



DEPARTMENT OF JOURNALISM,  
MEDIA AND COMMUNICATION

# **MEDIA USE AND VACCINE HESITANCY**

A qualitative study of individuals' media use and vaccine choice in the covid-19 era

**Ellen Hemmingsson**

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Essay/Thesis:	30 hp
Program and/or course:	Master's Programme in Political Communication/MK2502
Level:	Second Cycle
Semester/year:	St/2022
Supervisor:	Jesper Strömbäck
Examiner:	Adam Shehata
Report no:	

# Abstract

Vaccine hesitancy has long been recognized in separate research disciplines concerning different vaccines and societal contexts to comprehend what factors determine individuals' vaccine choices. Likewise, communication scholars have distinguished how it is possible to select the information that aligns with pre-existing beliefs – particularly in the high-choice media environment with copious information channels. Considering that many individuals stayed at home for large parts of 2020 and 2021, abundant opportunities existed to choose what information to consume. Thus, given the enormous supply of information related to covid-19, this might have affected individuals' perceptions about the virus and later of the supplied vaccines, leading to vaccine hesitancy.

Therefore, this study departs from the field of political communication. The purpose is to examine how Swedish citizens who have not received a covid-19 vaccine reason regarding their decision and to understand their world of thinking concerning media use, virus-related information, and trust towards traditional media, as well as societal institutions and other members of the public. The main focus is, however, on media use. The study employs a qualitative method with a receptive approach and uses the theories of the Reinforcement Spirals Model and Selective Exposure as a prism through which the research process and analysis are performed. Semi-structured interviews were held with 20 Swedish citizens who had chosen not to take the vaccine. The gathered data was then divided into a thematical analysis and shed light on different aspects related to media use, institutional and interpersonal trust, pandemic implications, and perceptions of vaccines.

The results suggest that a confirmation bias operates through selective exposure to vaccine information. The research also considers the Reinforcement Spirals Model, where some of the findings imply that the role of self-perceived identity is an underlying aspect of vaccine hesitancy. Although the findings cannot be generalized to a larger population, the lack of societal debate and reporting on different perspectives from traditional media during the pandemic caused a decrease in trust related to the mass media, the government, and associated agencies. As a result, many turned to other information sources, primarily online, where user-generated content seemed to reinforce their skepticism towards the establishments mentioned above. The research findings underline that it can be problematic from a democratic stance if certain groups of people create counter-publics where alienation and suspicion of established democratic channels are encouraged and magnified, rather than feeling that they are allowed to participate in the mainstream public debate on equal terms as vaccinated citizens.

Keywords: *Vaccine Hesitancy, Covid-19, Vaccination, Selective Exposure, the Reinforcement Spirals Model*

Words: 26 288

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# 1. Introduction

Numerous devastating diseases have been nearly controlled or eradicated due to the availability of safe, effective, and affordable vaccines, particularly in industrialized countries (Perry et al., 2020:32). Nevertheless, public sentiment on vaccines has been volatile for decades, and when the covid-19 pandemic struck, and multiple new vaccines against the virus were released, the issue of vaccine hesitancy again became salient (Karafillakis et al., 2022:700). Vaccine hesitancy is a complex phenomenon closely linked to social contexts and influenced by different factors, including historical periods, geographical area, and political situation (Rosselli et al., 2016:47). However, public opinion on covid-19 vaccines has been more dynamic and rapidly changing than it has been for other vaccines, which reflects the evolving epidemiological context, including distrust of government, potential risks of side effects, public anxieties about the newness of the vaccines, and misinformation circulation on social media (Karafillakis et al., 2022:699).

For centuries, the news media has been one of our fundamental sources of information. From a modest business historically, it has rapidly expanded into an industry that has profoundly shaped our societies and our way of looking at the world (Philips, 2019:73). In the contemporary media environment, our access to information and knowledge has undoubtedly evolved due to technological advancement. This transition from the traditional news paradigm substantially impacts the formation of societal views and the construction of narratives, as well as policy-making, political communication, and the building of public discourse – especially when complex issues are at stake (Cinelli et al., 2020; Del Vicario et al., 2016). Throughout 2020 and 2021, there was an enormous supply of information about the pandemic and the virus, with nearly every media outlet covering the most recent developments (Krause et al., 2020:1052). In addition, users on social media platforms gained influence with perspectives on the virus that frequently contradicted the picture provided by the traditional media (Werne, 2021). Since vaccine hesitancy can be exacerbated by health information obtained from a variety of sources, including new media such as the Internet and social media platforms (Puri et al., 2020:2586), questions arise about how these channels of information have impacted individuals' willingness to accept or deny a covid-19 vaccine.

After nearly two years of restrictions, Sweden and most of the world have lifted earlier limits and reopened after the coronavirus. Nevertheless, the past era of an unimaginable reality has revealed that vaccine hesitancy as a phenomenon remains vital to understand; not simply in terms of vaccine coverage in society but also its impact on public discourse, media usage, and ramifications for individuals' perceptions of the media, those in power, and each other. According to the Swedish Public Health Agency (2022), about 85 percent of the Swedish population had received at least two doses of the covid-

19 vaccine in April 2022. The remaining part and their decision not to be vaccinated is a topic worth exploring further. Particularly concerning the role of what information sources individuals rely on and their perceptions of traditional media's information distribution. From this point of view, this study departs from the field of political communication. It will examine why Swedish individuals choose not to vaccinate against covid-19 and where they find information that supports this choice. For a more detailed problematization, please see the next section.

## 1.1 Problematization

Underlying any politically relevant opinion, such as vaccine hesitancy, is a combination of people's primary preferences and what information they are exposed to, pay attention to, and trust. Research in political communication (E.g., Davis, 2019; Strömbäck et al., 2020; Van Aelst et al., 2017) has also established that the transition from low to high-choice media environments has had and continues to have significant effects on democracies' political information environments, including the distribution of information and knowledge. Concerning the covid-19 pandemic, previous research has shown that it influenced people's news media consumption (Van Aelst et al., 2021:1209), but also that the pandemic was characterized by an ample supply of misinformation (Önnefors, 2021:6). More generally, the pandemic illustrated the influence of the new media environment with limitless information channels and polarized groups around shared narratives. Noting that misinformation quickly proliferates when polarization is high (Vicario et al., 2019; Wardle & Derakhshan, 2017) and that inaccurate information may spread faster and broader than fact-based news (Cinelli et al., 2020; Vosoughi et al., 2018), it is crucial to understand what consequences the covid-19 era might have in terms of vaccine hesitancy and individuals' information seeking, media use and trust in established institutions.

In addition to the abovementioned, a new postmodern healthcare paradigm has arisen in recent years, in which authority has transferred from doctors to patients, science's legitimacy has been questioned, and expertise has been redefined (Kata, 2012:3378). This combined has created an environment where anti-vaccine activists can effectively spread their messages, and previous research has indicated that media consumption and internet use can influence whether or not a person chooses to be vaccinated (Betsch et al., 2010; Kata, 2012; Dannetun et al., 2005). For example, in a Swedish study of parents who postponed or refused to vaccinate their children, the media was the primary source of information for almost 80 percent of the surveyed (Dannetun et al., 2005). Equally, in a Welsh study, vaccination uptakes were much lower in the distribution region of a newspaper that launched a campaign against the measles-mumps-rubella [MMR] vaccine than in the rest of the country (Mason & Donnelly, 2000). Correspondingly, in a study by Betsch et al. (2010), where they looked at how well users assessed the accuracy of Internet-based medical information using the terms "vaccine safety" and "vaccine danger"

in search engines, 59 percent of the participants thought they retrieved factual sites. However, most sites were inaccurate, as defined by the study (i.e., not evidence-based sites). More importantly, this study showed that reading an anti-vaccine website drastically reduced vaccination intentions, lasting for five months, resulting in parents giving their children fewer vaccinations than advised (Betsch et al., 2010:450).

Considering that the contemporary society is mediated, which implies that most interactions between citizens and the wider community occur through the media and that almost all knowledge about society is indirect, whereas one can learn about it either by one's own experiences, interactions with others, or media consumption (Asp, 1986; Strömbäck, 2014). As a result, this implies that citizens' perceptions of reality are shaped by the available information, which may, in turn, impact their attitudes and behavior (Strömbäck, 2014:283). In times of crisis and uncertainty, research has shown that the media and the Internet are two essential components of an individual's meaning-making (Weick et al., 2005; Kim et al., 2020). Nevertheless, there are still conflicting views and an overall lack of research regarding how the contemporary high-choice media environment with rapid information transformation can influence people's behavior, especially in light of the covid-19 pandemic. Therefore, more research is needed to understand how the new information environment affects vaccine hesitancy and the effectiveness of government countermeasures, as well as how individuals perceive traditional media regarding information.

## 1.2 Research Questions

Against this background, the purpose of this study is to investigate how people who chose not to vaccinate against covid-19 reason concerning their decision and to understand their world of thinking regarding information seeking, media use, and media trust. More specifically, in-depth interviews with a receptive approach will be conducted with unvaccinated Swedish citizens to understand why they are not vaccinated; where they seek information regarding vaccines; how those decisions affect their behavior; and why they trust some information sources over others. The overall research questions that guide this study are:

- *Why do some people decide to not get vaccinated against covid-19?*
- *Where do the unvaccinated get information about vaccines?*
- *Why do the unvaccinated trust some information and information sources more than others?*
- *What are the expressed reasons for distrusting information from established media and expert sources?*



### 1.3 Research Contributions

*Vaccine Hesitancy* is a phenomenon that has been subject to research in different disciplines concerning different types of vaccines. However, in the post-covid-19 era, there is still a lack of qualitative research on vaccine hesitancy regarding covid-19 vaccines, as a majority of earlier studies in this field have utilized a quantitative approach and focused mainly on demographic characteristics (e.g., Graffinga et al., 2020; Kreps et al., 2020; Wang et al., 2020; Ward et al., 2020). Therefore, this study can contribute to the research gap in the post-covid-19 era by adopting a qualitative method to examine further the role of media and communication concerning individuals' vaccine choices. Using a qualitative method, which depends on people's first-hand accounts as the meaning-making agents in their daily lives, the goal is to understand a social phenomenon in its natural context (Wilson et al., 2021). Hopefully, this study will make it apparent to comprehend and grasp fundamental concepts that quantitative studies do not reach.

According to Krogh et al. (2021:279), phenomenon-based research aims to collect, describe, document, and conceptualize a phenomenon to proceed with appropriate theorizing and the development of research methodologies. As stated above, this study aims to explore vaccine-hesitant individuals' media consumption and approach an understanding of their world of thinking. From this point of view, the study's main contributions will be more practical than theoretical. This means that this study will not test or produce a theoretically based hypothesis but rather employ communication research theory as a prism through which the research process and analysis will be performed (Marsh et al., 2018). Hence, this study can shed light on what individuals perceive as inadequate regarding information distribution from traditional Swedish media, government, and authorities. The study might also help stakeholders understand how to better connect with vaccine-hesitant individuals or groups and what strategies to take to reduce vaccine hesitancy. Moreover, this study may also reveal how media consumption can influence vaccine hesitancy for covid-19 vaccines, allowing key actors to develop more relevant and effective strategies targeting groups that are difficult to reach in traditional ways.

The motive for doing this study in a Swedish context is that Sweden has responded modestly to the covid-19 crisis compared to other countries. Sweden's approach has encouraged citizens to exercise their judgment and act appropriately to prevent the virus from spreading (Devine et al., 2021) instead of strict limitations such as lock-downs. However, criticism of the Swedish corona strategy has been extensive, and key actors' decisions and recommendations have received considerable media attention and been objects of heated public discussions (Jönsson & Oscarsson, 2021). Although Sweden is frequently cited as one of the nations with the highest levels of institutional and interpersonal trust (Eurobarometer, 2018; Holmberg & Rothstein, 2016; Holmberg & Weibull, 2020), a recent report

(Andersson, 2021) showed that a decline characterized the trust towards different institutions during the pandemic.

For this reason one of the objectives of this study derives from a democratic perspective. By allowing those who disregarded the government's vaccine advice to communicate, their perspectives on the pandemic will be made public, revealing any issues they believe need to be resolved and how they view Swedish society, including the media, government, and authorities. It also provides a unique opportunity to examine and understand individuals' use and trust in the media when faced with choices related to their health. These findings can be valuable for interdisciplinary work, such as political science, public health, medical research, psychology, and communication.

## 2. Background

### 2.1 Introduction

Over two years have passed since the commencement of the covid-19 outbreak, and the Swedish government has declared that Sweden has failed to safeguard vulnerable groups, particularly the elderly (Rambaree & Nässén, 2020:239). Additionally, there has been substantial media coverage on both a national and international scale. Considering that context is necessary given individuals vaccine choice, it is essential to acquire some fundamental background on how the society and media reporting appeared in Sweden during the pandemic. It is, however, challenging to propagate all critical aspects of the pandemic's impact on Swedish society. Consequently, this chapter aims to provide some background for the societal situation and the actual environment of that time, characterized by great uncertainty and much information that citizens had to navigate through, factors that may have contributed to vaccine hesitancy toward covid-19 vaccines.

The Swedish strategy will be reviewed first, and aspects of institutional and interpersonal trust will be discussed. Second, the national media coverage will be reviewed, and findings on where individuals turned for information regarding the virus will be encountered. Finally, a brief discussion about political alternative media will be held.

### 2.2 The Swedish Strategy

In March 2020, it became evident that the world had been struck by a new pandemic caused by the coronavirus. The virus-induced illness caused widespread concern and unease on a national and international scale (Jönsson & Oscarsson, 2020:1). The extent of the infection's ramifications was unknown. However, there was no doubt that the virus would have far-reaching consequences for human health and the world economy. Other societal issues regarding democracy, progress, wealth, and freedom were also raised by scholars early on (Jönsson & Oscarsson, 2020:1).

In contrast to other nations, Sweden implemented a less restrictive strategy based on Public Health Agency (PHA) recommendations. The strategy emphasized individual responsibility, with the overarching goal of protecting the aged and vulnerable. Furthermore, the strategy aimed to slow the spread of the infection so that the healthcare system would adequately function (Lindström, 2020:1). Formulated by the government (Regeringen, 2020) in a publication from April 2020, the Swedish Strategy could be summarized in six points:

1. Limit the spread of infection,
2. Retain resources for health and medical care,
3. Limit the impact on socially important functions,
4. Mitigate consequences for citizens and businesses,
5. Reduce concerns through continuing information, and
6. Implement the right action at the right time.

These considerations illustrate that the strategy was never designed to limit illness transmission entirely. Instead, as previously stated, the goal was to prevent the spread of infection and keep it at a low enough level to keep healthcare from being overburdened (Jönsson & Oscarsson, 2020). As a result, questions were raised early on if Sweden sought to follow a herd immunity strategy by taking a less restricted approach and attempting to flatten the curve without drastic measures (Irwin, 2020:4). On the other hand, the government and PHA denied implementing such a plan on many occasions. Nonetheless, public confusion intensified after state epidemiologist Anders Tegnell utilized the term on television (Jonsson, 2020).

Another component of the herd immunity theory was how the Swedish response was reported in foreign media as radically different from other countries. According to *The Guardian* (Henley, 2020), Tegnell told Swedish TV in May 2020 that the population's infection rate would determine the outbreak continuum and that the virus could be stopped by either herd immunity or a combination of immunity and vaccination. The confusion regarding Sweden's strategy received much attention in international media, which probably affected the domestic inhabitants' view of their government. However, one of the justifications for the less restrictive strategy was that it was thought to be sustainable in the long-term regarding citizens' endurance and faith in the government and associated agencies (Irwin, 2020:5).

The public's faith and patience, however, may have been tested as the government, the Public Health Agency, the regions, and the municipalities in charge of elder care continuously blamed each other for the rise in the infection rates. According to Lindström (2021:2), transparency, inclusivity, and accountability requirements contained in WHO ethical pandemic principles were thrown aside in this blame game. This scenario may have influenced individuals' faith in governmental institutions as well as interpersonal trust among members of society, as it separated those who thought the government and associated agencies did a proper job from those who did not share the same opinion.

A requirement for approaching a crisis that relies on citizens' voluntary cooperation draws on that members of the society trust those in power as well as each other. Sweden has been acknowledged in different empirical findings for having high levels of institutional and interpersonal trust (e.g.,

Eurobarometer, 2018; Holmberg & Rothstein, 2016; Holmberg & Weibull, 2020). Nonetheless, given the objectives of this study, it is necessary to provide additional context on these topics.

### **2.2.1 Institutional and Interpersonal Trust**

Citizens' faith in governmental institutions is defined as *institutional trust*, which is a fundamental feature of functioning democracies (van der Meer & Zmerli, 2017:19). *Interpersonal trust* is described as an individual's assumption that the statement or commitments of others, whether strangers or familiar, can be relied on (Lunn et al., 2020:2). Public support for political institutions typically grows during difficult and dramatic times, such as after terrorist attacks or wars. A notion for this phenomenon is rally-around-the-flag effects, or rally effects for short, which appear to boost support for individuals or institutions affiliated with the nation (Dinesen & Jaeger, 2013; Esaiasson et al., 2021; Mueller, 1970). Scholars have proposed numerous theories for rally effects. The first is based on social identity theory (Tajfel, 1982:3) and focuses on national identification, in which a crisis motivates support for in-group symbols like the president or prime minister. The second set of theories focuses on the threat, with the rally effect as a mechanism to strengthen security in an unmoored scenario (Doty et al., 1991:630). A third viewpoint considers specific emotions, mainly anger and worry, as probable processes underlying rally effects (Lambert et al., 2011:345).

Given the Swedish context, it seems likely that all aforementioned perspectives were present when the coronavirus hit. The transition during the first year, from the early phase to the more acute phase, may have prompted feelings of national identity, the need for security, and feelings of rage and worry, where political leaders were unified in their fight against the pandemic (Esaiasson et al., 2021:749). In light of this, Esaiasson et al. (2021) examined how Swedish citizens updated their institutional and interpersonal trust during the spring of 2020 through a web-based survey of adult Swedes. In terms of institutional trust, the effect was consistent among categories that would be hesitant to support government institutions. The elderly and people with lower levels of education, who had fewer opportunities to work from home during the crisis, may have reacted more positively than privileged groups. The only sign of a heterogeneous influence is party support. Opposition party supporters may have improved their degree of institutional trust slightly less than incumbent government supporters. The shift in interpersonal trust was minor. However, as Esaiasson et al. (2021:755-766) note, interpersonal trust is frequently regarded as steady and almost impossible to change.

Furthermore, Sweden's interventions ranged in deploying *soft power* through leadership and information campaigns (Jorgensen et al., 2021:680) to aim individuals to take the vaccine. However, given that not everyone followed this, Sweden addressed the issue by introducing proof of vaccination

as an infection control to limit chains of infections. The idea was that at certain events, participants needed to present a vaccination certificate showing that they are fully vaccinated as a prerequisite for participating, which sparked intense discussions about liberal values of equality. Given this, it is reasonable to assume that individuals who declined the vaccination had a different opinion of the government and perhaps less trust in institutions. Moreover, during this time, vaccines were available. The most potent message from the authorities was that citizens should vaccinate for one's own sake and to protect others. A message that also permeated the media's reporting. Based on this, the next part will look more closely at the media reporting during the pandemic.

## 2.3 Media Coverage

Through its ambiguity, the Swedish language refers to the media as a third state power, possibly revealing the most fundamental struggle in journalism. On the one hand, the media, particularly news reporting, are intended to provide an information channel that contributes to societal cohesion by sharing critical information among its many segments (Nohrstedt, 2000:202). Herein lies a demand, not least on the part of the state, that choices be communicated to citizens and that the media bear responsibility for societal cohesiveness. This is evident in the case of crises, as critical information such as present threats and standards of behavior must be swiftly disseminated to the entire population (Nohrstedt, 2000:202). Taking into account that the covid-19 outbreak was an event with exceptional news value (Ghersetti & Odén, 2021:24), and how media reports are critical for how citizens perceive threats and behave throughout crises (Davis, 2019). Therefore, this part of the chapter will give some background on the national reporting on Sweden's response and where citizens turned for information.

### 2.3.1 National Media Coverage of Covid-19

The Swedish non-profit group VA (Public & Science) collaborated with researchers to investigate how the Swedish public received and understood information about the virus and how the media presented the pandemic by combining web-based surveys and content analysis. Bohlin et al. (2021) wrote the report, which includes some interesting findings. They examined the content of the coronavirus and researched coverage on Swedish Television (SVT), the newspaper Dagens Nyheter, and the tabloid Aftonbladet. Most media coverages took the form of reporting articles, such as news reports. A lesser portion included commentary articles, such as analyses, or argumentative articles, including editorials or debate articles (Bohlin et al., 2021).

Furthermore, many articles focused on the Stockholm area at the outset of the pandemic than in the succeeding times. The reporting tone was broadly neutral. One in every five articles featured alarming

components, whereas one in every ten had a relaxing tone. Unlike debate articles and opinion pieces, news items had a more neutral tone (Bohlin et al., 2021). They also found that individuals with a university or college education are more likely than others to participate in Dagens Nyheter, Svenska Dagbladet, and international media. People without higher education were more likely to obtain information about the coronavirus from local newspapers, Aftonbladet, and TV4 (Bohlin et al., 2021:24). From a political perspective, Bohlin et al. (2021:24) found that sympathizers of the Moderate party regard the tone as turned up/alarmist to a greater extent than the general population. Similarly, sympathizers of the Sweden Democrats regard the tone as more wait-and-see/cautious than others. People aged 65 and up see the reporting as cranked up/alarmist to a little greater extent than the general population. Traditional news media such as TV, newspapers, and radio was the Swedish public's primary source of information about the coronavirus during the pandemic beginning in March 2020 and six months later in September (Bohlin et al., 2021).

The Public Health Agency held press conferences between March 4th, 2020, and March 3rd, 2022, which were broadcasted by public service. A PHA spokesperson stated that the press conferences were viewed as a valuable medium for communicating newly produced reports, new decisions, and recommendations, and around 20-25 journalists were signed up for each press conference (SVT, 2021). However, Frode Forland, the Norwegian equivalent of the Swedish state epidemiologist, criticized the Swedish approach in an interview published in the daily Svenska Dagbladet in mid-May 2020. He questioned why the Swedish mass media did not raise serious objections to the strategy and the high mortality tolls. Forland commented that he was surprised by this lack of pertinent crucial questions (Falkrik, 2020). The Swedish press was largely silent throughout the official daily press conferences in the spring of 2020, despite a few press voices criticizing the plan as early as mid-March (Wolodarski, 2020). Most of the challenging queries were posed by foreign media. During the press briefings, Swedish Radio even questioned, "*who is the German putting pressure on the Public Health Agency?*" (Studio Ett, 2020). The journalist from the German TV channel ARD was undoubtedly considered exceptional.

Given that traditional news media was the Swedish public's primary source of information (Bohlin et al., 2021:25), some members of the public might have believed that the media strategy was to seek national unity rather than raise critical questions. This, in turn, may have strengthened the mistrust of individuals who did not trust the government, calling into question the pervasive message concerning vaccines disseminated through several channels. Additionally, considering that individuals used other information sources during the pandemic (Cinelli et al., 2020; Puri et al., 2020), it is possible to claim the covid-19 era was marked by an "information disorder" (Önnefors, 2021:18). Information disorder refers to a more fluid information culture centered on social media and online communication, which has overturned specific standards regarding what can be viewed as reliable information and what cannot.

Önnefors (2021:23) argues that knowledge is no longer constant. Knowledge-producing institutions or expert knowledge, which constitute the foundation of contemporary and open societies, are increasingly rejected in favor of competing truths—resulting in knowledge instability (Önnefors, 2021:23).

Knowledge instability implies that individuals may resort to other sources of information when they mistrust the mainstream media's narrative. Based on this, the following section will briefly address alternative media's implications, which may be an underlying predisposition of vaccine hesitancy.

## 2.4 Alternative (News) Media

The modest but rising vociferous opposition movement against the efforts linked to the virus has been present since the pandemic's start. For instance, protests have been held worldwide to declare dissatisfaction regarding lockdowns, restrictions, health passes, and vaccines, and that “the press and government” are lying about the virus's origin, spread, and dangerousness. In Sweden, as elsewhere, the organizers behind several demonstrations disseminated information via platforms that could be defined as *political alternative media* (Dalsbro, 2021).

Scholarly interest in alternative forms of (news) media has grown since the millennium's turn (Holt et al., 2019:861). Atton (2002) distinguishes alternative media as a *product* and a *process*. As a product, alternative media emphasizes radical, anti-hegemonic content and journalism principles with alternative aesthetics and forms that do not rely on advertising. As a process, aspects such as de-professionalization, collaborative organization, and alternative distribution are accentuated. However, a relational approach to understanding political alternative media is to consider that it is asserted (self-) perceived corrective to the overall trend of public discourse emerging from what is believed to be the dominant mainstream media in society. The “alternativeness” can be understood on a variety of levels. First, alternative news media can publish various perspectives attempting to influence public opinion in accordance with an agenda viewed as underrepresented or marginalized in mainstream news media. Alternative news media can also provide interpretations of political and social events and rely on alternative publishing routines via alternative media organizations or channels unsupported by major networks and newspapers (Holt et al., 2019:862). In contrast to traditional news media, which has reality check dynamics, alternative media has been discovered to contain propaganda feedback loops where the validity of material is negligibly essential than whether it meets political aims and offers partisan-consistent and identity-conforming news (Benkler et al., 2018:73). Thus, the availability of political alternative media has grown, which has also increased the availability of false information. Additionally, technology has made it easier for people to engage in political selective exposure, where they look for news that supports their attitudes and beliefs (Strömbäck et al., 2022:14).



Considering that some members of the society do not have complete faith in the government's assessments of the covid-19 recommendations, the attraction of alternative news media with alternate explanations over regular news might have attracted skeptical individuals. On the other hand, there may be an inverse correlation, meaning that individuals who frequently turn to alternative news media exhibit a lower trust in Swedish institutions and conventional media in the first place. However, considering this chapter aims to provide some background, it must be clearly expressed that alternative (news) media were very vocal during the pandemic. According to Puri et al. (2021:2587), vaccine conversation on alternative channels and social media has varied through time, with trends frequently tied to real-world occurrences. The covid-19 pandemic was no exception. However, considering that skepticism towards traditional media may cause individuals to use other sources of information as their viewpoints are marginalized in conventional media, it seems likely that using alternative media could underpin vaccine hesitancy.

## 3. Literature Review

### 3.1 Introduction

The following chapter will delve into various academic research and publications to better comprehend vaccine hesitancy as a concept and its definition to provide some background on the variables influencing vaccination decisions. The chapter will end with reviewing recently published research on vaccine hesitancy and covid-19.

### 3.2 Vaccine Hesitancy

Vaccination is frequently considered one of public health's most significant achievements, but individuals and groups who question and sometimes deny vaccines for several reasons have constantly challenged this accomplishment (Durbach, 2000:45). Due to the rapid global sharing of public concerns and occasional vaccine uncertainty, people have doubts about vaccines, seek other vaccination schedules, and sometimes postpone or refuse immunization (Larson et al., 2014:2150). Also, vaccination discussions have become more complex as new vaccines and vaccine combinations have evolved, and global technologies have become more prevalent, rapid, and non-hierarchical (Larson et al., 2011:526). The World Health Organization (WHO) has noted how vaccine hesitancy is a growing problem for immunization programs worldwide. For example, WHO (2019) indicates that measles cases have increased by 30 percent worldwide and declare that this increase is complex, and not all measles cases are related to vaccine hesitancy. Nevertheless, the disease has resurfaced in certain countries on the threshold of eradicating it.

In the literature, vaccine hesitancy is mainly discussed in scientific journals in public health and medicine specializing in vaccination or pediatric concerns. For example, Peretti-Watel et al. (2015:2) indicate that the notion of vaccine hesitancy is still an ambiguous concept with an undetermined theoretical underpinning. Further, they suggest that vaccine hesitancy could have started as a catchy phrase coined by experts to draw policymakers' attention. However, if one understands vaccine hesitancy as an unavoidably temporary stage between full support and strong opposition, it might lead to misconceptions and inefficient solutions targeting vaccination coverage. Instead, according to Peretti-Watel et al. (2015:3), vaccine hesitancy should be seen as a label given to a broad and diverse group of people who share varied reasons for indecision and who fall somewhere in the middle of a spectrum ranging from full support for vaccination to solid opposition to any vaccines. This means that individuals may refuse a vaccine, but they may also postpone or accept it at a later date, despite their reservation.

Dubé et al. (2013:1763) characterize the existence of vaccine hesitancy when vaccine acceptance is lower than expected, given the information provided and the available services.

Further, Dubé et al. (2013:1763) opine that vaccine hesitancy is an individual behavior influenced by different reasons, including knowledge and previous experiences. The impact of these reasons on vaccine hesitancy is also mediated by the individual's trust in the vaccine delivery system, health professionals recommending and administering vaccines, policymakers who decide on vaccination programs, and the different types of vaccine information conveyed in the media (Dubé et al., 2013). However, Peretti-Watel et al. (2015:3) imply that it is complex to describe vaccine hesitancy only as a behavior, as it can be linked to various other actions, such as information seeking and disposition to act or a positive or negative evaluation. Instead, Peretti-Watel et al. (2015:3) suggest that it would be more beneficial to consider vaccine hesitancy as a *decision-making process*. As both pro-and anti-vaccine individuals have strong convictions about vaccines in general, the referred decision-making process may be straightforward (i.e., without indecision) or practically automatic. On the contrary, the process may be more difficult, uncertain, and worthy of interest among individuals who have doubts — those who are genuinely hesitant.

Observing that vaccine hesitancy expresses reservation regarding vaccination and could be understood as a behavior or a process within a decision, most viewed publications on this phenomenon refer to a report made by the Strategic Advisory Group of Experts (SAGE) on Immunization of the WHO for the definition of vaccine hesitancy. Therefore, the following section will review the SAGE's definition of vaccine hesitancy, which appears to be the most acknowledged in the literature.

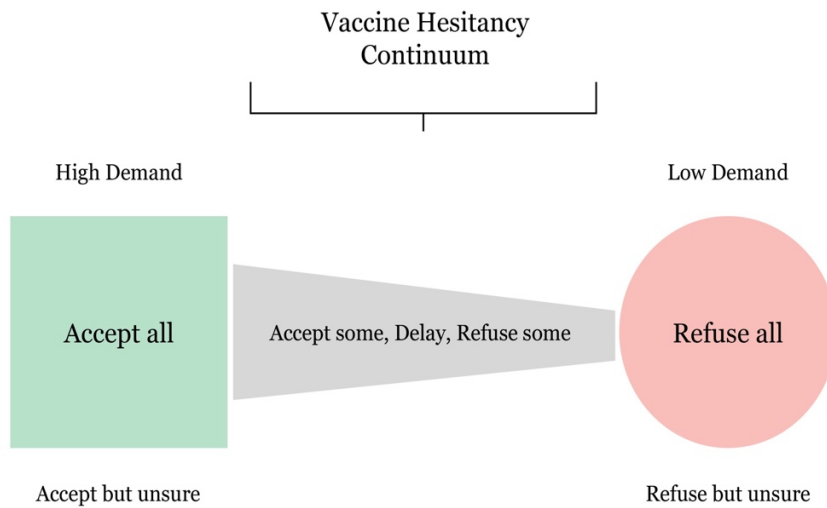
### **3.2.1 Definition of Vaccine Hesitancy**

The SAGE Working Group on Vaccine Hesitancy was initially formed in 2012 with the mission to propose a definition of vaccine hesitancy and its breadth. Also, to develop a model to categorize factors that influence a person's decision to accept a vaccine or not (MacDonald, 2015). The SAGE report was revised after a meeting in 2014, which will be the one referred to hereafter. However, according to their report, vaccine hesitancy is defined as follows:

Vaccine hesitancy refers to delay in acceptance or refusal of vaccines despite availability of vaccination services. Vaccine hesitancy is complex and context specific, varying across time, place and vaccines. It is influenced by factors such as complacency, convenience and confidence. (SAGE, 2014:7).

This stated definition implies that vaccine hesitancy exists when vaccine acceptance in a specific setting is lower than predictable, given available vaccine services (SAGE, 2014). Furthermore, the working group infers that vaccine hesitancy occurs on a spectrum between full vaccine acceptance (including high vaccination demand) and complete vaccine refusal of all or some vaccines, indicating that many people fail somewhere along the spectrum, see Figure 1 below.

**Figure 1.** *The Continuum of Vaccine Hesitancy between Full Acceptance and Outright Refusal of all Vaccines*



*Source: SAGE, 2014:9*

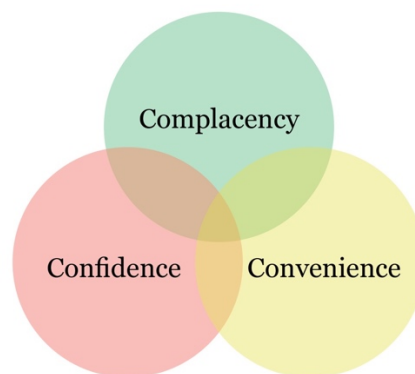
This introduced model aligns with arguments familiarized by the studies above (Peretti-Watel et al., 2015; Dubé et al., 2013). They also suggest that vaccine-hesitant individuals are a heterogeneous group in the middle of a continuum and may refuse some vaccines but accept others. It could be related to behavioral factors or a decision-making process. However, as SAGE (2014) clarified in their report, a first step toward raising demand, the core reasons and magnitude of vaccination hesitancy must be identified and addressed at both the individual and communal levels, which means that countries must address hesitancy as it undermines demand. Low demand is reflected in high levels of hesitancy.

On the other hand, low levels of hesitancy do not imply that demand will be high. Beyond those geared at reducing hesitation, context, community, and vaccine-specific techniques must be developed to generate high individual and community vaccine demand (SAGE, 2014). To better understand the idea of vaccination hesitancy, the SAGE devised the “3Cs model,” which will be introduced in the next section, along with other proposals for determinants of vaccine hesitancy.

### 3.2.2 Determinants of Vaccine Hesitancy

To understand what factors affect an individual when they face a choice to get vaccinated, the SAGE (2014) developed a model called the “3Cs,” which they claimed to be more intuitive in comprehending vaccine hesitancy than the model introduced in Figure 1. The working group clarified in their report that many determinants influence vaccine hesitancy and acceptability. As a result, recognizing the significant factors contributing to vaccine uptake hurdles and promoters is critical in overcoming vaccination hesitation (SAGE, 2014). However, the “3Cs” model aids in better understanding the definition of vaccine hesitancy and the principal determinants that influence it. For the “3Cs” model, see Figure 2 beneath.

**Figure 2.** *Confidence, Complacency, Convenience Model of Vaccine Hesitancy*



*Source: SAGE, 2014:11.*

In this model:

- *Confidence* is defined as trust in the effectiveness and safety of vaccines, the system that distributes them, such as the dependability and competency of health services and health professionals, and the motivations of policy-makers who determine which vaccines are required.
- *Complacency* occurs when the risks of vaccine-preventable illnesses are viewed as minimal, and vaccination is not considered a required preventative measure. Complacency regarding a specific vaccine, or vaccination in general, is impacted by various circumstances, including other life/health duties that are essential.
- *Convenience* signifies physical accessibility, price, willingness to pay, and understanding capacity. The availability of vaccination services at a convenient and pleasant time and place and in a cultural context influences vaccination decisions and may lead to vaccine hesitancy.

It might be beneficial to address these points figuratively to provide a broader context. As Betsch et al. (2015:64) discuss, neglect of vaccines can result from a lack of *confidence* in the efficiency and safety of vaccines and the system that delivers them. Those who fall into this category of non-vaccinators typically have very negative views of vaccination in the first place. This could be related to belief in false information about the vaccine (or the disease) or by belonging to social groups associated with the anti-vaccination movement. If vaccination is perceived as a requirement or a social norm, those individuals will purposefully oppose this norm.

*Complacency* can refer to a situation in which there is little public interest in vaccine decisions because complacent individuals do not perceive infectious illnesses as a threat. As a result, individuals will not take defensive action if they do not expect danger. It is reasonable to infer that a modest level of knowledge, awareness, and active information also occurs in this situation. Therefore, predicting behavior is challenging because of the weak attitude toward vaccination. Preventive behavior is not regarded as the norm in society. Consequently, rather than deliberately choosing not to vaccinate, complacent individuals are passive rather than active about their vaccine choices (Betsch et al., 2015:64).

*Convenience* denotes that even if there is a positive intention to vaccinate, structural obstacles like limited access or lack of willpower prevent the vaccination decision from being carried out. Barriers might be thought of as “gate-keepers” because, for example, even though most people think that immunization is necessary, other personal matters may seem more urgent. Accordingly, scheduling the immunization appointment is on hold in favor of other commitments. The lack of highly negative or positive attitudes in this situation indicates that immunization is not essential enough to overcome obstacles. As a result, when faced with obstacles like cost, access, or travel time, decision-makers choose not to vaccinate in order to get around these obstacles (Betsch et al., 2015:64).

### 3.3 Covid-19 and Vaccine Hesitancy

The previous sections discuss vaccine hesitancy from a general perspective. Since this thesis aims to examine vaccine hesitancy against covid-19 and their media use in the high-choice media environment, this part will introduce reviewed literature and research regarding vaccine hesitancy and covid-19. As stated in the introduction, most publicized studies in this niche have a quantitative approach. However, most evaluations of previous research on vaccine hesitancy and covid-19 have several common denominators, even though the studies are realized in different environments and with different approaches. Some of the introduced studies below have examined media use and vaccine hesitancy against covid-19, which also will be discussed briefly.

For example, Graffinga et al. (2020) conducted a survey in Italy and found that positive factors for vaccination willingness were individual health engagement and increased age. Negative factors for vaccine willingness were susceptibility towards covid-19, disease severity, and low trust in scientific research. Another study by Kreps et al. (2020), where a survey was done in the US, found that positive factors for receiving a covid-19 vaccine were associated with political placement. Respondents who had listed their political affiliation as Democratic were significantly more prone to receive a vaccination. On the other hand, negative factors were associated with the development of vaccines, mainly if it was developed outside of the US, especially if the vaccine came from China, which affected the willingness negatively regardless of political affiliations.

Wang et al. (2020) conducted a cross-sectional online survey in China and found that high confidence in vaccines and increased age were associated with positive factors for vaccination willingness. On the contrary, males, high education, and low trust in the government were associated with low willingness for vaccination. Jennings et al. (2020) combined a survey with focus groups in the United Kingdom. They found that positive factors for vaccination willingness were increased age, trust in health organizations, information from traditional media, positive evaluations of government handling of the covid-19 crisis, and perceived personal threat from covid-19. Negative factors were conspiracy beliefs, distrust of vaccines, belief in covid-19 misinformation, lock-down skepticism, and usage of YouTube, TikTok, and Instagram. Moreover, since they combined their research with survey groups, where participants could develop their reasoning, they found some factors affecting vaccination willingness by unsure individuals. Those factors dealt with the rapid development of the vaccines, lack of trust in information by the government, and skepticism around theories of the virus origin.

In line with Jennings et al. (2020), Ali et al. (2020) found a similar pattern in the United States. Changes in covid-19 views among participants were strongly and consistently linked to the use and trust in various information sources. Participants who utilized government websites were more likely to disagree with the following assertions; *that the coronavirus was released as an act of terrorism* and; *that the coronavirus is not as big a problem as the media suggest* than those who did not use official information. Furthermore, Ali et al. (2020) found that beliefs about covid-19 were also significantly influenced by mainstream media sources. Those who relied on CNN or MSNBC were more likely than those who relied on other nation/local media to agree that the coronavirus is deadlier than the seasonal flu, that media attention to the coronavirus has been adequate, and that the coronavirus is a bigger problem than the government claims. However, here they found a distinct divergence in political character. Those who watched Fox News, which is considered conservative, were more likely to believe that the coronavirus was released due to bioterrorism (Ali et al., 2020). Correspondingly, Pew Research Center data revealed that disparities in partisan media messaging contributed to Democrats and Republicans in

the United States to develop divergent perceptions toward the danger posed by covid-19 (Suede & Knobloch-Westerwick, 2022:89).

Following research on covid-19 vaccine hesitancy and media use, Piltch-Loeb et al. (2021) found that most of the respondents in their cross-sectional survey utilized conventional media to receive information on the covid-19 vaccine. Furthermore, findings from this study showed that using traditional media increased the likelihood of vaccination, regardless of how much the channel was trusted. It was reasoned that this is probably because traditional media are likely to use high-quality sources, presenting vaccine information related to governmental, healthcare, or academic data and studies (Piltch-Loeb et al., 2021). However, it must not be forgotten that the covid-19 era was primarily marked by ambiguity and knowledge gaps, especially at the beginning of the outbreak. Widespread skepticism and anxiety might have been caused by the apparent abundance of information and rapid changes to previously available information and advice from authorities mediated by the media. According to Razai et al. (2021:295), a transparent conversation underpinned by community engagement is necessary to address the public's concerns and build vaccine confidence.

### 3.4 Summary of Literature Review

This chapter evaluated vaccine hesitancy and its determinants, which revealed that vaccine hesitancy could be seen as a decision-making process in the continuum of full acceptance and outright refusal of all vaccines. Confidence, complacency, and convenience are three factors that could affect whether or not an individual or group accepts a vaccine. Generalizations about various socio-demographic characteristics were drawn from the evaluated literature on covid-19 and vaccine hesitancy, primarily realized with a quantitative approach. Even though some of the findings contradicted each other in different countries, it seems that, in general, a higher age and news consumption from traditional media might increase willingness to receive a covid-19 vaccine. Controversy, low trust in scientific research, the information provided by the government, and social media usage decreased willingness to receive a covid-19 vaccine. It is, however, important to recall that it is different types of vaccine-hesitant individuals, everyone with their unique sets of "active determinants" that affect their vaccine decision (Betsch et al., 2015:67). Consequently, more qualitative research is required to understand why people do not receive a covid-19 vaccine, where they get their information, why they trust some information sources over others, and what the expressed reasons are for distrusting information from established media and expert sources. Therefore, the following section of this thesis will look at communication theory research to address the aforementioned assertions from a communication perspective.



## 4. Communication Theory Framework

### 4.1 Introduction

Since the objective of this study is not to test or produce a theoretically based hypothesis, the following chapter will be divided into two parts to postulate a theoretical framework. The purpose is to provide a structure and background of the media's importance for opinions and attitudes before the selected theories are evaluated. Therefore, the first part will consider the mediated reality and some brief notions regarding agenda setting. The evolving media environment and its implications follow them. The last section of the first part will discuss the increased supply of media choices.

The second part will evaluate the theories of the Reinforcement Spirals Model and Selective Exposure, further introduced under the headline "Part II". However, this chapter aims to organize and contextualize the factors that affect individuals' decisions and perceptions, which can lead to what it could imply regarding the recognition of vaccines.

### 4.2 Part I

#### 4.2.1 The Mediated Reality

In modern democracies, the media play a crucial role. It is rooted in the fact that the media, particularly the news media, serve as the public's primary source of knowledge on politics and society (Shehata & Strömbäck, 2014:94). Modern politics and societal information are essentially *mediated*, implying that it occurs in and through media. It allows both citizens and political actors to be dependent on the media. The citizens depend on the media for information on all such matters beyond their everyday life, which applies to most things that touch on current issues, politics, and society. Also, political actors depend on the media to get information about current issues and reach out to wider groups in society (Strömbäck, 2015:207). Moreover, research has shown (e.g., Arendt & Matthes, 2014; Maurer, 2014; Strömbäck, 2014) that the media can significantly influence how individuals see reality and what matters they believe to be important.

Communication scholars have long been inquisitive about how public opinion is formed because of the media's mediating role in information dissemination. Already in 1922, Walter Lippmann's famous "Public Opinion" laid the foundation that eventually impacted how we view the relationship between media and public opinion. Lippmann's (1922) argument is that the news media, as our windows onto the world beyond direct encounters, shape our cognitive structures of reality. He argued that public

opinion reacts to the artificial environment that the news media has produced rather than the actual environment around us (McCombs & Valenzuela, 2021). Arguments that later evolved into the theory of agenda-setting. However, factual work about the media's agenda-setting role today validates and expands on Lippmann's broad-brush assessment. When agenda-setting was first presented, it contradicted the dominant assumption among communication researchers that mass media affected changing people's perceptions and attitudes. On the other hand, recent work on agenda-setting demonstrated that the news media might have powerful short-term direct effects by affecting not what people *think*, but what to think *about* (McCombs & Valenzuela, 2021).

However, as the media environment has expanded, individuals' opportunities to select media based on personal motives and content preferences have increased dramatically, calling into question the foundation of many classic media theories such as agenda-setting (Djerf-Pierre & Shehata, 2017:749). Following the discussion, the media sets the agenda for public reactions to current events. How has this changed as the media landscape has evolved over the last two decades into one with an increasing number of information channels? The following part will go through the changing media landscape and some of its outcomes.

#### **4.2.2 The Evolving Media Environment**

There is no doubt that the traditional media and its dominance has been challenged by the rise of digital media, causing a crisis about the traditional media's place and significance in the media system (Casero-Ripollés, 2020:3). Legacy media are losing their hegemony as the primary source of information on public affairs and current events (Bennet & Pfetsch, 2018:243). Today, individuals get information to create their own opinions from various sources, and the number of people using social media to access information is increasing (Newman et al., 2019). This necessitates significant changes in the way individuals gather information. One basic notion of this contemporary environment is that one can stay informed through peers and virtual networks without actively seeking information or paying attention to professional media. In this new media environment, assertiveness is that the news will find its way to the individual without further effort (Gil de Zuniga & Diehl, 2019:1253). However, as digital channels for information have become more widespread, a hybrid media system has emerged in which old and new media coexist (Chadwick, 2017:55). They interrelate in various ways, sometimes in harmony and sometimes in conflict, to shape the current political information environment and the increasingly digitalized public sphere. This hybridization enhances the complementarity between traditional and digital media. Instead of seeing themselves as adversaries, people see traditional and digital media as partners in the information-gathering process (Dutta-Bergman, 2004:41), which implies that the public's

attention is drawn to substance rather than the medium. As a result, individuals employ a variety of media sites to receive the information they seek or require (Casero-Ripollés, 2020:3).

In this new media landscape, there are several opportunities for the media audience role to evolve. Specifically, increased autonomy and equality concerning sources and suppliers. The audience member is no longer a mass but a member of a self-selected network, a specific public, or an individual (McQuail, 2010:140). Historically, there has been debate on how the average media audience could be defined. The concept of media audience has always been more complicated than it appears because it can be defined and formed in various ways and has no set existence. New technologies are calling the apparent boundary between sender and receiver into question, which is critical to the original concept of the media audience. The interactive and consultative uses of media eliminate the spectatorship that characterized the original mass audience. For media users today, practically all options may be customized, and media consumers have an almost limitless selection of content to choose from (McQuail, 2010:410-443). This means that the media audience's daily lives are influenced by structural, contextual, and institutional factors, including their media preferences and usage (Strömbäck, 2015:216). Correspondingly, one thing is pretty evident; the contemporary high-choice media environment allows the audience to pick, select or avoid content with high precision (Prior, 2007; Knobloch-Westerwick & Kleinman, 2012). At first glance, this situation might not appear to be alarming. There are, however, some consequences that follow when individuals select media content with precision. As Dahlgren (2020:32) explains, what an individual brings to their attention significantly impacts what they see. Any bias in the information an individual seeks might affect what they think and do. The next section will therefore evaluate choice and selectivity more in detail.

#### **4.2.3 More Choice – More Selectivity**

The traditional division between mass communication and interpersonal communication, and consequently between mass media and personal media, has been overturned by the digitization and personalization of media technologies. The former characteristics of mass media as distributors of broadly accessible information are no longer valid as individuals use media technology to create and trade personal perspectives via digital networks (Lüder, 2008:683). To a greater extent, individuals today follow media via different platforms more than they follow the same media, a development that can be interpreted in terms of increased fragmentation (Strömbäck et al., 2013). Considering how the media environment has expanded and fragmented, a consequence is how individual preferences have become increasingly important. While it has become easier for those who are interested in politics and society to find qualified information and participate in the news where they want, when they want, and

on the platforms they prefer, it has also become more accessible for those who are not interested in politics and society to avoid news media and news journalism (Strömbäck, 2015:245).

In the previous section, a brief discussion about the audience was mentioned, stating that it can be challenging to define how the average media user should be described. According to Strömbäck (2015:13), people can be more or less active as media consumers; an important distinction is, therefore, between *instrumental* and *ritualized* media use. Instrumental media use refers to people actively choosing media and content to achieve different goals. In contrast, ritualized media use refers to people more passively using media and choosing different types of content out of habit or to pass the time. Various reasons for participating in different media and content can lead to similarities and differences in media consumption. For example, an individual can select to see a specific TV program out of interest (instrumental media use) but also because of a habit of doing it occasionally and end up on the same program (ritualized media use). However, the more individual media use is characterized by being instrumental and goal-oriented, the more selective they can be expected to be (Strömbäck, 2015:13).

Except for individual preferences, another vital thing to consider is trust. Do people consume content they do not trust, given that individuals might be seen as instrumental media consumers who deliberately seek the content they want to consume? According to findings by Tsafati & Capella (2003:518), individuals who trust the mainstream media are more likely to watch and read the news provided by traditional media. Individuals distrustful of the mainstream media are more likely to consume non-mainstream media. Although skeptics' total news exposure is not significantly different from non-skeptics, their media diets comprise significantly more non-mainstream media news than their counterparts. According to Strömbäck et al. (2022:60), some people are increasingly turning to media and information sources whose coverage is likely to reinforce rather than challenge their views and attitudes since it has become easier to find attitude-consistent news and information. This may be especially true for people whose social identities are firmly tied to particular attitudes and beliefs (Strömbäck et al., 2020:60). The implications of identities and media use will thus be assessed further in the following section, which will examine, among other things, the Reinforcement Spirals Model.

## 4.3 Part II

The first part of the theoretical chapter aimed to provide an understanding of the mediated reality, as well as briefly talk about the agenda-setting role of the mass media. As mentioned in the background chapter, the media coverage about covid-19 during 2020 and 2021 was abundant, and vaccination information was disseminated through traditional as well as social media channels, which might have significantly influenced public opinion regarding whether or not concerned citizens wanted to receive a vaccine (Piltch-Loeb et al., 2021:2). The discussion regarding the evolving media environment has also shed light on how it has become easier for individuals to consume or avoid news media with high precision. Correspondingly, Most scholars agree that when more media options are available, media consumers will be more selective as their preferences have grander significance (Luskin, 1990; Prior, 2007; Strömbäck, 2015). Consequently, it is understandable that research concerns regarding the high-choice media environment center on how more media choices can affect individuals' attitudes, beliefs, and behaviors (Dahlgren et al., 2019:161).

Therefore, a possible theoretical approach to examining the importance of media use and its potential impact on an individual's vaccine choice or attitude is to consider the Reinforcement Spirals Model (RSM) and Selective Exposure. The reason for this, among other things, is that the RSM offers a broad conceptualization of media use as a dynamic, endogenous process combining media effects and selective exposure. It primarily seeks to comprehend the media's role in forming and maintaining beliefs and identity (Slater, 2015:371). Following the broader literature on media selectivity, selective exposure, as a theory of its own, refers to when an individual's opinion influences their media selection (Stroud, 2008:341). According to Sears and Freedman (1967:195), selective exposure can be defined as "*any systematic bias in audience composition*". This broad definition provides next to nothing about the factors influencing audience composition or why people choose different content or material. As a result, various theories can be used to clarify the cause of selective exposure, why it might occur, and under which circumstances (Dahlgren, 2020; Knobloch-Westerwick, 2014). However, one premise of this study is that the RSM and the theory of selective exposure may contribute to a theoretical comprehension of individuals' immunization choices.

### 4.3.1 The Reinforcing Spirals Model (RSM)

A central question in social science is how identity-relevant attitudes emerge from socialization and persist in a complex, heterogeneous society. The media, without a doubt, plays a role in this process. If the media's role is to help establish and sustain attitudes in the face of a plethora of opposing viewpoints, it serves an important function (Slater, 2015:375). Michael D. Slater proposed the Reinforcing Spirals Model (RSM) in 2007, which aims to comprehend “*media’s role in helping create and sustain both durable and more transient attitudes, as well as behaviors associated with those attitudes*” (Slater, 2015:370). The RSM is centered on the selection of differentiated media content that reflects the beliefs of subgroups within a broader society, whether they are ideological, religious, or lifestyle-oriented.

As the communication landscape has changed over the last two decades, the RSM has grown in importance. Choosing a communication channel is becoming more accessible and manageable due to digital and social media. It is possible to choose communication sources closely tied to one’s ideological, religious, professional, or almost any other type of social identity, ranging from news and quasi-news to quasi-interpersonal social media platforms, without geographical restrictions or economic barriers of any kind. Without regard for geography or economic barriers, it is possible to select communication sources closely related to one’s ideological, religious, professional, or almost any other type of social identity, ranging from news and quasi-news to quasi-interpersonal social media platforms. As a result, people have the option to immerse themselves in identity groups that reflect their worldviews and assumptions, limiting their exposure to arguments that contradict those views (Slater et al., 2020:1).

The RSM has two central premises; the first describes that media use is both a predictive and an outcome variable in many social processes. Correspondingly, media usage is best viewed as a mediating or endogenous variable (Slater, 2015:372). It can be said, less theoretically, that media use is influenced by social context and personal attributes and that media use, therefore, affects attitudes and actions (Slater & Rasinski, 2005:811). For instance, the media content selection may influence beliefs about religion or the appropriateness of using aggression to resolve conflicts. Individual differences, such as aggressiveness or religious affiliation, may be affected by factors such as dispositional demand for arousal or education, in part by influencing the media material that individuals attend (Slater, 2015:372).

The second premise of the RSM is that choosing media and the result of exposure to that media is a continuous and dynamic process. As a result, exposure to specific media genres, which are governed mainly by social context, identity, and past attitudes, will have a prospective impact on the accessibility of social group identifications, attitudes, and behaviors (Slater, 2015:372). Eventually, this will impact the succeeding media consumption, which should continue reinforcing the related aspects of social identity, attitude, and behavior (Slater, 2015:372). In situations when a social identity could be threatened, for instance, during political campaigns. Competing ideologies are becoming more apparent,

or during periods of social or economic tension, the RSM argues that until a proper balance is found, utilization of attitude and identity-consistent media content should increase. When identity threats are diminished, this selectivity will be lessened. Therefore, it is possible to deliberate media content reinforcement and maintenance as a homeostatic process (Slater, 2015:372).

Nevertheless, even if there is no ‘threat’ to one’s social identity, there are still several information sources and competing viewpoints in modern democracies. The RSM notes that, in large part, this process of selectivity and media effect might serve to maintain homeostasis, where homeostasis refers to how identity-relevant attitudes are kept in balance. Ultimately, individuals often have various conflicting social identities and demands on their time and attention. It is, therefore, imaginable that most people reach a point of equilibrium about the amount of time necessary to reinforce their identity, and they would not devote any more time beyond that, which might be engaged in other communication pursuits of interest (Slater et al., 2020:3).

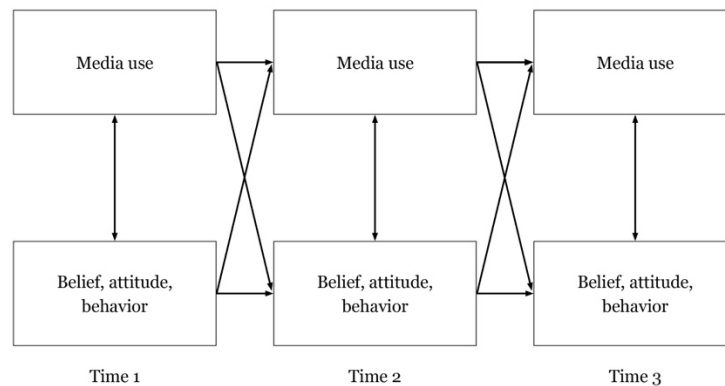
Empirical support considering the RSM has been evaluated in various contexts, frequently concentrating on the reciprocal relationship between media consumption and attitudes and behaviors. For the curious, research has been done on the relationship between attention issues and media multitasking (Baumgartner et al., 2018), supportive views of abortion, sexual liberalism and pornographic use (Wright & Tokunaga, 2018), between ideological leaning and selective news exposure (Dahlgren et al., 2019), between political interest and TV news consumption (Strömbäck & Shehata, 2019), and between political interest and internet use (Moeller, Shehata & Kruikemeier, 2018). Although not without complexities, realized research generally supports the idea of reinforcing spirals between mediated communication or political conversations and the variable of interest. Overall, the evidence is compelling enough to conclude that effects of any kind should not be assumed to be universal but rather dependent on elements at the individual level, such as individuals’ social identities and environmental surroundings (Slater et al., 2020:6).

However, as introduced, the RSM is a dynamic and cyclical representation of the relationship between social identity and communication (Slater, 2007). The model suggests that individuals seek mediated and interpersonal communication experiences representing their beliefs, perspectives, and social identities to maintain their preferred social identities. According to this perspective, media use is an endogenous or mediating variable shaped by social and dispositional elements such as social and personal identity and impacts ideas, attitudes, actions, and other aspects of human identity (Slater et al., 2020). Since another objective of the RSM is to incorporate selective exposure mechanisms, the next part will look closer at Slater's minimal path description.

### 4.3.2 Two Components of RSM: Selective Exposure and Media Effects

Slater (2007:284) postulated a minimal path description of reinforcing spirals. While prospective prediction is of significant interest, there are numerous indirect paths. From figure 3, it should be descriptive that if a) some types of media use have an impact on matching beliefs or actions and b) that belief or conduct, in turn, boosts the use of that sort of media, then c) the process should be mutually reinforcing over time (Slater, 2007:284). Participants in this process should be inclined to continue or increase their use of that specific media content. This should result in the maintenance or strengthening of the attitude or behavior mentioned above, resulting in the ongoing or expanded use of appropriate media content. Whether one begins with media consumption or selectivity effects, reciprocal impacts over time might be understood or depicted as a spiral of ongoing influence. Therefore, reciprocal effects over time can be conceived or represented as a spiral of continual influence, regardless of whether one starts with media usage or selective effects (Slater, 2007:284-285).

**Figure 3.** Slater's Minimal Path Description



*Source: Slater, 2007:284*

Understanding the interaction between selectivity and media effects requires acknowledging their reciprocal nature. The idea of reciprocity, though, can be deceptive. Causal relationships do not reciprocate as the term implies. These connections influence one another as time progresses, sometimes with cumulative or reinforcing consequences. As a result, since such a reciprocal connection must be dynamic over time, defining its minimal assumptions is a relatively simple task. Exposure at baseline must result in an effect at time two that affects exposure at time three, and depending on the impact at baseline, exposure at time two should result in an effect at time three. In the simplest example, the assumption of reciprocal links between media consumption and its effects requires a three-step, cross-lagged process, as displayed in figure 3 (Slater, 2007:284). The reinforcement spiral model highlights



the relevance of maintaining an identity and group identity in media usage and its impacts (Knobloch-Westerwick, 2014:363).

In short, the RSM emphasizes that patterns of selective exposure are thought to be the result of efforts to establish and maintain a functional self-concept and that people look for information that supports their identities and, in some cases, may avoid information that contradicts those identities (Suede & Knobloch-Westerwick, 2022:92).

### **4.3.3 Beyond Reinforcement Motivations**

A prominent theme of the described minimal-path model is reinforcement seeking as the main pattern of media usage and effects: Media consumers choose messages based on the attitudes and traits they already possess, which are then reinforced as an outcome of media exposure (Klapper, 1960; Slater, 2007). It is important to note that if this reasoning were to be applied more broadly, it implies that media effects would never lead to a person's conversion. Because of a disposition to congruent media content is constantly sought after and only serves to support the status quo of a person's perceptions (Knobloch-Westerwick, 2014:366).

Numerous empirical examples show the desire for *change* or the selection of content incongruent with a certain tendency. For instance, users of health information were observed to actively seek out information that contradicted their ingrained behavioral patterns, mainly when there is a more significant gap between actual conduct and advised behavior (Knobloch-Westerwick, 2014; Knobloch-Westerwick et al., 2013). Additionally, people are more sensitive to advertisements that promote opposing attitudes before an election that their preferred party would likely lose (Knobloch-Westerwick & Kleinman, 2012). These research results argue against the bias in favor of disposition-congruent communications' broad applicability. According to Knobloch-Westerwick (2014:367), focusing on the conditions preventing media users from seeking reinforcement would be more productive. Likewise, since many psychological traits, including attitudes and perceptions of oneself and the environment, are highly variable, reinforcement seeking is better understood as self-management toward consistency. Thus, selective media exposure to messages that reinforce one another aids in reducing this fluctuation and achieving greater stability (Knobloch-Westerwick, 2014:367).

As already declared, this study does not test a theoretically driven hypothesis, so the aim is not to accept or reject a hypothesis of whether or not a reinforcement spiral is at work in individuals' immunization choices. However, because what we are exposed to can affect how we see the world, it is still helpful to consider it concerning maintaining an identity. Additionally, since the RSM incorporates selective exposure, the next part is devoted to selective exposure and related theories.

#### 4.3.4 Selective Exposure and Cognitive Dissonance

“*Exposure is always selective*” noted Lazarsfeld, Berelson, and Gaudet in 1948, “*in other words, a positive relationship exists between people’s opinions and what they choose to listen to or read*” (1948:164). When this quote was coined, the media environment in industrialized countries was defined as “low-choice,” signified by a regulated media market with low commercialization and globalization. Citizens had access only to a few newspapers, television channels, and radio stations, and only a few journalists acted as gatekeepers considering conveying information to the public. Today, various information options are available in terms of more traditional media outlets and partisan actors who can bypass the traditional media’s gatekeeping function (Dahlgren, 2020). As a result, citizens must be more selective about what media and other information they expose themselves to and pay attention to since it is impossible to have the time, energy, desire, or ability to look at everything (Luskin, 1990; Stroud, 2008).

Although Lazarsfeld et al. (1948) were the first to write about selective exposure in mass communication, Festinger’s (1957) theory of cognitive dissonance shaped the early understanding and research on selective exposure. Dissonance, according to Festinger (1957), is a state that is psychologically uncomfortable for a person, and the presence of dissonance will drive the individual to try to avoid or lessen it. Theoretically, how does cognitive dissonance emerge, and what can individuals do to reduce it? Cognitive dissonance could appear with new events or when new additional information transpires, causing at least a sharp contradiction with previous knowledge, attitude, or cognition regarding an individual’s behavior. Since individuals do not have complete control over information that reaches them or the events occurring in the surrounding environment, dissonance might quickly arise.

For clarity, Festinger (1957) describes *cognition* as any information, opinion, or belief about the environment, oneself, or one’s actions. Individuals who encounter counter-attitudinal cognition, or cognition that contradicts their earlier decision, will feel psychological discomposure and respond by modifying their cognition about an occurrence or changing their behaviors (Festinger, 1957:6). The individual might adjust her “knowledge” by believing that the new information about a specific event has no negative impacts or may gain so much information pointing to the positive effects that the negative features become insignificant. If the individual can change his knowledge in either of these ways, the dissonance between what the individual does and what she knows will be lessened if not erased (Festinger, 1957:6). According to this logic, selective exposure is, therefore, a method for reducing dissonance (Tsang, 2019:395). Even though research has shown that pro-attitudinal information is favored on average two times more than challenging information (Cohen, 1988; Dahlgren, 2020), research has revealed that counter-attitudinal information is frequently chosen and not

avoided (Frey, 1986; Garrett, 2009; Hart et al., 2009). For example, users who had the option to alter their news recommendations were found to read much more counterintuitive headlines and items. Hence, it is essential to recognize that the utility of information can play a vital role when people are looking for information (Tsang, 2019:395).

Information Utility, from a theoretical perspective, relates to selective exposure. In addition to the reinforcing function established by cognitive dissonance theory, Atkin (1973:207) proposed that information utility may serve as surveillance, performance, and guidance functions. According to information utility theory, surveillance-relevant information alerts people to general changes in their surroundings and risks in particular. Individuals can learn new behaviors with the use of performance-related information. Guidance-relevance information assists individuals in deciding how to feel about certain situations. Much empirical research on information utility looks at scenarios in which people prefer information that serves the surveillance or direction functions over information that serves the reinforcement function. Surveillance objectives should, therefore, encourage selective exposure to attitude-discrepant material (Suede & Knobloch-Westerwick, 2022:96-97).

However, taking this together, the theory of cognitive dissonance implies that individuals will choose material matching their beliefs to lessen dissonance, and selective exposure is a way to achieve this. Festinger (1957) believed that if an individual experiences a modest amount of dissonance, the individual might adjust how they look for information once they have made a choice. Selectively rejecting decision-contrary material while seeking decision-consistent information, a phenomenon comprehended as confirmation bias (Garrett et al., 2013:677), which will be further evaluated in section 4.3.6. Still, selective exposure can be displayed in varying degrees due to the composition of the audience, their behavior, the causes of their behavior, and their ability to process information which can cause different outcomes. As a result, selective exposure is best understood as a process rather than a specific condition (Dahlgren, 2020; Knobloch-Westerwick, 2014). There is also a conundrum here. We should not expect people's individual media intake to be solely driven by their decisions. However, given the tremendous growth in the number of options available to individuals and their capacity to personalize the internet to their specific requirements, which might imply a tipping point, with more targeted exposure than ever before. Contrarily, selective exposure may now have a more prominent role than before, although the extent is still unknown (Dahlgren, 2020:54). In order to comprehend selective exposure, it could be useful to consider its recognized propositions.

### **4.3.5 Selective Exposure Propositions**

In general, selective exposure is a bias in which what people choose differs from the accessible messages, which requires variation. Freedman (1965) mandated that selective exposure must be characterized in terms of departures from a reference set by the availability of information. Dahlgren (2020:41) explains this very distinctly by describing the case of 100 news articles, half of which are left-leaning and half right-leaning. In that case, an individual would participate in selective exposure by choosing anything other than an equal ratio of the articles (Dahlgren, 2020:41). Apart from the notion that selective exposure requires a decision (Dahlgren, 2020; Knobloch-Westerwick, 2014), other fundamental principles of selective exposure have remained constant. Sears (1968:777) noted the following propositions in an early review:

1. People seek supportive information,
2. People avoid non-supportive information,
3. Both tendencies occur more frequently with greater cognitive dissonance.
4. Both tendencies occur more frequently when the individual has little confidence in her initial opinion.

Interestingly, the processes of selective exposure are frequently unconscious (Strömbäck et al., 2020). In other words, most people are unaware that they select information based on whether it is congruent with their attitudes and beliefs rather than which information is most relevant or of the highest quality. This implies that their thought processes are biased by the motivation to reach a particular conclusion and that they only use a subset of all the knowledge and information they have that may be relevant (Kahan, 2016; Kunda, 1990; Nickerson, 1998).

### **4.3.6 Selective Exposure and Confirmation Bias**

The notion of prioritizing cognitive consistency in information use behavior can be viewed from various angles. According to the theory of cognitive dissonance explained above, an individual with selective exposure demonstrates a confirmation bias when they seek or interpret information in ways biased toward existing beliefs or expectations (Nickerson, 1998:1175). As a result, when an individual filters out any inputs that contradict previously held views, decisions, or conclusions, contradictory information does not influence an individual's mental stability. Thus, conflicting information never disturbs mental stability, which allows the individual to respond quickly and take action (Wicklund & Frey, 1981:142), which might even improve political participation (Knobloch-Westerwick & Johnson, 2014:810). Defensiveness toward incoming knowledge, on the other hand, is unlikely to result in

effective and adaptive behavior if the individual's beliefs are incorrect or no longer appropriate. According to the theory of cognitive dissonance, the primary function of activity is to avoid psychologically unpleasant experiences. As a result, such action is intrinsically driven, resulting in states of heightened message consumption that prefer reinforcing stimuli. Consequently, information selection based on avoiding cognitive dissonance prioritizes pleasurable experiences above long-term purposes (Knobloch-Westerwick, 2015:327).

Garrett et al. (2013:678) argue that individuals demonstrate a confirmation bias, preferring sources compatible with their attitudes. However, individuals are not prompted to systematically avoid sources inconsistent with their attitudes, no matter how simple the task has gotten. Exposure to pro-attitudinal material will promote cognitions consistent with the original judgment, confirming the person's sense of correctness. As a result, the outcomes are all positive. The effects of being exposed to counter-attitudinal information are complicated. The attitude-inconsistent cognitions resulting from this exposure may initially cause an adverse emotional reaction. Individuals, on the other hand, do not accept this unfavorable situation passively; instead, they engage in counterarguments or a search for ways to dismiss or disregard the offensive information. If the individual is successful in these efforts and the discrepancy between attitude and evidence is addressed, pleasure-related areas of the brain are stimulated. As a result, the negative emotional state induced by counter-attitudinal exposure is usually fleeting, and successfully rejecting the challenge is emotionally satisfying (Garrett et al., 2013:678).

According to Nickerson (1998:1176), a large body of scientific evidence supports the premise that confirmation bias is widespread and influential and manifests itself in various ways. Findings also support the concepts that once an individual takes a stand on an issue, the person's primary goal becomes defending or justifying that stand. This is independent of whether one's interpretation of the evidence was evenhanded before taking the stand; it can become significantly biased later. Since this paper aims to examine why individuals chose not to take a covid-19 vaccine and where they turn for information justifying that position, the next part will briefly introduce selective exposure to health information.

#### **4.3.7 Selective Exposure to Health Information**

Scholars have proposed that gaining an acceptable level of exposure is a prerequisite for the success of compelling health messages (Hornik, 2002; Hornik et al., 2013). However, reaching optimal exposure levels is becoming increasingly challenging since health messages on different types of media compete for audience attention. A person's exposure to health information from various sources can be intentional or unintentional due to regular media usage. Individuals who seek information about a specific health issue, such as the benefits of a low-fat diet or the hazards linked with certain vaccines,

are usually in the process of making a decision (Johnson, 1997). Nevertheless, informal and mediated exposure to information from non-medical sources, such as family and friends, news media, and the Internet, also influences these decisions (Mills & Davidson, 2002; Napoli, 2000). Since selective exposure is omnipresent in today's public communication domain, where individuals have a high degree of choice over what they pick, this part will evaluate selective exposure to health information.

Regarding health messages, scholars believe that messages offering more valuable or practical information are more likely to be chosen than messages conveying less useful or practical information (Atkin, 1973; Knobloch-Westerwick, 2015). Most prominently, Knobloch-Westerwick and colleagues established four characteristics of information utility that influence selective exposure in the context of individuals' responses to external stimuli associated with possible risks or opportunities. The four characteristics are; a) the anticipated extent of challenges or satisfaction, b) anticipated probability that they materialize, c) anticipated closeness in time or immediacy, and d) anticipated effectiveness in influencing external stimuli (Knobloch-Westerwick, 2008; 2014). A meta-analysis by Hart et al. (2009) also emphasizes the importance of information utility in selective exposure. According to the meta-analysis, individuals usually exhibit a confirmation bias, preferring supportive over non-supportive information. However, an uncongenial bias occurs when disagreeable information offers grander utility than congenial information.

Knobloch-Westerwick, Johnson, and Westerwick (2013) examined cognitive dissonance theory to selective exposure in a health message context. Their study investigated the effect of selective health information exposure on participants' health habits and the gap between actual behavior and perceived behavior recommendations. According to their findings, the more people who practiced healthy habits, the more time they spent seeing messages urging them to do so. Furthermore, the more frequently individuals fell short of perceived criteria in health activities, the more time they devoted to information advocating that habit, showing that they were striving to persuade themselves to engage in such behaviors more regularly.

## 4.4 Theoretical Applications

In conclusion, this theoretical chapter has been rather extensive and has covered a wide range of topics. Part I sought to explain the nature of the mediated world, the ramifications of the changing media landscape, and how more options could make people more selective when evaluating various information sources. The intent of integrating these elements is supported by the literature review chapter's organization, which centers on vaccination hesitancy.

Part II centered on the RSM and Selective Exposure, where the theoretical approach addressed maintaining an identity and avoiding contradicted information. In this context, it can be said that individuals who are hesitant to immunization do not necessarily belong to the same social group since there are underlying reasons for the choice vary. Given the discussion in the background section, however, the Swedish society became incredibly polarized when the vaccine was rolled out. The contradiction between pro-vaccine and vaccine-hesitant individuals was apparent in the media, on the streets, and online. Thus, it can be cautiously stated that those who chose not to take the vaccine belonged to one “social identity group” and those who took the vaccine to another. Therefore, some of the implications of the RSM theory will be considered in the analysis, especially the dynamic mutual reinforcement patterns of media selection and influence, as well as associated patterns of choice in interpersonal association and communication, which help to maintain identification with a given social group (Slater et al., 2020:3). Furthermore, given the ease with which attitude-consistent news and information can be found, research has shown how individuals frequently turn to media and information sources whose content is likely to support rather than challenge ideas and attitudes (Strömbäck et al., 2022:60). Another viewpoint is, therefore, if the sampled individuals have considered counter-attitude information regarding the virus. Other implications will center on whether individuals selectively turn to the same information source, which potentially can reinforce their pre-existing beliefs and attitudes towards vaccines.

## 5. Methodology and Data Collection

### 5.1 Introduction

This chapter will introduce the chosen methodology and discuss the research process, data collection, and the considerations taken along the route. The research design will be addressed first, followed by a description of the study technique. The process of conducting the interviews and transcribing them will be explained, along with the sampling options and a responder gallery. After that, the scientific quality of this research project will be discussed.

### 5.2 Research Design

A qualitative research approach was used for this research project, which “involves collecting, analyzing, and interpreting data by observing what people do or say” (Burns & Busch, 2014:118). Since the thesis aims to understand covid-19 vaccine hesitancy and the role of news media and information seeking in individuals’ choices, qualitative research was better suited to eliciting more information from participants than, for example, surveys. Furthermore, three of the four initial study questions included a “why,” indicating that interviews were preferred over a quantitative method. Another reason for using a qualitative approach was to acquire primary data that was more relevant to the research objectives. Secondary source data did not correspond well to the given research questions and would not have addressed the research topic as desired. However, as noted in the introduction, in-depth interviews with the participants were conducted. More information regarding the interview process, including the interview guide and questions, will be presented under the headline “interview guide”.

An underlying idea of qualitative research is the subject matter of the social sciences, which means that the social world must be appraised from the perspective of the individuals being researched, rather than as if those subjects were incapable of their perspectives on the social world (Bryman, 2012:399). According to Lofland and Lofland (1995:16), the epistemology underlying qualitative research includes two essential principles: 1) Face-to-face interactions are the fullest condition of participating in the mind of another human being, and 2) one must participate in the mind of another human being (in sociological terms “take the role of the other”) to acquire social knowledge. The qualitative approach was devised in accordance with semi-structured interviews since the purpose was to reach the respondents’ realm of thinking and participate in their ideas.

Another objective of this study was to use communication research theory as a prism through which the research process and analysis would be undertaken, rather than to test or develop a theoretically



grounded hypothesis. More regarding the research technique will be covered in further detail in the following section.

### **5.2.1 Research Technique**

According to Bryman (2012:469), interviews are possibly one of the most regularly used methods in qualitative research. It probably depends on the adaptability that makes it so appealing in qualitative research. Generally speaking, interviews are directed talks that differ from everyday conversations in that the inquiries are orientated toward a specific goal, namely the examination of a given topic (Lofland & Lofland, 1984). An advantage of qualitative interviews is that researcher might divert from any timetable or direction, which implies that it is possible to adjust the order and even the language of questions in response to participants' answers. Because of that, qualitative interviewing tends to be adaptable, responding to the direction in which respondents take the interview and occasionally modifying the research emphases in response to critical topics revealed during interviews (Bryman, 2012:470).

Since the scope of this research had a specific goal, semi-structured interviews were used for this project's objectives. In contrast to unstructured interviews, where the formations tend to be very similar to a conversation (Burgess, 1984), and the interviewer asks a few questions and responds to points that seem worthy of being followed up, structured interviews have a somewhat different character (Bryman, 2012:471). The semi-structured interviews include a set of questions or topics to cover, referred to as an interview guide. The arrangement gives respondents much flexibility in their responses. Questions may not be answered in the order specified in the interview guide, and questions not mentioned in the guide may be asked as the interviews continue. However, as Bryman (2012:471) underlines, it is essential to note that all questions must be asked, and the exact wording will be utilized from the interviewee to the respondents, which was also incorporated in the research technique when the interviews were carried out. However, before the actual interviews began, a pilot interview was conducted. As Bryman (2012:474) suggests, it may be a good idea to run a pilot interview to evaluate how the questions flow and how long the setting would take. The pilot interview lasted 30 minutes; however, when the actual interviews were conducted, the period for nearly all of the interviews ranged from 45 minutes to an hour. Five lasted for around 90 minutes since the participants had other topics they wanted to cover.

All the interviews except one were held through digital tools. The reason for interviewing one person at the kitchen table, face to face, was because the person who met the selection criteria was also a person from the undersigned's circle of acquaintances. The other participants were recruited from a Facebook group, where a post was written, and interested participants could comment or write a message directly

to show their interest in participating. Since it was immaterial where they lived in the country for the study's approach, they were interviewed through video calls. Video calls were used simply due to time constraints and the flexibility of adapting the interview opportunity at short notice after the respondents' participation prospects.

Furthermore, video call interviews were the second best option compared to fronting interviews. They can be considered nearly equivalent to face-to-face meetings since it is possible to communicate directly and see each other. However, in every scientific study, some ethical concerns must be considered. These will be covered in further detail in the next section.

### **5.2.2 Code of Ethics**

According to Bryman (2012:135), discussions on ethical norms in social research appear to venter on distinct challenges that reoccur in different forms. However, Bryman (2012:135) refers to Diener and Crandall (1978), who effectively split these discussions into four primary areas that must be considered when conducting research. These are:

1. Whether there is *harm to participants*,
2. Whether there is a *lack of informed consent*,
3. Whether there is an *invasion of privacy*,
4. Whether *deception* is involved.

Based on these points, the ethical aspects of this study will be evaluated further in this section. First, a normative assumption is that research likely to harm participants is inappropriate. Therefore it could be worth clarifying what harm in this sense could mean. Bryman (2012:135) gives examples of physical pain, harm to individuals' development, loss of self-esteem, stress, and pushing subjects to execute heinous deeds as aspects of this matter. Regarding this study, no harm should have been done to the participants. This is motivated by that all participants were assured anonymity and informed that they could cancel the interview anytime. Furthermore, the participants were informed and consented that the conversation would be recorded; solely so that the dialogue could be transcribed afterward. When the conversation was transcribed, it was deleted.

The notion of whether there is a lack of informed consent signifies that research participants should be provided as much information as necessary to make an informed decision about whether or not to join a study (Bryman, 2012:138). In this case, all participants chose whether they wanted to participate. Each interview began with a brief introduction about the purpose of the research, which was about their use of media and their thoughts about the pandemic and vaccines. Moreover, all interviews were concluded

by asking if they had any questions or anything else to add. On this basis, the second matter should not be realized. However, no consent form was used, but a verbal agreement was made with all participants.

The third matter could be a more sensitive issue, as it might be tender to ask medically related questions or questions about religious beliefs. However, it seemed that many participants had been looking forward to talking about how they experienced media coverage during the pandemic and why they did not choose to vaccinate themselves. Regarding the religious perspective, it was made clear that it was only included as a demographic question, but also because previous research has shown that it could be due to religious reasons that individuals choose not to receive a vaccine (SAGE, 2014; MacDonald, 2015). Therefore, this ethical aspect did not appear to be a problem since the participant had been promised anonymity and had the opportunity to interrupt or refuse to answer questions.

Concerning the fourth and final point, whether or not deception was involved, which occurs when researchers promote their work as something other than what it is (Bryman 2012:143), is more of a subjective question in this particular study. All participants were promised that after the paper was finished, they would be able to read it. However, whether or not it is deceptive is a question only the participants can answer. The sampling technique will be thoroughly examined now that the ethical issues have been addressed.

### 5.3 Sampling

For this research project, purposive sampling was used. This sampling method involves the selection of units directly related to the research questions. The notion is that the research topic should indicate which units should be sampled, meaning that the research questions should suggest which groups of persons should be the center of attention and thus sampled (Bryman, 2012:416). Purposive sampling is a non-probability form of sampling. This implies that there has been no attempt to sample participants randomly. Instead, the purpose is to strategically sample participants so that the research questions can be answered. It is beneficial if the resultant sample has variation so that the participants differ from one another in terms of important traits relevant to the study objectives (Bryman, 2012:416).

As mentioned, 19 out of 20 participants were recruited from a Facebook group. The name of the Facebook group was “*#nej till vaccinpass*” which spells “#no to vaccine passports” in English. For a detailed post for recruiting participants, see appendix 1. However, the purpose for entering that specific group and looking for participants was due to the group’s size and activity level. With over 20 000 members and several new posts every day, it was assumed that at least one person who had not received the vaccine wanted to discuss it further. Furthermore, as noted in the background chapter, the social

debate surrounding vaccine passports was significant for a while, creating an environment of conversation that was visible both on the Internet and in the traditional media. However, as Bryman (2012:418) discusses, with purposive sampling, the criteria for selecting participants are established prior to the research. Two criteria needed to be fulfilled in this case: being an adult (<18 years) and not taking a vaccine against covid-19. Opinions on other issues mattered less to the purpose of the essay. If the response to the promoted post had been unsatisfactory, the search for participants would have continued in other Facebook groups, on other social platforms or in real life settings. However, the response to the post was overwhelming, and therefore the necessary respondents were gathered.

By using purposive sampling, there was no attempt to sample subjects or respondents at a random level, which means that the results cannot be generalized to a larger population. However, the motive behind purposive sampling is to strategically sample cases or participants relevant to the research questions being asked. According to Bryman (2012:417), researchers frequently wish to guarantee that the resulting sample has a fair lot of variation so that the sampled respondents differ from one another in terms of essential traits relevant to the study issue. As already mentioned, the two criteria for this research process were that the participants were over 18 years old and had not received a vaccine against covid-19. Other aspects related to this sampling procedure will be discussed in the section “scientific quality.”

### **5.3.1 Sample Size**

As Bryman (2012:425) argues, one of the problems with qualitative research is that it can be challenging to decide how many individuals need to be interviewed. It is difficult to tell whether saturation has been attained prior to the research. According to Onwuebuozie & Collins, 2007:289 (in Bryman, 2012:425), from a general stance, sample sizes in qualitative research should not be too small so that achieving data saturation, theoretical saturation, or informational redundancy becomes difficult. At the same time, the sample size should not be so large that doing a thorough, case-based analysis becomes difficult.

Before conducting a study, the criteria for deciding when theoretical saturation has been achieved are more or less absent. However, Guest et al. (2006) conducted some experiments using data from in-depth interviews with women in West African countries to answer these conundrums. Sixty interviews were conducted and transcribed. Surprisingly, they discovered that data saturation was achieved once roughly twelve transcripts had been thematically evaluated. Their research was, however, homogenous and narrow in scope (Bryman, 2012:425). Nevertheless, it is a clear example of how difficult it is to discern when theoretical saturation has been reached. The plan from the beginning was to interview respondents until enough data for the research questions was sufficient, but there was no plan on how many people

would be interviewed; it simply emerged during the research process. In this case, 20 respondents were interviewed, which provided sufficient theoretical saturation, but another influencing factor could be due to time constraints. This and further questions regarding external validity and the generalizations of this study will be discussed more in the final section of this chapter.

The next part, however, will provide a table of the respondent gallery organized with the demographic questions.

## 5.4 Respondent Gallery

**Table 1.** *Respondent Gallery*

Respondent	Gender	Age
Albert	Male	56
Beate	Female	54
Cecilie	Female	34
Dave	Male	47
Emelie	Female	51
Frida	Female	28
Gunilla	Female	47
Hanna	Female	54
Ida	Female	49
Johan	Male	52
Karin	Female	65
Lisa	Female	58
Magda	Female	61
Nicole	Female	55
Olle	Male	21
Peter	Male	55
Rita	Female	69
Samuel	Male	30
Tuva	Female	42
Victor	Male	35

## 5.5 Interview Guide

The interview guide deviated from the research questions and incorporated some questions to better grasp the participants' worldview. The questions were further broken into three subgroups, with the interview beginning with thoughts/views on media, media trust, and information utilization. The second section assessed views and experiences about the pandemic, where trust in authority and experiences were discussed. The third and last section focused on vaccine choice and vaccine beliefs. As mentioned in the literature review, vaccine hesitancy, according to SAGE (2014), can be influenced by confidence, complacency, and convenience. Thereby, an attempt was also made to capture these aspects in the questions. Confidence was captured by their perceptions in general on vaccines and their view on authorities, and if the respondents believed that the government and Public Health Authority had their best in mind during the pandemic. Complacency was incorporated in questions regarding if they expected vaccines to be more dangerous than the actual virus. Convenience could be captured if the individuals believed it was unnecessary to take a vaccine against covid-19 and, therefore, declined the immunization opportunity.

Previous research has shown that religious belief, education level, and political affiliation (Ali et al., 2021; Graffinga et al., 2020; Kreps et al., 2020; Jennings et al., 2020) can affect whether or not individuals want to receive vaccines. Therefore, questions related to these aspects were included in the interview guide. Partly to see if the respondents developed their reasoning about these questions and distinguish them more easily. In the respondent gallery, however, these demographic factors will not be displayed to protect the participant's anonymity. The respondent gallery, as displayed above, consists of invented names, gender, and ages of the participants. All of the interviews were all held in Swedish and a more detailed interview guide can be found in appendix 2, for English translation please see appendix 3. However, once the data has been collected, a strategy for using it and a plan for transcribing and coding must be developed. Thus, the following section will address these matters further.

## 5.6 Theme Analysis inspired by Grounded Theory

Qualitative data from interviews are difficult to analyze since they often comprise a vast corpus of unstructured textual content. Unlike quantitative data analysis, no clear-cut criteria for qualitative data analysis have been devised. However, grounded theory is one of the most well-known qualitative data analysis strategies (Bryman, 2012:565), initially introduced by Glaser and Strauss (1967). It can be described as a theory derived from data, systemically gathered and analyzed through the research process, and where the data collection, analysis, and eventual theory are all closely related (Bryman, 2012:387). Thus, two critical characteristics of grounded theory are that it is concerned with constructing

theory from collected data and that the approach is iterative, which means that data gathering and analysis occur concurrently (Bryman, 2012:387). Some grounded theory proponents support a far more open-ended technique of starting with a blank slate. As a result, the literature becomes essential later in terms of informing theoretical ideas as they arise from the data and contextualizing the significance of the findings. There is, however, a dispute among scholars if it is desirable to postpone a literature review (Bryman, 2012:385).

As mentioned before, this research does not aim to produce theory but instead to employ communication research theory as a prism. Therefore the qualitative research will be analyzed using a theme analysis inspired by the grounded theory technique. The purpose is to convey the strategy's intention and structure clearly, while also attentively participating in the content to uncover an overview of critical topics that may be examined further. Theme analysis entails searching for recurring subjects, indigenous typologies or categories, transitions describing how topics shift in transcripts, similarities, and variations in the content, how respondents may discuss a topic differently, and linguistic connectors (Bryman, 2012:580). Therefore, it is vital to introduce the transcription and coding process, as they are central procedures in data analysis.

### **5.6.1 Transcription and Coding Process**

Coding is a critical step in quantitative research. Many types of data of interest to social scientists are essentially unstructured, such as answers to open questions (Bryman, 2012:247). As already introduced, the data collection was based on open questions in a semi-structured way. All the interviews were recorded and transcript by hand. After every interview, some general notes were made, stating significant issues. The transcription resulted in 180 pages of text which were read and re-read in the coding process. Bryman (2012:624) states that the transcription and coding process is guided by finding repetitions to provide themes. The coding process, however, had an open-ended approach where different themes were identified.

The first step was to transcript all the recordings, and the second step was to identify themes and put them into categories. The coding process followed the interviews quickly to keep essential aspects in mind. Inspired by Bryman (2012), the coding process involved readthroughs by the initial set of transcripts and notes several times before categorizing the data. As the data analysis is a thematic analysis inspired by grounded theory, themes were identified by looking for repetitions, transitions, linguistic connectors, and similarities and differences in the gathered data. However, another essential aspect of conducting a study is honorably considering the scientific quality. It will be discussed in the next section.

## 5.7 Scientific Quality

Common launching points for discussing scientific quality have been terms such as reliability, validity, and generalizability, with qualitative researchers employing the terms in a fairly similar way to quantitative researchers (Bryman, 2012:390). For instance, Mason (1996:21) claims that generalizability, reliability, and validity “*are different kinds of measures of the quality, rigor and wider potential of research, which are achieved according to certain methodological and disciplinary conventions and principles*”. Mason (1996) closely follows the significance that these criteria have in quantitative research, where they have been developed to a significant extent. There is, however, difficult to discuss qualitative scientific quality from these aspects. Reliability refers to which degree the study can be replicated, which is a complex requirement to meet as it is impossible to capture a social environment and the circumstances to make it repeatable in the sense that the term is commonly used. Validity refers to the study’s ability to draw generalizations into a larger population, which is challenging to reach due to the use of case studies and small samples (Bryman, 2012:390).

However, Guba and Lincoln (1985;1994) has introduced a second viewpoint on validity and reliability, where qualitative research should be examined or evaluated using criteria that are different from those utilized by quantitative researchers. The fact that the abovementioned criteria assume that it is possible to create a single, absolute account of social reality is a fundamental factor in Guba and Lincoln’s (1985;1994) discomfort with the straightforward application of reliability and validity standards to qualitative research. In other words, they disagree with the idea that social scientists should reveal any absolute truths about the social world. Instead, they contend that there may be many truths. The study’s research methodology will be compared to the perspective put forth by Guba and Lincoln (1994:1985), as it does not seek to demonstrate a specific truth. Instead, it takes a curious approach to discover more about the relationship between individuals vaccine choice and media usage. Guba and Lincoln’s viewpoint consists of credibility, transferability, dependability and confirmability, which each has an equivalent criterion in quantitative research (Bryman, 2012:390). However, based on these aspects, the scientific quality will be discussed.

Credibility refers to the degree to which the results represent the collected data. Establishing the credibility of findings requires ensuring that research is conducted according to sound practice doctrines and submitting research findings to members of the social world examined for confirmation that the investigator has accurately understood that social world (Bryman, 2012:390). One strategy to meet this condition was to conduct enough interviews and provide participants with access to the study once it was completed.



Transferability, which refers to the extent to which the findings may be applied to other contexts (Chaney & Lee, 2021:744), was determined using a sample of respondents from various demographic backgrounds and ages. There is, however, essential to note that the sampling procedure included gathering a majority of respondents from a Facebook group due to time and financial constraints. The chosen sampling procedure might imply that the sample primarily consisted of individuals who already are using the Internet as a primary part of their information consumption. Hence, the sampling procedure might be insufficient to claim that these findings can be applied to other contexts. The sampling procedure could have been done differently to increase the transferability criterion. In other words, sample unvaccinated individuals who do not use social media or the Internet as part of their media diet. However, given that we live in a world where the Internet plays a prominent role and that the researcher could not travel around the country to sample individuals, it was difficult to achieve within the scope of this study. As already mentioned, the transferability criterion was considered by ensuring that respondents had diverse demographic backgrounds. Furthermore, because Sweden used a different strategy to handle the virus, the findings may not be applicable in other countries.

Guba and Lincoln (1985:1994) suggest the concept of dependability as a counterpart to reliability, which refers to the openness with which data is collected and interpreted. Guba and Lincoln (1985:1994) suggest that by keeping thorough records of all aspects of the research process, such as problem formulation, study participant selection, notes, interview transcripts, and data analysis decisions in an accessible format, peers could then function as auditors. However, given that this research was conducted outside such context, the dependability is anticipated through how aspects have been clarified explicitly throughout this chapter.

While conceding that total objectivity is unattainable in social research, confirmability is concerned with confirming that the researcher behaved in good faith. In other words, the researcher has not openly allowed personal values or theoretical preferences to influence the research and its conclusions. (Bryman, 2012; Guba & Lincoln, 1994). In this case, it is worth noting that the initial outline of this research was written from a condemnatory position prior to the data collection. Influenced by social interactions and societal norms, it was difficult to comprehend why individuals did not want to receive a covid-19 vaccine. Prejudices against “anti-vaxxers” permeated the view of the research process. However, after conducting 20 interviews, the realization derived that it is not possible to design a study based on previous preconceptions. Consequently, this study sought to take an explanatory stance by allowing several perspectives to emerge independent of own biases. As a result, most of the previous text was reviewed and rewritten to strengthen the criterion of confirmability.

The purpose of this part was to reflect upon the scientific quality of this research process honestly. Although some general limitations are present, which will be discussed more in the final chapter, the

research strengths lie within the qualitative method and the in-depth interviews that provide a comprehensive understanding of the issues influencing participants' reluctance to receive a covid-19 vaccine. Since the interviews were in Swedish, the mother tongue for all parts, it was possible to pick up nuances and expressions more easily. However, there may be a problem that data findings are lost when translating, but it outweighs the disadvantages of conducting the interviews in English. If the interviews had been held in English, this would have forced the respondents to communicate in a foreign language, which might have prevented them from responding spontaneously.

However, although this last part of the method chapter has reflected on the research process, the notion of validity should be raised in more detail. The question of validity, according to Bryman (2012:171), pertains to whether an indicator or group of indicators designed to assess a concept truly measures that concept. In this case, this research aims to understand how individuals who have not chosen to take a vaccine against covid-19 reason their decision and to understand their world of thinking regarding information seeking, media use, and media trust. Previous research has shown that media use could affect whether or not an individual would receive a vaccine (e.g., Jennings et al., 2020). Therefore, the posed research questions fill a knowledge gap by examining these aspects of vaccine hesitancy and media use in a Swedish context.

Nevertheless, a consequence of this research's validity is related to the sample chosen and the sampling process. Most of the respondents came from the same Facebook group and expressed their interest in participating by responding to a group post. This may have two significant implications for the research findings. First, the fact that the participants responded to the post to express their interest might indicate that these people are outspoken persons who use Facebook as a communication medium. That is, crucial opinions or ideas relevant to the research aims may have been overlooked throughout the sampling procedure. However, as previously stated in this chapter, purposive sampling was utilized, which takes these factors into consideration. Also, as previously stated, the chosen Facebook group had at the time over 20 000 members, implying that the research's validity is acceptable because the group contains a diverse range of people.

Second, in this study, there were only participants who had not been vaccinated, which indicates that the study revealed a small indication of their perceptions of traditional media. A weakness of this study is that it is not possible to shed light on what vaccinated individuals think of the traditional media, where they search for information regarding vaccines or their trust in institutional actors. However, since this study derives from vaccine hesitancy, it was most reasonable to narrow it down to respondents who were most relevant for the research, i.e., unvaccinated individuals.

## 6. Findings

### 6.1 Introduction

The following chapter will introduce the data findings. The findings have been grouped into three main themes: media use, views about the pandemic, and perceptions of vaccines. The motive for dividing the results into three themes and related subgroups is because the methodological implications evaluated the coding and transcription with a thematic approach, as described in the previous chapter. However, this chapter seeks to make the findings plain without further implications on what they can signify from a theoretical standpoint. Correspondingly, the succeeding chapter will conclude and answer the research questions.

### 6.2 Media Use

Given that the theoretical chapter evaluated aspects related to individuals' purposes to seek out mediated information that confirms their pre-existing beliefs, the first theme will assess data findings regarding general media use. Including an attempt to cover the respondents' general news consumption. As a result of the themes that arose in the transcription, perceptions of traditional media and attitudes towards information online will also be presented.

#### 6.2.1 General News Media Consumption

A question that naturally arose from the scope of this study concerned where the respondents turned for information and news. Not necessarily regarding the pandemic or their vaccine choice, but rather to understand what their news consumption looked like and why. Some respondents said they used traditional media to get informed, such as TV, radio, newspapers, and tabloids, although the reason varied. A general assertion was that it was easy to turn to traditional media or that it was due to ritualized media use, in other words, a habit. For example, one respondent expressed that

*"I guess I always watched the news on the television. It's probably a tradition from home that we've always watched the news on the TV" (Karin)*

For others, though, the use of conventional media to participate in the news was more characterized as instrumental, or goal-oriented. For instance, one responder who turned to traditional media, both national and international media outlets, stated that it was a daily practice to scan all of the major news

sites and their headlines around three times per day. This behavior was because he wanted to know what message was broadcasted to the general public. He said

*“... it is not for my own information. But, it is to know what is being communicated – and the purpose of it. It is not like I have to know everything that is going on for my own part. It is more like this: I will always depend on what the big masses thinks” (Dave)*

Consequently, when asked regarding trust towards different traditional media outlets, Dave expressed that he did not trust any of them. He only consumed them to know how other members of society act and react to specific information. Furthermore, this was motivated that even if Dave does not deliberate or observe issues the same way as others, perceptions of problems shared by the broader community will still affect him. In contrast to Dave, some individuals said they actively chose not to participate in the news. They could still browse, for example, websites of different tabloids, but they did not take it to heart. The main reason for this was that the news portrayed so much negativity, and it was, therefore, best to avoid it as much as possible for one’s own sake. Two respondents expressed this by saying

*“Time after time, terrible things [on the news] are repeated. I need something more upbeat. News that genuinely makes people happy. It is no surprise that the more terrible things that are reported, the worse people feel” (Tuva)*

*“I guess I feel a bit like this; when you go out and watch the news daily, you don’t get a good feeling. I want to keep my good feeling, and the news only provides negativity” (Gunilla)*

When asked where they turned for news, both Tuva and Gunilla responded that they primarily used Facebook, which was a common response from others as well. Most respondents claimed that social media significantly influenced how they consumed news, whereas Facebook, Instagram, Twitter, and YouTube were seen as excellent information sources. Those who turned to social media to access information justified this by saying that those sources were more unfiltered and unregulated than traditional mass media. For example, three arguments were as follows

*“I’ve started using Facebook, but only through Facebook-groups. These groups discuss various topics, and I then follow any articles or videos that have been shared that I find interesting” (Frida)*

*“Many sources I am currently involved with, for example, on YouTube, I experience them as fair and objective. They just want the truth out. It is not like they work for someone but their selves. They only want to bring out a truth that we do not get from the [traditional] media” (Cecilie)*

*“I turn for news on the internet, alternative channels, Swebbtv. Many small accounts. I especially search via YouTube. I feel that the news we get from SVT and Tv4 is completely angled and only half the truth” (Nicole)*

A further inquiry that this study aimed to capture was whether people frequently utilize the same news sources out of habit or if they selectively turn to different ones in their general news consumption. Generally, nearly half of the respondents said that they regularly used the same news sources, where the sources ranged from traditional media and social media to alternative media. The other half claimed to seek out different news sources regularly, and the information they frequently adhered to came from alternative media, various scholars, or people who had social media accounts. However, respondents' opinions towards traditional media were a prevalent theme, which will be further covered under the following headline.

### **6.2.2 Perceptions of Traditional Media**

Most respondents expressed some level of mistrust for traditional media, particularly public service, which many thought drove the government's agenda and prevented voices of other viewpoints from being heard. This attitude was general regarding different issues but explicitly concerning disseminating information regarding the virus and the pandemic. For a relatively large part, their skepticism towards traditional media emerged *during* the pandemic, as they had not previously had any particular opinions regarding, for example, public service. For others, it was evident that their trust in traditional media had always been low. Still, some of them emphasized that the information distribution during the pandemic reinforced their earlier negative opinions about traditional media.

*"I generally think that all [traditional] media is extremely controlled. I don't believe anything I read, see, or hear anymore. That feeling has come after the pandemic, of course" (Beate)*

Furthermore, it was widely believed that journalists working for various traditional news organizations were motivated by political agendas. One respondent, for instance, stated

*"I am not so fond of traditional news in general. I believe that many journalists are left-leaning, and I feel that they are biased which I don't like" (Olle)*

When discussing traditional media, it also became clear that financial interests, not journalistic ethics, were paramount, according to the respondents. As a result, some respondents said they found "independent" journalists more credible, who examined the government and its decisions and correspondingly earn their salary from reader donations.

*"Media are supposed to scrutinize the state, but they don't, because they receive their money from there. They don't harm those who provide for them" (Peter)*

Thus, to a great extent, many respondents expressed skepticism towards traditional news and believed that most of the reporting was driven by a political agenda. As a result, one is left to wonder if they are equally wary of the news and information they access online. The data findings regarding this will be provided in the section that follows.

### **6.2.3 Attitudes towards Information Online**

As many respondents expressed that they used digital and social media to get informed, the natural question was whether they considered themselves critical of sources. Since a relatively significant part of the respondents did not trust the information provided by the traditional media, it is vital to investigate whether they were equally critical online. As a result of the potentially incorrect question and the aspect that it is a subjective answer, it was not surprising that basically everyone said that they were very conscientious about sources online. Regarding Facebook information, one standard method was to read the comments to see what other users had said. Moreover, many claimed that users who posted on Facebook frequently shared sources, making it simple for others to follow and verify. However, several respondents expressed concern that Facebook, like traditional media, is beginning to be censored.

*"I use Facebook the most, but it's not because of the sources on Facebook or because someone thinks something, but because Facebook provides material to click on, so you can go ahead and get references. But I've noticed that scientists and doctors who posted reports vanish and are no longer available. Facebook regularly removes links, particularly those with content critical of what the government decides or the PHA says" (Karin)*

However, because respondents were aware that every point of view has sources to back it up, they commonly responded that sources must be criticized. As an outcome, it seemed that most participants actively sought information from other perspectives to create their own opinion.

*"It is obvious that when individuals post something online, they will constantly promote their own agendas, and you must always keep that in mind and always consider: what is the purpose of this?" (Cecilie)*

Most of those invited to participate in the study appeared to share one trait: they questioned almost everything, regardless of whether the information came from social media, interpersonal communication, or traditional media. As a result, the following section will concentrate on how people perceived the pandemic. It will introduce identified themes of institutional trust, interpersonal trust, and perceptions of the media coverage of the pandemic.

## 6.3 Pandemic Perceptions

This section will discuss the data about respondents' perceptions of the pandemic's impact on institutional and interpersonal trust. As defined in the background chapter, institutional trust relates to trusting institutional organizations. Interpersonal trust is defined as a person's reliance on the actions or commitments of other members of society. Additionally, the respondents' view of the media coverage of the pandemic and its possible consequences on the abovementioned dimensions will be presented.

### 6.3.1 Institutional Trust

The research findings revealed a wide range of levels of trust in institutions. During a time of great uncertainty and strain, several respondents believed the authorities were doing their best and trusted their actions. Others, on the other hand, did not hold high regard for government institutions and had not done so prior to the pandemic. Regarding how spokespersons handled the viral material, Anders Tegnell was mentioned. Many thought he did an excellent job at first by remaining calm and neutral and merely introducing facts.

*"I think Anders Tegnell is actually one of those who have been quite good because he has not embellished anything, and I think he has de-dramatized a lot of things. I believe that under other conditions, he could have been even better" (Rita)*

*"I believe the government went slightly crazy. Went out and told those who were not immunized that they knew where we resided. Tegnell, however, was cool, in my opinion. He handled the matter calmly. And given the circumstances, I was grateful to live in Sweden, where there were no strict lock-downs" (Magda)*

Others argued that Tegnell, or the PHA, was too pushy, particularly concerning vaccinations, implying that the government and the PHA handled the matter poorly. Consequently, they felt exposed since the government had openly stated that failing to follow their recommendations and be immunized meant they were not taking their civic obligation seriously. Additionally, some respondents found it challenging to understand what the government and PHA were trying to say during some press conferences and thus drew their own conclusions.

*"PHA was way too pushy regarding vaccines. The people should be able to decide for themselves what they want to do. But if you don't take it, they say that you are a bad citizen, which I think is exceptionally ruthless" (Karin)*

*"I remember December 8th, 2021, when the government announced the extension of proof of vaccination to things in the community. But they didn't announce the date, which was strange. At*

*the same time, they said that you cannot test yourself to participate in important social functions. You must have vaccines, period. But in the same press conference, in the same message, they said that you can be vaccinated and still be infected. I believe vaccines have become a way to separate obedient and disobedient people” (Johan)*

For others, the institutional trust decreased during the pandemic.

*“I have always trusted authorities in the past. I mean, it’s not like I’m entirely unvaccinated. After all, I have stood in line and taken all my shots as you have to do to be a good citizen. But now, when this came. I knew something was wrong” (Emelie)*

*“When it comes to authorities, I had stronger faith before the pandemic - Absolutely. When it comes to politicians, you always have to take them with a grain of salt” (Magda)*

Strikingly, but perhaps not so surprisingly, there were no respondents who explicitly expressed that their institutional trust had increased during the pandemic. The next part will, however, evaluate findings from the theme of interpersonal trust. Given that at least 85% of the Swedish population had received at least two doses in April 2022 (PHA, 2022), how is it then to be a “minority” in the context of vaccines? How do the unvaccinated perceive other members of the community?

### **6.3.2 Interpersonal Trust**

Although there may be some disagreement regarding how other community members view those who choose not to get vaccinated, it is interesting to see how the respondents felt about other people in society. The attitude towards other people could be divided into two main themes. Numerous respondents expressed that they did not value other people’s choices and wished that others would stop worrying so much about their vaccine preferences. Respondents who felt furious toward others surfaced as the second topic. The furious partly arose because the respondents experienced that fellow citizens blindly trusted the information they were served from the government or traditional media. To a certain extent, because of how they were treated, where others expressed that they were a danger to the whole society and called them words as “conspiracy theorists,” “anti-vaxxers,” “tin foil hats,” and for some, terminated friendships. These quotations could serve as a summary of the two main themes.

*“Once a man in a sauna asked me if I was vaccinated, but I didn’t answer. It’s my choice and I don’t want to share my choice with strangers. I feel that society has lost its good manners on which it was founded, people have started to get involved in others’ business” (Johan)*

*“...And it just get worse and worse [...] such nonsense, and you know, people are just buying it. Without thinking. People have lost the ability to think independently” (Karin)*



*“The thing is that people are so stupid. They are brainwashed so they only listen to [traditional] media. If you, for example, dumped a folder with hundred different sources claiming the vaccine is bad they refuse to consider it because it is not what the media has reported. And they tell me that I am not a trained journalist, but do I need to be a journalist to see cause and effect?” (Viktor)*

### **6.3.3 Views of Media Reporting**

A significant portion of the respondents thought that the media was a driver for making members of society more afraid than necessary. Similar to the institutional trust, some individuals’ confidence in conventional media deteriorated during the pandemic. The media reporting was generally seen to be too excessive with one-sided reporting, which also were the themes that emerged when reviewing the collected data.

*“The Swedish media, in my opinion, is very biased. They simply never display more than one side. And I think things got a lot worse during the pandemic because no one was suddenly allowed to raise questions” (Magda)*

*“I thought it was excessive, and I think it kind of scared people. For instance, if we take my mother-in-law. She was so scared that she did not even dare to go and visit her grandchildren for like six months, which made her feel very bad mentally. She ended up alone instead” (Tuva)*

*“Instead of getting to the bottom of what is causing this, they run alarm headlines. They are just there to scare the populace into making bad decisions and not thinking for themselves” (Viktor)*

*“I always questioned everything since I am a researcher, but I can say that the questioning has been greatly strengthened during the pandemic. The biased way media has reported frequently left me feeling both angry, frustrated, and despaired” (Rita)*

*“The virus is not really what has affected society. It is the media’s controlled reporting on how dangerous it is. We all know the coverage is controlled and biased. The media have steered it in that direction: all should be forced to vaccinate” (Beate)*

*“The only media that has deviated from this hypnosis, which has played a more subdued line, is Expressen. Public Service has been apathetic, asking neither uncomfortable nor counter-questions—journalism with no regard for ethics, in my opinion” (Johan)*

The conventional media’s coverage of the pandemic was not well received by the respondents. When asked what was lacking in the Swedish media landscape, many said they wanted more perspectives and investigative journalism. The next part, however, will look more closely at the burning topic, namely the perception of vaccines, and further the respondents’ vaccine choice.

## 6.4 Perceptions of Vaccines

To further understand why the respondents did not receive a covid-19 vaccine, it is crucial to grasp what context they found themselves in – and perhaps, to some extent, still find themselves in. As introduced in the literature review, an individual's attitude towards vaccines can be influenced by different factors, such as confidence, complacency, and convenience. This last theme will therefore evaluate previous experiences with vaccines, as a vaccine choice might be influenced by negative prior experience. After that, findings regarding their surroundings and vaccine choice will be introduced. Since a choice related to one's health might be easier to state if belonging to a group, affiliated family, and acquaintances who have done the same. Finally, the expressed reasons for not receiving a covid-19 vaccine from the respondents will be presented.

### 6.4.1 Previous Experiences of Vaccines

Nearly half of the respondents said they had a non-critical opinion of available vaccines. They thought it was a good invention but must be adequately tested. Two groupings might be made up of the remaining half. The first group was generally dubious as they discovered evidence of immunizations online or because they had witnessed people nearby becoming ill due to different vaccines. The other, relatively small part expressed a negative attitude, saying that vaccines, in general, and the covid-19 vaccines, in particular, are used to transmit infection, which in the long run is used as a world population control mechanism.

*"I have no general objections to vaccinations. Since I was immunized as a child and those vaccines have been extensively studied, I don't find them frightening" (Hanna)*

*"The covid-19 vaccination was something about which I was initially unsure. However, the swine flu struck while I worked at a school. It was dreadful when a young girl developed Narcolepsy. She was only 17 years old, and it was so terrible that I honestly was not sure whether to accept it or not. But in light of that, I had doubts about the covid-19 vaccine" (Karin)*

*"Because the thing is, they don't want everyone to get sick at the same time either, because then people would start to suspect things. Dad has taken two doses because he wanted to get out and live like normal, and I haven't noticed any side effects on him. But he may have been lucky and received a vaccine without dangerous substances" (Viktor)*

*"It feels hopeless, I want to save people but am powerless. And the side effects of the vaccine are numerous and will only increase. It will be covered more and more in the media soon since they cannot conceal it. Additionally, it's awful, they inject young children, it's insane. Kids don't need it. I believe that what causes infections is the vaccine" (Emelie)*

As the SAGE (2014) implies, the decision to take a vaccine can be found in a continuum between full acceptance and outright refusal of all vaccines. However, since a central subject in social science is to understand how identity-relevant attitudes are formed through socialization and subsequently maintained in a complex, heterogenous community, the next section will evaluate the findings of the respondents' surroundings. Were they influenced by anyone in their choice, or did they perhaps influence others to refrain from a covid-19 vaccine?

#### **6.4.2 Surroundings and Their Perceptions of Vaccine**

As the reinforcement spirals model suggests, group identity is central for individuals when searching for information. As a result, one of the questions asked how their surroundings had done with the vaccine and if the respondents would say that they influenced others in their surroundings or if other individuals had influenced them. A significant majority claimed that their vaccine choice was solely their own. Others expressed that they tried to influence friends and family to follow their line, whereas some succeeded and others did not. When asked if any specific person or event had strengthened their choice, some referred to their childhood or family, but many others referred to persons they had seen online. Either on Facebook, Instagram, YouTube, or alternative news channels such as Rumble and SwabbTV. Other had found friends that shared the same view as them, and they could exchange information with each other and thereby reinforce their beliefs.

*“A Buddhist instructor in Arizona expressed skepticism about the vaccine and his arguments against it in a post on Instagram. Since it is a person whom I trust, it had an impact” (Albert)*

*“Well, I have a good friend. Which is also very much in favor of the alternative, and we start to discuss it more, and she is also unvaccinated. We exchange information because she resides in the south; whoever finds useful information transmits it to the other” (Hanna)*

*“I have failed with my family [to keep them unvaccinated], except for my children, because I could use my ‘parent veto’ when they were offered vaccines through the school (Dave)*

As displayed by the last quote, it was quite general that respondents' tried to influence their surroundings, where some succeeded better than others. The next section, however, will introduced the expressed reasons to not receive a vaccine.

### 6.4.3 Expressed Reasons to not Vaccinate

This chapter's last part will introduce the reasons for not receiving a covid-19 vaccine. When reviewing the data, four themes emerged, which will be evaluated individually. The first apparent theme that was expressed by many was respondents who expressed an attitude towards the vaccine that can be summed up as “wait and see”. Many of these individuals’ expressed reasoning that since they were not first in line for the vaccines, they might as well wait. For some of these, it simply did not happen later, but for others, their decision was reinforced by finding information suggesting that the vaccine was dangerous with many side effects.

*“Initially, I was not an opponent, but when vaccines were available, I wanted to wait and see. Sometimes it goes fast and gets right, and other times it goes fast and gets wrong. I also know that some side effects might arise later, so I did not want to be the first to receive it” (Albert)*

*“Users on, for example, Flashback Forum are 99% unvaccinated. And they have expressed that you should wait. And then I also felt that I wanted to wait” (Cecilie)*

The second theme relates to the perception of the respondents' immune system. Since the beginning of the pandemic, these individuals were generally confident that they would not take any vaccine against the virus, but some had different tactics. For example, one respondent expressed that he actively sought out people who had been infected with Omicron to have his immune system updated. Others just believed their body would handle the virus if infected.

*“I knew early on that I wasn’t going to take it. I have never had the flu, and it has been 14 years since I was on sick leave. I trust my body” (Ida)*

*“I can honestly say that I am petrified of the vaccine and what it could do to me, who never is sick. I have a feeling it might actually screw up my great immune system. I have read about this, and you can see that there are many who, just like me, were never sick, but then took the vaccine, and after immunization, they got sick from time to time” (Beate)*

Respondents who made a risk-benefit analysis and did not wish to encounter side effects revealed as the third theme. They also believed that the current vaccines were too untested.

*“The biggest reason is side effects. I don't think that the Covid-19 vaccine is good for one's immune system, it impairs the immune system, and it does not seem to be a standard vaccine. It only took a few months before it was rolled out. It usually takes between 5 - 10 years, but this only took a few months. But honestly, I don't like vaccines in general” (Olle)*

*“I feel uncomfortable about the side effects, and if you have to take several doses, it might be a cocktail effect” (Hanna)*

The fourth and final theme that emerged was expressed by respondents who believed the vaccine to be part of a bigger plan and that it was not, in fact, a vaccine developed to protect against serious illness or death. Some expressed that it was a tool to decrease humanity. Others expressed that it was a subscription to poison.

*“Vaccines and its coercion have increased avalanche-like in the last ten years, so it was a matter of principle that I did not want to take the first shot because I know it is a subscription. I refuse to subscribe to a foreign substance, which is always a risk” (Johan)*

*“I will not receive a vaccine because they inject a virus into the body to make us sick and then make profits by selling pharmaceutical preparations to reduce side effects. It is not for us to get healthy but to limit the side effects. For every vaccine injection you take, you get another side effect because you get a toxic environment in your body” (Victor)*

And by that, this last section of this chapter is presented. The next chapter will evaluate the key findings, draw conclusions and answer the research questions.

## 7. Conclusions

### 7.1 Introduction

This study has investigated how some Swedish individuals who choose not to take a vaccine use media. Also, their perception of aspects related to institutional and interpersonal trust and views of the pandemic and vaccines. In order to address the research question, this chapter will be devoted to abstracting the critical findings from the empirical material and providing a discussion influenced by the theoretical applications.

### 7.2 The Role of Media Use

Given that the interviews were conducted with a receptive approach, where the research point of departure was to enter the respondents' world of thinking, there was an opportunity to understand how they viewed the pandemic and the virus, as well as their perception of media use. With the theoretical implications of the RSM and selective exposure, it was expected that some of the explanatory factors underlying an individual's vaccine choice might be determined based on the information to which the individual was exposed. Information that to a certain degree, aligns with a person's previous beliefs.

In the scope of this research, there are two critical aspects to consider. First, the covid-19 outbreak had barely received an official explanation before rumors flourished and alternative theories emerged and spread online. Messages on different social media platforms, such as YouTube, Facebook, and Twitter, stated that the virus had been manufactured and deliberately released (Werne, 2021:88). The premise behind several of these messages could be interpreted as that nothing is as it seems, and hardly anything happens by chance. So when a crisis hit – a terror attack, a conflict, or a pandemic, the answer is always close. All one has to do is look. Second, the rapidity with which information was conveyed when many knowledge gaps remained probably produced a setting in which mistrust and fear might have prompted some people to seek simplistic solutions to complicated occurrences. In this scenery, the hybrid media system served as an accent wall. Considering that the way a person perceives a channel can impact how they act on that information (Piltch-Loeb et al., 2021), it is comprehensible that the embedded data suggest that individuals who were skeptical of traditional media prior to the pandemic did not trust their narrative regarding the virus. As a result, they sought other sources with different content that reinforced their pre-existing attitude.

Some key findings from the empirical material revealed that social media constituted a significant portion of the respondents' media diets. It was, however, a great mix when it came to news consumption. Some people used traditional and social media to stay informed, while others avoided traditional news and only looked for their own. Since search engines are regularly used to access a large amount of online content, their user interfaces act as an essential "window to the world" of online information. Some conclusions based on the findings exhibit that personal relevance of topics might influence information searches, and considering that research (Knobloch-Westerwick, 2015:344) has displayed that Google users primarily click on top-ranked results, this may indicate that Google's search and ranking algorithms have significant ramification for what content is actually accessed.

Furthermore, as Knobloch-Westerwick (2015:357) underlines, searching for information online is substantially different from information found in traditional media, as users can view messages on their topic of interest from various sources on the screen. However, since many respondents claimed they did not settle for the first search match that appeared but looked further, it signifies that respondents demonstrated a confirmation bias. Thus, the classic notion of confirmation bias seems to apply to the high-choice media environment. Beyond all, to a certain degree, the data findings also revealed that although individuals are at large independent to selectively chose what information to obtain, the agenda-setting role of the mass media seems to spill over online. On the other hand, given that the pandemic was a significant event, it is not as remarkable.

However, it can be said with confidence that individuals are likely to obtain information from various sources during a pandemic. Nevertheless, no matter how many sources individuals can choose between, the contemporary media environment is of little use as long as media outlets do not have citizens' trust. In line with the findings of Strömbäck et al. (2020), the empirical material of this research suggests that a lack of confidence in news media is associated with less use of these and more use of other information sources, implying a link between news media trust and selective (non)exposure to traditional news media. From a normative perspective, this situation may benefit democratic principles when citizens turn to different sources of information to shape their views. Conversely, it could potentially lead to "*divergent impressions of the most important problems facing the nation*" (Stroud, 2011:164). As Hjavard (2008:116) also discusses, there can be no organized social life without some degree of a shared vision of reality, whatever its origin. As displayed by the empirical data, the hybridization of the media environment has grown to operate as a barrier between individuals and any understanding of the world outside immediate surroundings and explicit sensory perceptions. However, given that social media is de-institutionalized and symmetrical in the sense that it requires users to perform actively, it has challenged the conventional media in the race of information distribution.

### 7.3 Implications of the Pandemic

Research has shown that rally effect may arise during times of great uncertainty or when a crisis is facing the nation (Esaiasson et al., 2020). In this data collection, there were no evident signs of rally effects, as no individuals expressed that their affiliation with the government or related agencies had increased. Instead, it was the opposite. The data revealed that while some respondents' trust had been low prior to the pandemic, it had decreased throughout the occurrence for others.

A conclusion that can be drawn is that the traditional media's reporting was primarily responsible for what appeared to be a lack of trust in the government and PHA. Respondent lacked debates, in-depth reporting, and a media dynamic that featured more diverse perspectives on the virus and strategy. Consequently, the absence of these aspects led many to believe that the authorities were utterly deficient in transparency about crucial information. As a result, the data findings reveals that several individuals searched for their own news, consisting of opposing arguments and views. Given that data findings concede that social media or alternative news channels were used for information, the minimal-path description of Slater (2007) will be considered. Whether the starting point is media consumption or selectivity effects, reciprocal effects over time can be understood as a spiral of ongoing influence. Although many respondents had been involved with information distribution that questioned the mainstream narrative even before the pandemic, Slater's (2007) model suggests that a particular attitude or belief should increase a certain type of media consumption, which enhances the corresponding attitude, eventually become mutually reinforcing over time. Thus, it seems clear that those who turned to other sources before the pandemic experienced some reinforcement of that behavior during the outbreak. Likewise, those whose skepticism arose due to traditional media reporting also encountered effects described by the RSM.

Garett and Young (2021:2194) claim that the mainstream media frequently portrays "anti-vaxxers" as non-scientific and untrustworthy, which is an opinion shared by many pro-vaccine individuals, consequently contributing to increase polarization around a public dilemma. Certain implications of the pandemic resulted in heated public debates regarding vaccines, where those who did not take the vaccine felt like "second class citizens". This phenomenon affects democratic ideals and can lead to even more polarization, resulting in two camps of views that refuses to listen to each other. According to the evidence of this research, the pandemic caused numerous thoughts and judgments about society. Where respondents questioned fellow citizens' refutation against them and were treated adversely by friends, family, authorities, and the media. In the long term, this might have strengthened respondents' selective exposure to information that supported their choices and attitudes, which made them join platforms or groups where like-minded people were, not to feel so alone.



Based on the research findings, it is possible to argue that unvaccinated individuals selectively exposed themselves to information that strengthened their cognitions about vaccines. As Festinger (1957) contends, if an individual experiences a modest amount of dissonance, they may change how they look for information after making a decision and reject decision-contrary material while seeking consistent information. A phenomenon that most likely could be applied to individuals who have chosen to be vaccinated against covid-19 as well, as the influence of cognitive dissonance on our choices is likely to be prominent regardless of choice made. However, since this data only contained information from unvaccinated individuals, it is possible to state that cognitive dissonance tendencies could be identified.

## 7.4 Vaccine Hesitancy

Vaccine hesitancy is not a new phenomenon, but the spread of anti-vaccination misinformation via social media has given it additional urgency, particularly in light of the covid-19 pandemic, according to Wilson & Wiysonge (2020:1). In the “3C”-model reviewed in chapter 3, it was evident that confidence, complacency, and convenience were recognized determinants that could affect individuals’ vaccine choices. These determinants will be briefly evaluated with respect to the data findings.

*Confidence* refers to the trust in the effectiveness and safety of vaccines, the system that delivers them, and the motivations of policy-makers who determine which vaccines are required (SAGE, 2014). According to Betsch et al. (2015), the determinant of confidence concerning vaccine hesitancy denotes individuals with highly unfavorable initial opinions on vaccination. If vaccination is seen as a requirement or a social norm, those people will consciously oppose vaccination. The data findings revealed that confidence was prominent, as many respondents expressed negative views concerning the health care system, the companies that develop and distribute vaccines, and the policy-makers who decide on vaccination programs. In the same way as Esaiasson et al. (2021) discuss how interpersonal trust is a stable feature, almost like a personal trait, strong opinions about certain aspects seem hard to alter. It is, therefore, challenging to offer a remedy to this issue, but based on the results of this study, more openness and tailored communication are required from all mentioned establishments. Moreover, the traditional media must help to establish a more conducive environment for dialogue and debates.

*Complacency*, according to Betsch et al (2015:64), can signify passive individuals who do not expect danger and therefore do not need to do an active immunization choice. In the data findings, this view appeared by some of the respondents, who believed that the virus was not that dangerous, although their attitude towards the virus may be weak, they still expressed some strong opinions regarding the vaccines. The main reason, however, to not receive a vaccine was that they trusted their own immune system. In

order to reach passive individuals the key is probably also a well-balanced debate climate offered by traditional media.

*Convenience* refers to barriers that alter positive intentions to vaccinate, which did not emerge in the data findings. Although individuals expressed that they did not have a general critical opinion towards vaccines, they still were overburdened with the feeling of “wait and see”, which implies that they had all the prerequisites to go and receive a vaccine, but they did not choose it. There can be a contradiction here in the sense that the more society put pressure on citizens to get vaccinated, the more passive and waiting these individuals can become. Extensive communication is needed, as well as an understanding that it should be the individual’s choice. This again brings us back to the fact that authorities and the media should present fact-based and empirical research that includes different perspectives. The collected data testify that many respondents joined different groups online, where other individuals wrote, shared, and discussed side effects of covid-19 vaccines. Concerns regarding the safety of vaccines or potential side effects must therefore be raised more extensively by society’s institutions. They must show that the apprehensions expressed by citizens are taken seriously and underline what research says. As Garrett and Young (2021) underline, social media platforms must work together to stop misinformation online. These tech companies are, in essence, the gatekeepers to the vast information available on the internet. However, as the data revealed, many respondents had experienced this phenomenon on Facebook, resulting in that they believed Facebook had started to “censor” particular views. For some, it led them to join other platforms where extreme perspectives were shared. Thus, this is an incredibly complex problem that professional researchers should monitor to see what should be done.

## 7.5 Addressing the Research Questions

Finally, it is time to answer the question that prompted this entire research process. The proposed research questions will be answered individually by the empirical findings.

- **Why do some people decide to not get vaccinated against covid-19?**

In the scope of this study, this broad question can be answered that uncertainty about the perceived threat and received information play a prominent role regarding individuals’ immunization choices. For some, previous views have been reinforced by exposure to information that supports their cognitions. For others, the overwhelming reporting by the traditional media has led them to avoid conventional news and instead turn to quasi-mediated information online. Often to forums that expressly were against vaccines. There was, however, a relationship between respondents who were at home even when the restrictions had been lifted (e.g., unemployment, being retired, or other reasons) and expressions of

really strong, often negative, opinions of vaccines. Although no causality can support this, the evidence suggests that these people have had more time than others to delve into material that may have led them to feel that their vaccine choice became a part of their identity. This suggests that, as emphasized by the RSM, individuals seek out information that affirms their identities and, in some situations, may reject information that contradicts those identities, and that patterns of selective exposure are assumed to be the outcome of efforts to create and sustain a functional self-concept.

- **Where do the unvaccinated get information about vaccines?**

The short answer to this question is that unvaccinated individuals predominantly receive information via the internet. The data revealed how many searches for their own information, suggesting that many respondents exhibit instrumental media use. By being goal-oriented and determined to find information supporting the notion of not receiving a vaccine, they could strengthen their cognition that it was the right choice. In line with empirical findings (Knobloch-Westerwick, 2015:333), attitude-discrepant information from high-credibility sources may be particularly threatening to respondents who found a certain issue crucial, such as vaccines or trust related to those who decide on vaccination programs. As a result, the data revealed that some of the respondents preferred low-credibility messages with consistent content, as these were less persuasive and thus less likely to challenge their beliefs. The empirical findings, therefore, advocate that respondents favor information that agrees with their viewpoint and are less concerned with source credibility when there is a great deal of importance associated with the topic, and they hold a preexisting solid belief. The role of online media certainly signifies that information can be obtained quickly and easily and that seeing information online can get individuals to be further exposed to similar content, ultimately entering a reinforcement spiral.

- **Why do the unvaccinated trust some information and information sources more than others?**

The empirical findings reveal that many of the respondents primarily trust information that cuts through traditional media noise or oppose the grand narrative that pervades Swedish society. Many people described an intuitive sense that “something was not right” with the virus outbreak, implying that mistrust was prevalent from the outset of the pandemic. The widespread perception of traditional media information was that it could not be trusted since it was only motivated by financial interests. As a result, information from small actors seemed more appealing since it implied that these small actors risked a lot by opposing the most prominent view about the virus.

Information utility may also have been an underlying reason why the data findings showed that some individuals turn away from traditional media. The channels that provided the information that gave the

most significant utility may have been more trusted, where guided-relevance information assists individuals in deciding how to feel about certain situations, which is related to selective exposure as a mechanism to avoid cognitive dissonance. It is also crucial to consider that almost all the data consisted of individuals who frequently used social media, implying that continuous feedback loops and algorithms have affected their views of information. As already noted in research (e.g., Hart et al., 2009; Strömbäck et al., 2022), people may prefer facts or evidence that validate an opinion or attitude over actual evidence that refute the opinion. The data suggests that when the respondent found congruent information to be stronger and more compelling than incongruent information, it caused them to ignore evidence that conflicted with their beliefs and expand more effort to reject discrepant facts and arguments.

- **What are the expressed reason for distrusting information from established media and expert sources?**

The most striking was that individuals lacked the versatility of most traditional media. Consequently, many turned to other sources to get informed—primarily online, such as social media, but also alternative channels of news information. Many also believe that the government and the traditional media are driven by power and money and therefore do not look out for the good of society or its inhabitants. The data revealed that some had held this opinion for a long time, but for others, it seemed like the incentives to take vaccines presented by established media or expert sources did not reach them. Thus, an underlying cause may be the unbalanced debate in society, but it might also be due to the information sharing of information online or other factors.

## 7.6 Summary

A focus on whether the context of online media would encourage exposure patterns that reinforce attitudes towards vaccines has been one of the topics that emerged in this thesis. The RSM highlights the role of identity or group identity. In some matters, the empirical findings pointed towards that individuals believed that it was an identity to oppose the salient norm, as they had done it for years. Other findings imply that exposure to information confirming this view can further reinforce their attitude when a choice is made. Although the data revealed that many considered counter-attitude information related to covid-19, none of them expressed that it changed their perception in the slightest, it was contrariwise.

Therefore, this study can contribute to the research field by suggesting tailored communication strategies that reach everyone in the society. More research is though needed to understand comprehend who

information-seeking habits are affecting peoples understanding about and attitudes toward certain issues.

Although the findings cannot be generalized to a larger population due to purposive sampling, the lack of societal debate and reporting on different perspectives from traditional media during the pandemic caused a decrease in trust related to the mass media, the government, and associated agencies. As a result, many turned to other information sources, primarily online, where user-generated content seemed to reinforce their skepticism towards the establishments mentioned above. The research findings underline that it can be problematic from a democratic stance if certain groups of people create counter-publics where alienation and suspicion of established democratic channels are encouraged and magnified, rather than feeling that they are allowed to participate in the mainstream public debate on equal terms as vaccinated citizens.

## 8. Discussion

### 8.1 Practical Implications

This research has shed light on vaccine hesitancy against covid-19 in a Swedish context. For clarity, it is not for this study to determine whether receiving a vaccine is desirable or not. However, the research has evaluated the role of media use in relation to immunization choice. The findings displayed that individuals who have not received the vaccine demand more transparent information and debates. The wider community would also show more tolerance against their choice and views. This study can shed light on the practical implications that information plays an essential role in shaping individuals' attitudes and behaviors, especially during a crisis. In the dynamics of a conversation where those in power take certain regard to those who are worried seriously, probably more success can be reached than via harsh rhetoric. The study also offers important insights to policymakers who seek to understand the impact of information-seeking behavior on knowledge and beliefs about the virus and vaccines. Similarly, knowing who uses and trusts different sources of information allows public health professionals to tailor communication strategies to a more diverse population.

### 8.2 Limitations and Suggestions for Future Research

This research aims to understand a recent phenomenon that has surfaced due to the covid-19 outbreak and will hopefully contribute to the current literature on the topic. Discussing the limitations of this study might assist prospective researchers in improving and expanding on research regarding media use and vaccine hesitancy.

One limitations, as briefly discussed in the method chapter refers to the sampling procedure. By gathering almost all of the respondents from the same group, it could infer that they were sharing more characteristics than not. Therefore, future research could avoid this by sampling respondents of interest that do not use social media as a source of information, or respondents who employees a different media platforms. One aspect could be to join alternative news channels to comprehend the narrative that is present there. Moreover, Future research could, for example, employ the theory of RSM more broadly to examine group identity and vaccine choice, perhaps mainly by targeting those who express the most strong negative opinion against vaccines. Although trust is a central factor, and some individuals do not trust the academic world, methods must be developed to solve this problem.

Only individuals who have not been vaccinated are chosen for this study because it delimited the research field more since it is impossible to talk to "everyone." However, for future research projects, it

could be an idea to examine other aspects regarding media habits and information seeking that includes citizens from both camps – vaccinated and unvaccinated. However, since the scope of this study focused on vaccine hesitancy, it was more helpful to talk to those who had experienced or belonged to the continuum of vaccine hesitancy.

### 8.3 Final Remarks

This study began as part of a curiosity regarding the impact of perceived information on our choices. Since the high-choice media environment with limitless information channels is omnipresent, and it is easy to get stuck in algorithms supporting content and information that has been searched or viewed before, this seemed as an interesting topic to investigate further. The method chosen was semi-structured interviews, which resulted in exciting conversations with 20 individuals. The greatest thanks must be given to these people, without their honesty and considerations, this study would not have been possible.

Hopefully this study can contribute to more research within interdisciplinary work, to further examine vaccine hesitancy, but also be seen as a starting point to examine more closely what citizens consider missing in the Swedish media landscape and why some mediating communication about health choices do not envisage as thought.

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# Appendices

## Appendix 1. Facebook Group Post

### #nej till vaccinpass

Privat grupp · 21,6 tn medlemmar



Om **Diskussion** Utvalt Rum Ämnen Medlemmar Evenemang Objekt



Ellen Hemmingsson

· 1 tim · 🌐



Hej! 😊 Ellen heter jag och skriver för tillfället min masteruppsats i politiskt kommunikation vid Göteborgs Universitet. Då tidigare forskning har visat att det kan finnas ett samband mellan människors medieanvändning och vaccinationsval, så genomför jag en intervjustudie där jag söker myndiga personer (som inte har vaccinerat sig mot covid-19) som skulle vilja svara på några frågor gällande medieanvändning, tilltro till medier samt tankar kring vaccin och upplevelsen av pandemin.

Intervjun tar runt 30 minuter och kommer ske digitalt efter överenskommelse. Som deltagare är man anonym och svaren är konfidentiella och kommer endast användas för denna uppsats.

Efter intervjun kommer jag skicka en digital trisslott som tack för deltagandet.

Låter detta intressant? Kommentera nedan eller skicka ett meddelande så hörs vi vidare.

Hälsningar Ellen



Besök Covid-19-informationscentret för mer hjälp och information om vaccin.  
[Få information om vaccin](#)



## Appendix 2. Interview Guide in Swedish

### Inledning

Jag skriver just nu min masteruppsats i Politisk Kommunikation vid Göteborgs Universitet, och när jag funderade på vad jag ville skriva om, så hittade jag tidigare forskning har visat att det kan finnas en länk mellan människors medieanvändning och valet att inte vaccinera sig i dagens värld med många olika informationskanaler. Syftet med denna intervju är därmed att få reda på hur du som valt att inte ta vaccin mot covid-19 använder medier, vilka medier du känner tilltro till men även dina tankar kring pandemin och vaccinet. Du kommer vara anonym i studien och har rätt att avbryta när du vill. Är det okej om jag spelar in? Det är ingen annan än jag som har tillgång till inspelningen och den kommer raderas när all data har samlats in.

### Demografiska frågor

- Ålder
- Boende i stad/landsbygd
- Troende/utövar någon religion
- Utbildning
- Arbete
- Placering på den politiska skalan

### Medieanvändning

- När du vill ta del av nyheter, vart vänder du dig då? Och hur ofta tar du del av nyheter?
- Vänder du dig ofta till samma nyhetskälla?
  - Om ja, vilken/vilka och varför?
  - Om nej, hur ser din nyhetskonsumtion ut?
- Vilken typ av nyheter vänder du dig till när du konsumerar nyheter?  
Ekonomi/Sport/Omvärld/Lokala
- Om du använder flera nyhetskällor, rangordna gärna vilken du litar mest på och varför.
- Är det någon media du ställer dig skeptisk till eller inte litar på? Ge gärna exempel.
- Använder du sociala medier dagligen?
  - Om ja, ange plattformar och vad du använder dem till
- Om du tar del av tankar/nyheter från vänner i ditt flöde, hur källkritisk är du då?
- Använder du nätet för hälsorelaterad information?
  - Om ja, vart och hur ofta?
  - Om nej, hur söker du hälsorelaterad information?

- Vad tycker du saknas i det svenska medielandskapet?

### **Tankar kring pandemin**

- Vad var din initiala känsla när nyheterna rapporterade om att det brutit ut en pandemi?
- Förändrades känslan över tid?
- a) Hur anser du att regeringen och talespersoner hanterade informationen om viruset?  
b) Hur upplevde du att media rapporterade om viruset?
- c) Tyckte du att medias bevakning var proportionerligt i relation med virusets påverkan på samhället?
- Kände du att du kunde lita på att regeringen/folkhälsomyndigheten hade ditt bästa i åtanke under pandemin?
- Hur ofta och genom vilka kanaler tog du del av information gällande pandemin?
- Har du använt dig av samma informationskälla gällande pandemin över tid?
- Hur tror du att covid-19 viruset uppkom?

### **Tankar kring vaccin**

- Vad har du för tidigare upplevelser/erfarenheter av vaccin?
- Har du hört något negativt om covid-19 vaccin? Var?
  - Om ja, påverkade detta dig i ditt val att inte vaccinera dig?
- a) Vem/Vilka källor litar du mest på gällande information om covid-19 vaccin? Varför?  
b) Vem/Vilka källor litar du minst på gällande information om covid-19 vaccin? Varför?
- Hur har attityden varit i dina flöden på sociala medier gällande covid-19 vaccin?
- Hur har du upplevt att omgivningen/samhället har bemött dig som ovaccinerad?
- Vad är du mest orolig för: viruset och dess mutationer eller potentiella biverkningar av vaccin?
- Vad är din främsta anledning till att inte vaccinera dig?
- Visste du redan från början att du inte skulle vaccinera dig eller är det ett val som har vuxit fram under tiden?
- Finns det någon person, upplevelse eller annat som sticker ut som har påverkat ditt val?
- Har du fler i din omgivning som inte har vaccinerat sig?
  - Om ja, skulle du säga att du har påverkat den personen eller är det den personen som har påverkat dig?
- Något annat du vill tillägga eller har frågor om?

## Appendix 3. Translation of Interview Guide

**Introduction:** I am writing my master's thesis in Political Communication and found that previous research has shown that there may be a link between an individual's media use and the choice not to get vaccinated. The purpose of this interview is thus to find out how you use media, which media you feel confident in, and your thoughts about the pandemic and the vaccine. Your participation is anonymous and you have the right to cancel at any time. Is it all right if I record?

### Demographic questions

- What is your age?
- Do you live in a rural or urban area?
- Do you practice any religion? If yes, which?
- What is your education?
- What is your profession?
- Where would you place yourself on the left-right political spectrum?

### Media use

- What media outlets do you turn to take part in the news and how often?
- Do you often turn to the same news source?
  - If yes, which and why?
  - If not, what does your news consumption look like?
- Is there any news that is your priority when you consume news? Such as finance/sports/world/local?
- If you use several news sources, please rank which one you trust the most and why
- Are there any media you are skeptical of or do not trust? Please specify
- Do you use social media on a daily basis?
  - If yes, please specify which platforms and what you use them for
- Would you consider yourself as critical of sources when you see any post from a friend or someone else in your social media feed?
  - If yes, do you do anything to check the source?
- Do you use the Internet for health-related information?
  - If yes, where and how often?
  - If not, how do you search for health-related information?
- What do you think is missing in the Swedish media environment?

### Thoughts on the pandemic

- What were your first thoughts or your initial feeling when hearing that a pandemic had struck the world?
- Did those thoughts or feelings change over time?
- a) How do you think the government and spokespersons handled the information sharing about the virus?  
b) How did you think the media handled the reporting?  
c) Do you think it was proportionate how much the media reported compared to the virus' impact on the world and the society?
- Did you feel that you could trust that the government/public health authority had your best interest in mind during the pandemic?
- How often and through which channels did you receive information about the pandemic?
- Have you used the same source of information regarding the pandemic over time?
- How do you think the covid-19 virus originated?

### Thoughts on vaccine

- What are your previous experiences with vaccines in general?
- Have you heard anything negative about covid-19 vaccines?
  - If yes, where? Did this information influence you in your choice to not take the vaccine?
- a) Who/which sources do you trust most about information about covid-19 vaccines? Why?  
b) Who/which sources do you least trust about information about covid-19 vaccines? Why?
- How has the attitude been on your social media regarding covid-19 vaccines?
- How have you experienced that society has treated you as unvaccinated?
- What are you most worried about: the virus and its mutations or potential side effects of vaccines?
- What is your main reason for not taking a covid-19 vaccine?
- Did you know from the beginning that you would not be vaccinated or is it a choice that has emerged over time?
- Is there any person, experience or other thing that stands out that has influenced your vaccine choice?
- Do you have other people around you who have not been vaccinated?
  - If yes, would you say that you have influenced that person or is it vice-versa?
- Anything else you would like to bring up or have questions about?