably. Looking at the political representation variable, this one is also significant across both models. This shows how higher feelings of political representation lead to more satisfaction with democracy. The inclusion of the conspiratorial thinking variables does not change this remarkably. Voting behavior is not significant in any of the models. The satisfaction with the economy variable is significant across the models. It confirms the previous research that suggests that individuals who are more content with the macroeconomic situation in the country are more satisfied with the democracy (Quaranta & Martini, 2016; Singh & Mayne, 2023). Looking at the being unemployed dummy variable, it is not statistically significant in either of the models. Therefore, this finding contradicts the research suggesting that unemployed individuals are less likely to be satisfied with democracy (Singh & Mayne, 2023; Wagner et al., 2009).

Looking at the demographic variables in the models, it was previously mentioned how the satisfaction with democracy field lacks research on the relationship between gender and age and satisfaction with democracy (Singh & Mayne, 2023). This analysis shows that neither of these variables are significant in the models. This indicates that there are more essential factors predicting satisfaction with democracy. Income is significant in the first model but not in the second. This implies that when controlling for conspiratorial thinking, this is more significant for satisfaction with democracy than income. Again, this emphasizes the impact conspiratorial thinking has on satisfaction with democracy. Lastly, the East dummy variable is consistent throughout the two models, and it shows that people living in Eastern Europe are more likely to be less satisfied with democracy, also when conspiratorial thinking is accounted for. This is in line with previous research (Stecker & Tausenpfund, 2016, p. 499). As including conspiratorial thinking does not change it, it can be perceived as a robust predictor of satisfaction with democracy.

A couple of things become apparent after looking at the conspiratorial thinking variables in both models. First, it is interesting how all three variables for conspiratorial thinking are statistically significant, indicating that higher levels of conspiratorial thinking lead to lower satisfaction with democracy, confirming H1 for the second analysis. This consistency with all three conspiratorial thinking variables indicates that, regardless of content and context, conspiratorial thinking can be considered a robust predictor of lower satisfaction with democracy. Also, the fact that all three variables are statistically significant strengthens the earlier argument of the three of them to tap into conspiratorial thinking, as it becomes clear that they tap into three different aspects of conspiratorial thinking. Lastly, table 4 also illustrates that Covid-19 conspiratorial thinking has the most significant negative impact out of the three variables. These findings are visualized in Graph 3. Here it again becomes evident how across all three models, conspiratorial thinking leads to lower satisfaction with democracy. One can see how anti-science and Covid-19 conspiratorial thinking have a steeper impact on satisfaction with democracy than general conspiratorial thinking.

**Graph 3 – Conspiratorial thinking’s impact on satisfaction with democracy**



The fact that conspiratorial thinking has a robust negative correlation with satisfaction with democracy is in line with the earlier implications in the research that conspiracy theories can be perceived as a threat to democracy (Ardévol-Abreu et al., 2020; Papaioannou et al., 2022; Sternisko et al., 2020; Sutton & Douglas, 2020). The findings in my study are highly relevant here as it shows a clear link between conspiratorial thinking and satisfaction with democracy. Moreover, as implied earlier, higher levels of dissatisfaction can increase the wish for reform in a less democratic direction (Quaranta & Martini, 2016; Singh & Mayne, 2023). This is an intriguing finding that merits more research.

# 7 Conclusion

## 7.1 Effects and consequences of conspiracy theories

The reason for studying what conditions conspiratorial thinking is that one knows they have real-life implications for society and individuals; one can talk of both the positive and negative effects of conspiracy theories. First, conspiracy theories should not be viewed as something solely negative. There is research that suggests it might have a positive impact on society. For example, they may allow people to question social hierarchies and encourage/push governments to be more transparent (Jolley & Douglas, 2014, p. 36). Conspiracy theories might also reveal actual plots or anomalies, as some have turned out to be true (Jolley & Douglas, 2014, p. 36). On the same note, they might also open for a political debate, which is crucial in a democracy—highlighting how small doses of conspiracy theories might be necessary for a healthy democracy.

Research has also found that believing in conspiracy theories might lead to a community and a feeling of belonging with other people who support the same view (Jolley et al., 2020, p. 232). This can be linked to the social motive behind beliefs in conspiracy theories (Douglas et al., 2017). In this way, conspiracy theories might fulfill the social needs of people and lead to a sense of community. Lastly, there is also an indication that conspiracy theories might inspire collective action and social change attempts in certain circumstances, especially when individuals react to threatening events (Jolley et al., 2020, p. 232). Conspiracy theories might add enough pressure to force governments to disclose information and unearth dishonest behavior (Thórisdóttir et al., 2020, p. 305). Which again is a positive thing for democratic regimes. Even though some positive consequences seem to exist, this line of research lacks empirical evidence, and the focus has mainly been on the harmful effects of conspiracy theories (Jolley et al., 2020, p. 232). Therefore, despite research claiming that there could be some positive benefits from conspiracy theories, it can be argued that conspiracy theories generally do more harm than good (Douglas et al., 2019, p. 3).

Most of the research is focused on the harmful effects of conspiracy theories. Examining how it has a potentially negative impact in the following areas: psychological, attitude polarization, political, scientific, and daily life (Jolley et al., 2020). As already pointed out, research suggests that exposure to conspiracy theories could reduce people's intentions to engage in political behavior like voting (Jolley & Douglas, 2014). Further, research focused on the political aspect of the consequences of conspiracy theories also highlights how conspiracy theories tend to be associated with institutional distrust (Jolley et al., 2020, p. 235). Here the danger is how much belief in conspiracy theories contributes to the increased suspicion and erosion of trust between citizens and central authorities, which can endanger the whole democratic system (Jolley et al., 2020, p. 235). This negative impact on democratic systems has been examined in this thesis through how conspiratorial thinking impacts satisfaction with democracy in this thesis.

Conspiracy theories can also negatively impact intergroup relations and fuel violence toward other people (Jolley et al., 2020, p. 235). In general, on a social level, belief in



conspiracy theories is closely linked to populism, political extremism, and the radicalization of fringe groups (Andrade, 2020, p. 508). This link between conspiratorial thinking and political extremism, and populism is arguably not favorable, as these factors harm society. In addition, belief in conspiracy theories can also be said to hurt individuals. This is evident when looking at how conspiracy theories might look promising when it comes to satisfying epistemic and existential motives, but in the end, they seldom do (Douglas & Leite, 2016; Douglas et al., 2017), leading people to potentially be more confused or threatened than before. This exemplifies how conspiratorial thinking can harm individuals as well as society.

In addition, conspiracy theories are hard to refute, and it can be said that they must be approached patiently and without disrespect, as one could argue that conspiratorial thinking is entirely natural (Andrade, 2020, p. 511). That conspiracy theories are hard to refute makes them harder to disprove, and attempting to do so can solidify the belief (Andrade, 2020; Douglas et al., 2017). However, research on medical conspiracy theories suggests that information campaigns aimed at health-related correcting conspiracy theories do have some effect (Bode & Vraga, 2018, p. 1131). This makes it evident that there are efforts that can be taken to limit or reverse belief in conspiracy theories. This is reinforced by the finding that higher interest in science can be related to fewer unfounded beliefs and more knowledge about Covid-19 (Mulukom et al., 2022, p. 5). However, to minimize the negative impact of conspiracy theories, knowing which factors make individuals more likely to engage in conspiratorial thinking is helpful.

## 7.2 Results

As we know that conspiracy theories have a negative impact on individuals and society, this thesis has been two-fold. First, I wanted to examine if it was possible to find general robust predictors for conspiratorial thinking on an individual level and if this differed depending on the conspiracy theory in question; here, the following research questions were presented: what conditions conspiratorial thinking on a personal level? Are different conspiracy theories conditioned by various factors? Then for the second part of my thesis, I wanted to see how conspiratorial thinking impacts satisfaction with democracy and if it could be said to affect democratic regimes negatively. Therefore, the following research questions were presented: Does conspiratorial thinking impact satisfaction with democracy? What implication does this have for democratic regimes?

### 7.2.1 First analysis

To answer the first research question, I first examined the literature on what impacts conspiratorial thinking on an individual level. Psychological, ideological/political, and demographic factors were presented and hypothesized here. To test my expectations for these variables, three multilevel models were performed. Here, each model had conspiratorial thinking as the dependent variable, but in different forms: general conspiratorial thinking, anti-science conspiratorial thinking, and Covid-19 thinking. This was done so that it could be possible to identify robust predictors for conspiratorial thinking, regardless of context and content. Further, I expected the independent variables to impact the dependent variables similarly, except for education and radical left positioning.

In the first analysis, several variables were robust predictors for conspiratorial thinking. When looking at the psychological factors, authoritarianism, and interpersonal trust had

strong predictive abilities. Here it became clear that individuals who score high on authoritarianism are more likely to engage in conspiratorial thinking across all three models. The only exception here was the obedience measure of authoritarianism. As discussed in sub-chapter 4.1, this might be explained by the notion that people with higher levels of general conspiratorial thinking do not view the government as the proper authority. Therefore, they do not perceive it as necessary to obey them. This is just a proposed explanation, as the data do not say whether the respondents view their national authority figures as the proper authority. This relationship should be studied further. However, the other measure for authoritarian submission was significant across all three models, making authoritarianism a strong predictor for conspiratorial thinking. Lower interpersonal trust also predicted higher conspiratorial thinking across all three models. This confirms the previous research's findings that individuals who are less trustworthy of other people are more likely to engage in conspiratorial thinking (Goertzel, 1994; Lantian et al., 2020; Thórisdóttir et al., 2020; Yendell & Herbert, 2022). Therefore, both H1 and H2 were confirmed, and authoritarianism and interpersonal trust can be viewed as robust predictors for conspiratorial thinking, and these do not differ majorly between the three models.

There were some surprising findings when looking at the ideological and political factors. Here H3 was discarded across the models, with the only expectation of the radical right variable being a predictor of Covid-19 conspiratorial. This was a surprising finding, as previously medical conspiracy theories have been shown not to be conditioned by conservatism and partisanship (Gemenis, 2021; Klofstad et al., 2019). As discussed, this might be explained by the high levels of politicization that Covid-19 has enjoyed. This also highlights one aspect of Covid-19 conspiratorial thinking that differs from the others in the analysis. In addition, the radical left variable behaved opposite to what I expected in the Covid-19 conspiratorial model, as it was not significant here. Lastly, it is noteworthy that the radical right variable is insignificant in two out of three models and that in neither model, the radical left is a positive predictor for conspiratorial thinking. This is contrary to previous findings that suggested that radicalism, especially radical right positioning, predicts conspiratorial thinking (Imhoff et al., 2022; Prooijen et al., 2015; Thórisdóttir et al., 2020). This indicates that ideological positioning is not a robust predictor for conspiratorial thinking in general. This strengthens the notion that conspiracy theories have emigrated from the fringes of society (Plenta, 2020). Political trust and political powerlessness were also examined; here, H4 and H5 were confirmed across all three models. Therefore, low levels of these variables merge as strong predictors for conspiratorial thinking regardless of context and content.

A set of demographic variables were also examined in the first analysis. Starting with education, it behaved as predicted with H6, meaning lower levels of education do predict higher levels of conspiratorial thinking across all three models. I also expected a curvilinear relationship between education and Covid-19 conspiratorial thinking. This did indeed exist, and here it became clear that not only lower levels of education predicted Covid-19 conspiratorial thinking, but also higher levels of education. This was also the case in the three other models. This is a significant finding, as previous research has focused on the negative correlation between education and conspiratorial thinking. This shows that higher levels also emerge as a strong predictor for conspiratorial thinking. The income variable behaved as predicted, and therefore H6 as a whole was confirmed. Religiosity behaved as expected and positively predicted conspiratorial thinking in general. More internet use predicted higher levels of conspiratorial thinking in the general conspiratorial thinking model but not in the other two, revealing its limited significance as a robust predictor.

Lastly, age and gender were also controlled for. Here the age variable was only significant in the Covid-19 model, and surprisingly, it behaved opposite compared to the two other models. It indicated that younger people are more likely to engage in Covid-19 conspiratorial thinking. This was an intriguing finding as in the two other models, even though insignificant, it predicted that older people were more likely to engage in conspiratorial thinking. This is another example that sets Covid-19 conspiratorial thinking apart from the others. Gender did not have significance across any of the models.

To summarize and answer the research questions for the first analysis, it becomes clear that factors such as authoritarianism, interpersonal trust, political trust, political powerlessness, education, and religiosity can be perceived as robust predictors for conspiratorial thinking on an individual level, regardless of content and context. However, it also becomes clear that there are some differences in what predicts Covid-19 conspiratorial thinking; here, radical right and younger age emerged as positive predictors, and they did not do so in the other models. This shows how one can talk of certain robust predictive factors, but some factors still depend upon the content and context of the conspiracy theory.

### 7.2.2 Second analysis

To be able to answer the research questions for the second analysis, I again started by examining the previous research on conspiracy theories' impact on democracy and, more specifically, satisfaction with democracy. Here I hypothesized that conspiratorial thinking negatively impacts satisfaction with democracy. To test this, two multilevel models were performed, where the first one was run without the conspiratorial thinking variables, and the second included these. Here satisfaction with democracy was the dependent variable, and the three same variables for conspiratorial thinking from the first models were used as independent variables. This was done so that it would be possible to see how much conspiratorial thinking not only impacts satisfaction with democracy but also if it impacts the other independent variables' predictive powers for satisfaction with democracy.

A few findings were noteworthy when looking at the other variables besides conspiratorial thinking. Starting with the radical left and right variables, the radical right variable is only significant after conspiratorial thinking is included in the model. Showing its importance. Satisfaction with the government and satisfaction with the economy variables were positive predictors across the models. Being unemployed is not a significant predictor for satisfaction with democracy in any of the models, which is in contrast to previous research (Singh & Mayne, 2023; Wagner et al., 2009). Neither age nor gender had any significance in the models. However, the income variable was significant in the first model, but when the conspiratorial thinking variables were added, it lost its significance. This makes it clear that conspiratorial thinking is a stronger predictor for satisfaction with democracy than income. Lastly, the East dummy variable was significant across the models and was congruent with previous research suggesting that individuals living in Eastern Europe are less satisfied with democracy (Stecker & Tausendpfund, 2016).

When looking at the second model, where the three conspiratorial thinking variables were included, it became distinct that conspiratorial thinking negatively impacts satisfaction with democracy. This confirms H1 for the second analysis. As this was the case with all three variables, it makes it a robust negative predictor for satisfaction with democracy. In addition, it makes it apparent that all three variables tap into different forms of conspiratorial thinking. Strengthening the findings in the first analysis as well. It also became clear that Covid-19 conspiratorial thinking had the most significant negative

impact. To answer the second research question, yes, conspiratorial thinking impacts satisfaction with democracy and does so in a negative way. Further, this makes it possible to argue that conspiratorial thinking can be perceived as a threat. This research points out that if enough individuals are dissatisfied with democracy, this can lead to an increased wish for reforms in a less democratic direction (Quaranta & Martini, 2016; Singh & Mayne, 2023).

### 7.3 Limitations of my research and avenues for future research

The findings in my thesis open many new potential strands in the research on conspiratorial thinking. First, there is potential when looking at how internet use impacts conspiratorial thinking and, more specifically, if individuals use social media as their primary source of information. As the findings on internet and social media use were limited in this thesis but still were significant in the first model (general conspiratorial thinking), this should be explored more. It would have been interesting to look more specifically at if individuals who use social media as their primary source of information would be more likely to endorse conspiratorial thinking across different conspiracy theories. Continuing it would also have been interesting to examine further my finding that younger individuals are more likely to engage in Covid-19 conspiratorial thinking. Can this be explained by social media use or other factors not included in my analysis? This relationship merits more research, as not only is this the only model where age is significant, but it moves in the opposite direction from the other models. In addition to these specific variables, my research shows country-level differences, even though this was not examined. This was due to the limited scope of this thesis; however, this should be studied. Then it would have been possible to test whether high death rates increase Covid-19 conspiratorial thinking or if the other variables behaved differently from country to country.

Moving on to the second analysis in my thesis, some relationships should be studied further. Again, the country level was not examined, and the ICC results from the second analysis also showed country-level differences. Therefore, one could see how the different ways of conspiratorial thinking impact satisfaction in country-specific cases. One might expect differences between East and West as general satisfaction levels with democracy differ here. Maybe in countries where the satisfaction with democracy is more robust, conspiratorial thinking would have a weaker negative impact. Even though I found that conspiratorial thinking hurts satisfaction with democracy, this thesis has not examined why this is the case. This is both a limitation and an excellent opportunity for further research. Building on the current research on conspiracy theories' negative impact on democracy, (Ardévol-Abreu et al., 2020; Giry & Tika, 2020; Papaioannou et al., 2022; Sternisko et al., 2020; Sutton & Douglas, 2020), one should also examine how different conspiracy theories impact other essential aspects of democracy, such as voting behavior and tolerance. In addition, by only looking at one part of democracy, it limits the extent one can say that it might threaten democratic regimes. Nevertheless, despite this, I would still argue that my findings clearly show how conspiratorial thinking must be approached with caution as it can potentially do damage.

Some of my limitations have already been mentioned. Still, I would also like to highlight a couple of extra ones. First, it is always challenging to be completely objective when doing research. Even though this has been the goal throughout the thesis, some bias is to be expected. Especially when choosing variables as well as presenting potential

explanations for my results. As a quantitative research design was used, I have not been able to examine why individuals endorse these conspiracy theories expressly. This would have been possible if one used a qualitative research design, such as in-depth-interviews. One could have supplemented these quantitative findings with qualitative studies for further research. The data is also only representative of Europe, meaning one must be careful to generalize these findings outside of Europe. Here one should also study conspiratorial thinking on a grander scale outside of Europe. Lastly, it is crucial to remember that this is an ever-evolving field, and new conspiracy theories with different implications could surface tomorrow.

## 8 Bibliography

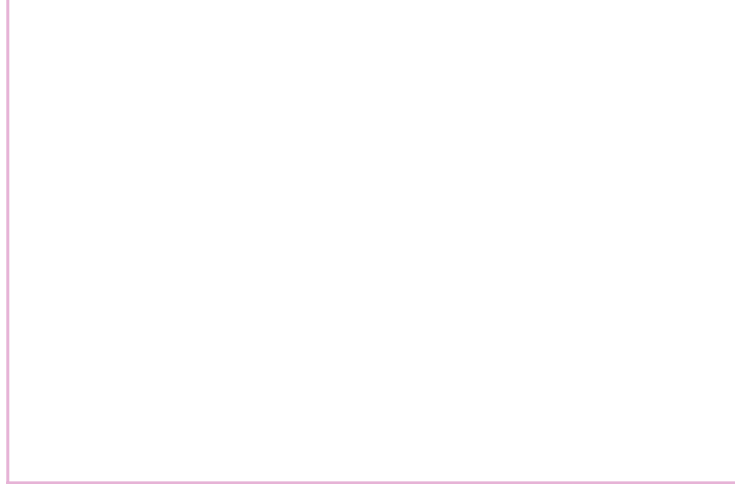
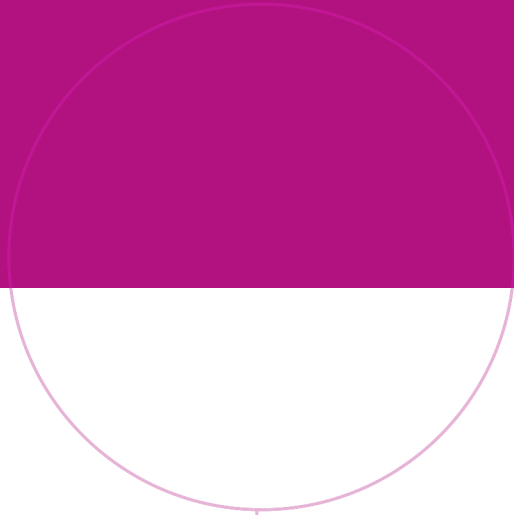
- Andrade, G. (2020). Medical conspiracy theories: cognitive science and implications for ethics *Medicine, Health Care and Philosophy*, 23, 505-518. doi:<https://doi.org/10.1007/s11019-020-09951-6>
- Ardévol-Abreu, A., Zúniga, H. G. d., & Gámez, E. (2020). The influence of conspiracy beliefs on conventional and unconventional forms of political participation: The mediating role of political efficacy. *British Journal of Social Psychology*, 59(2), 549-569. doi:<https://doi.org/10.1111/bjso.12366>
- Bode, L., & Vraga, E. K. (2018). See Something, Say Something: Correction of Global Health Misinformation on Social Media *Health Communication*, 23(9), 1131-1140. doi:<https://doi.org/10.1080/10410236.2017.1331312>
- Butter, M., & Knight, P. (2020). General Introduction In M. Butter & P. Knight (Eds.), *Conspiracy Theories in Political Science and Political Theory* (pp. 1-8). London, New York: Routledge
- De, R., Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice *International Journal of Information Management*, 1-5. doi:[10.1016/j.ijinfomgt.2020.102171](https://doi.org/10.1016/j.ijinfomgt.2020.102171)
- Douglas, K. M., & Leite, A. C. (2016). Suspicion on the workplace: Organizational conspiracy theories and work-related outcomes. *British Journal of Psychology* 108(3), 486-506. doi:<https://doi.org/10.1111/bjop.12212>
- Douglas, K. M., & Sutton, R. M. (2023). What Are Conspiracy Theories? A Definitional Approach to Their Correlates, Consequences, and Communication. *Annual Review of Psychology*, 74(1), 271-298. doi:<https://doi.org/10.1146/annurev-psych-032420-031329>
- Douglas, K. M., Sutton, R. M., & Cichocka, A. (2017). The Psychology of Conspiracy Theories. *Current Directions in Psychological Science*, 26(6), 538-542. doi:<https://doi.org/10.1177/0963721417718261>
- Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi, F. (2019). Understanding Conspiracy Theories *Advances in Political Psychology* 40(1), 3-35. doi:<https://doi.org/10.1111/pops.12568>
- Earnshaw, V. A., Eaton, L. A., Kalichman, S. C., Brosseau, N. M., Hill, E. C., & Fox, A. B. (2020). COVID-19 conspiracy beliefs, health behaviors, and policy support *Translational Behavioral Medicine*, 10(4), 850-856. doi:<https://doi.org/10.1093/tbm/ibaa090>
- Eckhardt, W. (1991). Authoritarianism *Political Psychology*, 12(1), 97-124. Retrieved from <https://www.jstor.org/stable/3791348>
- Enders, A. M., & Smallpage, S. M. (2019). Who Are Conspiracy Theorists? A Comprehensive Approach to Explaining Conspiracy Beliefs *Social Science Quarterly* 100(6), 2017-2032. doi: <https://doi.org/10.1111/ssqu.12711>
- Enders, A. M., Uscinski, J. E., Seelig, M. I., Klofstad, C. A., Wuchty, S., Funchion, J. R., . . . Stoler, J. (2021). The Relationship Between Social Media Use and Beliefs in Conspiracy Theories and Misinformation *Political Behavior* doi:<https://doi.org/10.1007/s11109-021-09734-6>
- European Social Survey. (n.d.). About the European Social Survey. Retrieved from <https://www.europeansocialsurvey.org/about/>
- Gemenis, K. (2021). Explaining Conspiracy Beliefs and Scepticism around the COVID-19 Pandemic *Swiss Political Science Review* 27(2), 229-242. doi:[10.1111/spsr.12467](https://doi.org/10.1111/spsr.12467)

- Giry, J., & Tika, P. (2020). Conspiracy Theories in Political Science and Political Theory In M. Butter & P. Knight (Eds.), *Routledge Handbook of Conspiracy Theories* (pp. 108-120 ). London, New York Routledge
- Goertzel, T. (1994). Belief in Conspiracy Theories *International Society of Political Psychology* 15(4), 731-742. Retrieved from <https://www.jstor.org/stable/3791630>
- Gogarty, K., & Hagle, C. (2020). A guide to right-wing media reactions and conspiracy theories surrounding coronavirus Retrieved from <https://www.mediamatters.org/coronavirus-covid-19/guide-right-wing-media-coronavirus-reactions-and-conspiracy-theories>
- Grzesiak-Feldman, M., & Irzycka, M. (2009). Right-Wing Authoritarianism and Conspiracy Thinking in a Polish Sample *Psychological Reports* 105(2), 389-393. doi:<https://doi.org/10.2466/PRO.105.2.389-393>
- Harteveld, E., Kokkonen, A., Linde, J., & Dahlberg, S. (2021). A tough trade-off? The asymmetrical impact of populist radical right inclusion on satisfaction with democracy and government *European Political Science Review* 13(1), 113-133. doi:<https://doi.org/10.1017/S1755773920000387>
- Hetherington, M. J., & Weiler, J. D. (2009). *Authoritarianism & Polarization in American Politics* New York: Cambridge University Press.
- Imhoff, R., Zimmer, F., Klein, O., António, J. H. C., Babinska, M., Bangerter, A., . . . Prooijen, J.-W. v. (2022). Conspiracy mentality and political orientation across 26 countries *Nature Human Behaviour*, 6, 392-403. doi:<https://doi.org/10.1038/s41562-021-01258-7>
- Jolley, D., & Douglas, K. M. (2014). The social consequences of conspiracism: Exposure to conspiracy theories decreases intentions to engage in politics and to reduce one's carbon footprint *British Journal of Psychology* 105(1), 35-56. doi:<https://doi.org/10.1111/bjop.12018>
- Jolley, D., Mari, S., & Douglas, K. M. (2020). Consequences of Conspiracy Theories In M. Butter & P. Knight (Eds.), *Routledge Handbook of Conspiracy Theories* (pp. 231-241). London, New York Routledge
- Karp, J. A., Banducci, S. A., & Bowler, S. (2003). To Know it is to Love it?: Satisfaction with Democracy in the European Union *Comparative Political Studies*, 36(3), 271-292. doi:<https://doi.org/10.1177/0010414002250669>
- Klofstad, C. A., Uscinski, J. E., Connolly, J. M., & West, J. P. (2019). What drives people to believe in Zika conspiracy theories? *Palgrave Communications*, 5(36), 1-8. doi:<https://doi.org/10.1057/s41599-019-0243-8>
- Lantian, A., Wood, M., & Gjoneska, B. (2020). Personality Traits, Cognitive Styles and Worldviews Associated with Beliefs in Conspiracy Theories. In M. Butter (Ed.), *Routledge Handbook of Conspiracy Theories* (pp. 155-167). London, New York Routledge
- Linde, J., & Ekman, J. (2003). Satisfaction with democracy: A note on a frequently used indicator in comparative politics *European Journal of Political Research*, 42(3), 391-408. doi:<https://doi.org/10.1111/1475-6765.00089>
- Monsicais-Carrillo, A., & Ramos, G. C. (2022). Education, democratic governance, and satisfaction with democracy: Multilevel evidence from Latin America *International Political Science Review* 43(5), 662-679. doi:<https://doi.org/10.1177/0192512120952878>
- Moskalenko, S. (2021). Zip-tie guys: military-grade radicalization among Capitol Hill insurrectionists *Dynamics of Asymmetric Conflict* 14(2), 179-191. doi:<https://doi.org/10.1080/17467586.2021.1912374>
- Moskalenko, S., & McCauley, C. (2021). QAnon: Radical Opinion versus Radical Action *Perspective on Terrorism*, 15(2), 142-146. Retrieved from <https://www.jstor.org/stable/27007300>
- Mulukom, V. v., Pummerer, L. J., Alper, S., Cavojoja, V., Farias, J., Kay, C. S., . . . Zvezelj, I. (2022). Antecedents and consequences of COVID-19 conspiracy beliefs:

- A systematic review *Social Science & Medicine* 301, 1-14.  
doi:<https://doi.org/10.1016/j.socscimed.2022.114912>
- Norris, P., Garnett, H. A., & Grömping, M. (2020). The paranoid style of American elections: explaining perceptions of electoral integrity in an age of populism *Journal of Elections, Public Opinion and Parties* 30(1), 105-125.  
doi:10.1080/17457289.2019.1593181
- Oliver, J. E., & Wood, T. J. (2014). Conspiracy Theories and the Paranoid Style(s) of Mass Opinion *American Journal of Political Science*, 58(4), 952-966.  
doi:<https://doi.org/10.1111/ajps.12084>
- Osborne, D., Costello, T. H., Duckitt, J., & Sibley, C. G. (2023). The psychological causes and societal consequences of authoritarianism *Nature Reviews Psychology* 1-13.  
doi:<https://doi.org/10.1038/s44159-023-00161-4>
- Papaioannou, K., Pantazi, M., & Prooijen, J.-W. v. (2022). Is democracy under threat? Why belief in conspiracy theories predicts autocratic attitudes *European Journal of Social Psychology*, 1-11. doi:<https://doi.org/10.1002/ejsp.2939>
- Passini, S. (2017). Different Ways of Being Authoritarian: The Distinct Effects of Authoritarian Dimensions on Values and Prejudice *Political Psychology*, 38(1), 73-86. doi:<https://doi.org/10.1111/pops.12309>
- Plenta, P. (2020). Conspiracy theories as a political instrument: utilization of anti-Soros narratives in Central Europe. *Contemporary Politics* 26(5), 512-530.  
doi:<https://doi.org/10.1080/13569775.2020.1781332>
- Prooijen, J.-W. v., Krouwel, A. P. M., & Pollet, T. V. (2015). Political Extremism Predicts Belief in Conspiracy Theories *Social Psychology and Personality Science* 6(5), 570-578.
- Prooijen, J.-W. v., & Vugt, M. v. (2018). Conspiracy Theories: Evolved Functions and Psychological Mechanisms *Perspectives on Psychological Science* 13(6), 770-788.  
doi:<https://doi.org/10.1177/1745691618774270>
- Pummerer, L., Bohm, R., Lilleholt, L., Winter, K., Zettler, I., & Sassenberg, K. (2022). Conspiracy Theories and their Societal Effects During the COVID-19 Pandemic *Social Psychology and Personality Science*, 13(1), 49-59. doi:10.1177/19485506211000217
- Quaranta, M., & Martini, S. (2016). Does the economy really matter for satisfaction with democracy? Longitudinal and cross-country evidence from the European Union *Electoral Studies*, 42, 164-174.  
doi:<https://doi.org/10.1016/j.electstud.2016.02.015>
- Reher, S. (2015). Explaining cross-national variation in the relationship between priority congruence and satisfaction with democracy *European Journal of Political Research*, 54(1), 160-181. doi: <https://doi.org/10.1111/1475-6765.12077>
- Robson, K., & Pevalin, D. (2016). *Multilevel Modeling in Plain Language* London SAGE.
- Rose, S. (2022). A deadly ideology: how the 'great replacement theory' went mainstream Retrieved from <https://www.theguardian.com/world/2022/jun/08/a-deadly-ideology-how-the-great-replacement-theory-went-mainstream>
- Shahsavari, S., Holur, P., Wang, T., Tangherlini, T. R., & Roychowdhury, V. (2020). Conspiracy in the time of corona: automatic detection of emerging COVID-19 conspiracy theories in social media and the news *Journal of Computational Social Science* 3, 279-317. doi:<https://doi.org/10.1007/s42001-020-00086-5>
- Singh, S. P., & Mayne, Q. (2023). Satisfaction with Democracy: A Review of a Major Public Opinion Indicator *Public Opinion Quarterly* 0(0), 1-32.  
doi:<https://doi.org/10.1093/poq/nfad003>
- Sommet, N., & Morselli, D. (2017). Keep Calm and Learn Multilevel Logistic Modeling: A Simplified Three-Step Procedure Using Stata, R, Mplus, and SPSS. *International Review of Social Psychology* 30(1), 203-218. doi:<https://doi.org/10.5334/irsp.90>
- Stecker, C., & Tausendpfund, M. (2016). Multidimensional government-citizen congruence and satisfaction with democracy *European Journal of Political Research*, 55(3), 492-511. doi: <https://doi.org/10.1111/1475-6765.12147>



- Stecker, C., & Tausenpfund, M. (2016). Multidimensional government-citizen congruence and satisfaction with democracy *European Journal of Political Research*, 55(3), 492-511. doi: <https://doi.org/10.1111/1475-6765.12147>
- Sternisko, A., Cichocka, A., & Bavel, J. J. V. (2020). The dark side of social movements: social identity, non-conformity, and the lure of conspiracy theories *Current Opinion in Psychology*, 35, 1-6. doi:<https://doi.org/10.1016/j.copsyc.2020.02.007>
- Stoeckel, F., & Ceka, B. (2022). Political tolerance in Europe: The role of conspiratorial thinking and cosmopolitanism *European Journal of Political Research*, 1-24. doi:10.1111/1475-6765.12527
- Stoica, C. A., & Umbres, R. (2021). Suspicious minds in times of crisis: determinants of Romanians' beliefs in COVID-19 conspiracy theories. *European Societies* 23(1), 246-261. doi:<https://doi.org/10.1080/14616696.2020.1823450>
- Sturm, T., & Albrecht, T. (2021). Constituent Covid-19 apocalypses: contagious conspiracism, 5G, and viral vaccinations *Anthropology and Medicine*, 28(1), 122-139. doi:<https://doi.org/10.1080/13648470.2020.1833684>
- Sutton, R. M., & Douglas, K. (2020). Conspiracy theories and the conspiracy mindset: implications for political ideology *Current Opinion in Behavioral Sciences* 34, 118-122. doi:<https://doi.org/10.1016/j.cobeha.2020.02.015>
- Swami, V. (2012). Social psychological origins of conspiracy theories: the case of the Jewish conspiracy theory in Malaysia *Frontiers in Psychology* 3, 1-9. doi:<https://doi.org/10.3389/fpsyg.2012.00280>
- Swami, V., Chamorro-Premuzic, T., & Furnham, A. (2010). Unanswered questions: A preliminary investigation of personality and individual difference predictors of 9/11 conspiracist beliefs. *Applied Cognitive Psychology* 24(6), 749-761.
- Thórisdóttir, H., Mari, S., & Krouwel, A. (2020). Conspiracy theories, political ideology and political behaviour In M. Butter & P. Knight (Eds.), *Routledge Handbook of Conspiracy Theories* (pp. 304-316). London, New York: Routledge
- Uscinski, J. E., Enders, A. M., Klofstad, C., Seelig, M., Funchion, J., Everett, C., . . . Murthi, M. (2020). Why do people believe COVID-19 conspiracy theories? *The Harvard Kennedy School Misinformation Review* 1, 1-12. doi:<https://doi.org/10.37016/mr-2020-015>
- Velavan, T. P., & Meyer, C. G. (2020). The COVID-19 epidemic *Trop Med Int Health* 25(3). doi:10.1111/tmi.13383
- Wagner, A. F., Schneider, F., & Halla, M. (2009). The quality of institutions and satisfaction with democracy in Western Europe - A panel analysis *European Journal of Political Economy* 25(1), 30-41. doi:<https://doi.org/10.1016/j.ejpoleco.2008.08.001>
- World Health Organization. (2022). Coronavirus disease (COVID-19) advice for the public: Mythbusters doi:<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters>
- World Health Organization. (2023). WHO Coronavirus (COVID-19) Dashboard Retrieved from <https://covid19.who.int/>
- Yendell, A., & Herbert, D. (2022). Religion, Conspiracy Thinking, and the Rejection of Democracy: Evidence from the UK. *Politics and Governance* 10(4), 229-242. doi:<https://doi.org/10.17645/pag.v10i4.5904>



Norwegian University of  
Science and Technology