



**DEPARTMENT OF JOURNALISM, MEDIA AND
COMMUNICATION**

Self-perceptions and misperceptions

Examining the antecedents and consequences of
self-perceived media literacy

Elvira Holmström

Master's Thesis in Media and Communication

Thesis:	30 hp
Program and/or course:	Master's Programme in Political Communication/MK2502
Level:	Second Cycle
Term/year:	Spring 2024
Supervisor:	Jesper Strömbäck
Examiner:	Nora Theorin

Abstract

The current media landscape provides arenas for public debate where virtually anyone can share their opinions and disseminate information (Strömbäck et.al 2022:57). Legacy media has traditionally held a gatekeeping role and curated the media supply, by being citizen's main source of news but this role has been undermined by media formats that lower the threshold for participation (Lechler & Egelhofer 2022:69-70). This has largely shifted the responsibility of navigating and assessing the truthfulness of media onto the individual. Because individuals are highly prone to directional biases, media literacy has become increasingly important (Journell 2024:25-26). Much of previous research within media literacy builds on an objective perspective of media literacy, but the issue with focusing exclusively on objective media literacy is that it is a perspective that does not account for the important influence of motivations, such as psychological and social circumstances (Journell 2024:29). Perceptions guide our actions, irrespectively of how representative they are of the real world (Lippman 2004). The self-perception of media literacy abilities is thus important regardless of their congruence with reality. The aim of this thesis is therefore to add to the sparse research on self-perceived media literacy and its implications for misperceptions, departing from the normative assumption that citizens need to be informed for a democracy to function well.

This study contains a twofold analysis of self-perceived media literacy. First, antecedents in the categories demographic variables, political variables and media variables were examined using hierarchical regressions on panel data. Second, a stepwise regression was used to explore the relationship between media literacy and misperceptions within the topics immigration, vaccines and crime. The results demonstrate that within demographic variables, higher educated ($b=.298$ $p<.001$) and men ($b=.211$ $p<.001$) reported higher self-perceived media literacy. Political variables had the strongest explanatory value out of the three categories of variables ($\Delta R^2=.090$ $p<.000$), and showed that higher self-perceived media literacy was reported by respondents with higher political knowledge ($b=.398$ $p<.001$), higher political interest ($b=.987$ $p<.001$) and that were far to the right ($b=.195$ $p<.01$). Finally all media use variables included except left-wing alternative media use were also positively related with self-perceived media literacy. In the second analysis, only vaccine perceptions were found to have a significant relationship with self-perceived media literacy ($b=.051$ $p<.05$).

Keywords: media literacy, self-perceived media literacy, SPML, misperceptions

Acknowledgements

Thank you to my supervisor Jesper Strömbäck for insightful advice, support and for writing lots of reference friendly literature.

Table of contents

1. Introduction.....	1
2. Theoretical Review.....	5
2.1 Democracy in a changing media environment.....	5
2.2 Opportunities, motivations and abilities.....	6
2.3 The challenges of misperceptions.....	7
2.4 The issue with media literacy.....	8
2.5 Reframing media literacy.....	9
2.6 Explaining self-perceived media literacy.....	11
2.7 Theorising antecedents.....	12
2.8 Theorising consequences.....	15
2.9 Summary.....	17
3. Material and Method.....	18
3.1 Structure of analyses.....	18
3.2 Material.....	18
3.2.1 Control variables.....	19
3.2.2 Political antecedents.....	19
3.2.3 Media trust.....	21
3.2.4 Traditional media.....	21
3.2.5 Social media news exposure.....	22
3.2.6 Alternative media.....	22
3.2.7 Self-perceived media literacy.....	23
3.3 Analytical strategy.....	23
4. Results: Analysis of Antecedents.....	24
5. Analysis Number Two: SPML and Misperceptions.....	28
5.1 Operationalisation of misperceptions.....	28
5.2 Analytical strategy.....	30
6. Results: Analysis of SPML and Misperceptions.....	31
6.1 Vaccine perceptions.....	31
6.2 Results immigration perceptions.....	34
6.3 Crime perceptions.....	38
6.4 Limitations.....	41
7. Discussion and Conclusions.....	42
7.1 Conclusions.....	45
7.2 Future research.....	45
Bibliography.....	46
Appendix 1: Variables.....	52
1. Factor analyses.....	52
2. Descriptive statistics.....	53
2.1 Analysis 1.....	53
2.2 Analysis 2.....	54

Appendix 2: Results..... 55

1. Introduction

Spreading false information has become easier and cheaper over the last decade due to vast technological developments. The current media landscape provides arenas for public debate where virtually anyone can share their opinions and disseminate information (Strömbäck et al. 2022:57). Legacy media has traditionally held a gatekeeping role and curated the media supply, by being citizen's main source of news but this role has been increasingly undermined by media formats that have lowered the threshold for participation (Lechler & Egelhofer 2022:69-70). Although legacy media is still an important source of information, they do not hold the same power as they did before as the rise of digital media has increased the competition for users' attention (Strömbäck et al. 2022). The decentralisation of media production that comes with this development supports democracy in some ways, such as allowing for public debate, but also poses some threats (Benkler et al. 2018:347). Because almost anyone can spread information online, mis- and disinformation have become more accessible (Lechler & Egelhofer 2022:72-73). Misinformation that has high news value can also be picked up by legacy media which contributes to spreading it further (Hameleers 2022:83-84). This in turn risks causing a misinformed citizenry, as repeated exposure to claims, especially with the absence of resistance often leads to endorsement of them (Nyhan 2020:225). Meaning, simply being exposed to false information can be an important source of misperceptions.

Due to this increased supply of media choice, people have to be more selective, which in turn makes personal motivations and abilities more important (Prior 2007:28-29). This reasoning is known as the OMA model, which stands for opportunities, motivations and abilities (Strömbäck et al. 2022:58; Lindgren et al. 2022:190). When everyone is able to choose which media to consume based on their abilities and motivations, media audiences become increasingly fragmented (Prior 2007; Hameleers 2022:45). Instead of everyone consuming the same media content, as it has worked historically, personalised media feeds are created by preferences alongside social and algorithmic curation (Prior 2007, Strömbäck et al. 2022:51,58) Further, biases and motivated reasoning heavily affect these choices, meaning we are more prone to believing in the information that supports our preconceptions and is congruent with our opinions (Kossowska 2022; Journell 2024; Nyhan 2020). People are also likely to choose content they support, and therefore uncritically accept it to a large extent (Hameleers 2022:45). Therefore, even the most knowledgeable is to some extent susceptible to mis- or disinformation (Journell 2024:26-27). Misinformed citizens may in turn intentionally or unintentionally contribute to the continued spreading of false information, promoting misperceptions (Lechler & Egelhofer 2022:72-73).

Misperceptions can be defined as *“belief in claims that can be shown to be false”* (Nyhan 2020:221). Although highly related to opinions, misperceptions are different from opinions. They are a type of belief, what a person considers true about a specific object, whereas opinions are evaluations

of a specific object expressing preferences such as support or opposition (Clawson & Oxley 2020). Vraga and Bode (2020:137) also argue that misperceptions should not be confounded with unsubstantiated beliefs but rather identified by their contradiction of best available evidence based on relevant expert consensus. Thus, misperceptions may occur due to someone's predispositions and how they navigate information rather than them not having access to correct information (Strömbäck et al. 2022:7). Strömbäck et al. (2022) write that those who do not have the abilities and motivation to actively seek out high-quality information are more likely to become uninformed or misinformed which in turn may increase inequalities in media use.

A tool that may have the potential to bridge these inequalities and help people think critically about their interactions with media is media literacy. According to one of the more popularly used definitions, media literacy can be understood as “*the ability of a citizen to access, analyse, and produce information for specific outcomes*” (Aufderheide, 1993). Media literacy research and education have made some efforts to deal with the issue of uninformed/misinformed citizens but has largely been concerned with providing people with tools and strategies for finding and utilising accurate knowledge, thereby focusing on the abilities aspect (Journell 2024:26-27). For example, scholars and educators are teaching media literacy techniques such as lateral reading and have developed tools like media bias charts. These types of interventions and much of previous research within media literacy build on an objective perspective of media literacy, where providing information about media is central (Journell 2024:27). Some scholars argue that while this objective approach is valuable, understanding media literacy from a subjective perspective is also important (Potter 2004b. Journell 2024:28). The issue with focusing exclusively on objective media literacy is that it is a perspective that does not account for the important influence of motivations, such as psychological and social circumstances (Journell 2024:29). Therefore, examining self-perceptions within media literacy is also important because, as previously mentioned, information processing is not necessarily a straightforward process that builds on a goal of accuracy. Journell (2024) for example argues that people may not want to become more media literate as it is an uncomfortable process, compared to acting upon one's own biases. He argues that to increase media literacy people need to become aware of their own biases and the biases in their feeds created by algorithms. To develop more subjective perspectives on media literacy, self-perceived media literacy (SPML) is an advantageous entry-point because there is some previous research on the concept (Vraga et al. 2015; Tully & Vraga 2018; Miller et al. 2024; Su et al. 2022; Borah & Lorenzano 2023; Borah et al. 2022).

While there is much research on media literacy in general and some on self-perceived media literacy, more knowledge is needed on how these self-perceptions correspond with one of the potential desired outcomes of media literacy, namely being correctly informed. Little research can also be found about the antecedents of these self-perceptions; what makes someone perceive themselves as media literate or if and how this perception matters. However, there are a few different ways in which SPML could theoretically matter for information processing and through which it may affect

misperceptions. Education is established to be highly predictive of political knowledge (Barabas 2014:842). A person with high education may be politically informed and have faith in their abilities to tell true and false apart, simply due to the knowledge they possess about the political world. This does not have to mean that they are highly media literate but they are likely provided with opportunities to develop critical thinking through school, possibly creating efficacy in critical thinking in other areas. An alternative scenario is that SPML is instead related to being misinformed. Imagine for example a person who is confident in the belief that mainstream media is not trustworthy. Instead of news media, they turn to their Facebook feed, where they are fed false anti-elitist information that paints legacy media in a bad light. This person considers himself media literate because he can detect and avoid what he perceives as false information by the news media. At the same time, their source of knowledge leads them to hold misperceptions about society. This is a hypothetical example of a type of metacognitive deficiency where a lack of knowledge in an area makes someone overestimate their abilities because they do not comprehend what being capable in the area entails. Krueger & Dunning (1999) tested the occurrence of such effects over several different areas in a classic study and found consistently that those in the lower tier to a larger extent highly overestimated their abilities. This is called the Dunning-Kruger Effect.

There is also a possibility that both of the scenarios presented above are true, where both highly knowledgeable people and misinformed people consider themselves media literate. Or that there is no relationship at all. Or, based on consumption driven by personal motivation, different topics may be more or less affected by self-perceived media literacy as they could tap more or less into biases and preconceptions. Due to the lack of research in this specific area, we can only speculate. There is thus a gap in research on the overlap between media literacy and cognitive, emotional and psychosocial processes. Or, as Journell (2024:35) puts it: *“Until we shift the focus of our media literacy efforts to include an introspective look at why individuals are so inclined to believe misinformation, we have little chance of having a meaningful impact on the civic crisis that fake news poses. Attention to psychosocial processes cannot, and should not, replace the valuable approaches to media literacy that have already been established in the literature.”* In light of this, there is a need for further investigation of the subjective approaches of media literacy. Therefore, the key research problem addressed in this thesis is what the antecedents of SPML are and how SPML relates to misperceptions, specifically in a Swedish context. Because there is little previous research within this area and most of what has previously been done is in a US context, it is interesting to research SPML in a different country where both the political and the media landscape differs quite largely from the US. This also allows for future comparison to other national contexts. The purpose is to better understand SPML and the potential of using it to combat misperceptions. In two separate analyses, the following research questions are addressed:

RQ1: What are the antecedents of SPML?

RQ2: Does SPML have an effect on misperceptions and in what way?

RQ3: Does the occurrence of an effect of SPML on misperceptions differ depending on the topic?

To answer the first research question, theoretically motivated antecedents in the categories of demographics, politics and media were explored using hierarchical regressions. The second and third research questions were explored in a separate analysis by examining the relationship between SPML and perceptions within different topics. All variables from the previous analysis alongside SPML were regressed onto perceptions within different topics to determine both if there was any relationship despite many other explanatory factors being included and if this differs between different topics. This focus could allow for the development of media literacy by better understanding how perceptions of one's abilities relate to other perceptions and possible outcomes.

2. Theoretical Review

2.1 Democracy in a changing media environment

At the beginning of the 20th century, there were fewer legacy media broadcasters, making the options for both advertisers and consumers fewer. Information about the surrounding world was acquired by watching the news or reading the newspaper. However, with the influx of cable TV and internet use, personally curated media feeds became accessible and the role of news media changed. They no longer hold the same gatekeeping role as before (Fletcher & Young 2012:2-4, Prior 2007). Advertisers are also increasingly having to compete for the attention of media users which in turn affects the nature of media messages, as they are designed to catch the attention of potential consumers (Potter 2004:8, Fletcher & Young 2012). Many media systems, such as the US, have also been subject to privatisation and deregulation, making them entertainment-dense (Curran et al. 2009). Alongside this, online and social media has grown tremendously over the last decade, completely changing our way of interacting with media (Strömbäck et al 2022:6). This development poses three different challenges that are potentially damaging to democracy. First, media audiences become fragmented in both their opinions (Hameleers 2022:45-46) and their levels of knowledge (Prior 2007). Second, misinformation thrives and spreads quickly in a high-choice and fragmented environment, which may threaten the political debate (Hameleers 2022:1) and third, the amount of choices provided creates fatigue and superficial learning (Potter 2004; Strömbäck & Andersen 2021).

The first issue, fragmentation occurs because with the increase in supply, instead of simply consuming more, each person can shape their media consumption based on personal preferences (Prior 2007:95). Media is one of the most important sources of information today, meaning that it also plays an important role in how informed citizens become (Lechler & Egelhofer 2022:69-70). When the news media is saturated with more entertaining options, those who are not motivated and interested in learning about society can simply choose not to watch the news and instead use media for entertainment purposes, creating the risk of increasing knowledge gaps based on personal motivation (Prior 2007:94-95). With different demands competing for people's time, becoming informed also requires incentives, as it does not hold intrinsic value for everyone (Rab et al. 2022:131). As Prior (2007:95) writes, “...*People who like news learn more about politics in a high-choice media environment than they used to, while political knowledge drops for those who prefer entertainment*”. Further, preference-based media consumption does not only create a divide between those who are more or less interested in politics but it also, through algorithm-curated social media feeds, fuels exposure to one-sided information and isolates people in a so-called “echo chambers” where one-sided information dominates (Hameleers 2022:25; Benkler et al. 2018:4-5). An informed citizenry is beneficial for democracy but when personal preferences guide which

information citizens consume, providing citizens with high-qualitative information is no longer enough (Prior 2007:96).

Second, while technological developments have enabled nearly everyone to partake in public debate online and share their views more broadly than before, this availability creates issues as well (Strömbäck et al. 2022:6). The developments have provided an environment in which mis- and disinformation can easily spread and stick (Hameleers 2022:1). Hameleers (2022:1) writes that empirical evidence and expertise has increasingly become a subject of debate, where alternative truths based on emotion and gut-feeling are presented as legitimate alternatives. He also writes that this fragmented and high-choice online media environment circumvents the traditional gatekeeping role of journalists and allows for a fast-paced spread of misinformation. This misinformation may in turn tap into and strengthen the beliefs of people who distrust legacy media and cause a divide in what people believe to be factually true (Hameleers 2022:1, 11).

Finally, a risk posed by the overwhelming mass of messages encountered every day is a decrease in the quality of media consumption (Potter 2004). Already in 2004, Potter was writing about how the large amount of messages we encounter each day also leaves us passive consumers, who constantly have to ignore and filter out information to avoid fatigue. There is now a bigger amount of messages and platforms available online than ever before (Strömbäck et al. 2022:6) and Potter's (2004) ideas have therefore only become more relevant. He writes that much media consumption serves the purpose of instant gratification and with the mere mass of media messages encountered, the filtering process often has to be automatic to save cognitive resources. In passive consumption, a lack of meaning-making appears, which leads to consumers only gaining superficial knowledge about the things they are exposed to (Potter 2004). The high-choice media environment has thereby created options, such as social media, where people can take part in news but learn less compared to using more traditional media (Strömbäck & Andersen 2021). It has also been found that not only do people learn less, but consuming news in this superficial manner, often linked to social media or entertainment-oriented use, leads people to build incorrect perceptions of themselves as more informed than they are (Schäfer 2020; Leonhard et al. 2020). To summarise, although this increased access to information means an increase in access to true and qualitative information and learning opportunities, it also has several negative sides to it.

2.2 Opportunities, motivations and abilities

Although there are both positive and negative sides to the change in opportunities, information processing does not only depend on opportunities, or which information is available. As aforementioned, when everyone can choose which media they want to consume, motivations and abilities that influence these choices also need to be considered (Strömbäck et al. 2022:54-57). The OMA model provides a framework that accounts for a broader spectrum of influences and highlights

the interplay between opportunities, motivations and abilities. According to Prior (2007:28-29) within this framework, opportunities refer to the availability of political information and thus largely depends on the media environment. Motivations refer to the personal interest in absorbing information within different subjects and abilities refer to the skills and cognitive processes required to do so. Abilities can be physical or innate, such as the ability to see and thereby read certain texts. They can also be learnt behaviours, such as verbal proficiency and political knowledge (Prior 2007:28-29).

The increase in opportunities means that motivations and abilities become more important and when considering how a citizenry becomes informed or not, these three aspects play an important role (Prior 2007:94-95). A clear example lies in the difference between being uninformed and holding misperceptions. Lindgren et al. (2022:187) write: *“In contrast to the uninformed, people holding misperceptions may very well be informed. However, the information they consumed was either flawed, or they drew incorrect inferences from it – something which is often attributed to cognitive biases, “directional motivations” to protect core values and existing beliefs, and knowledge resistance”*. Thus, simply uninformed people are more likely to become more knowledgeable if they are provided with correct information, as their faulty knowledge is often due to a lack of opportunities whereas those who hold misperceptions will be guided by directional motivations to a larger extent and therefore resist information that contradicts their beliefs (Strömbäck et al. 2022:12).

There are also different kinds of motivations. Accuracy goals refer to reasoning motivated by coming to accurate conclusions by carefully weighing different information (Taber & Lodge 2012). Directional motivations, as they are called here, are referred to by Taber & Lodge (2012) as partisan motivations. They are a more affective and automatic process where preconceptions guide reasoning and the goal is defending a prior conclusion. However, even when prompted to be objective, it is generally hard to fully disengage preconceptions, making adherence to accuracy goals difficult (Taber & Lodge 2012).

2.3 The challenges of misperceptions

If we do not consider the influence of motivations in misperceptions and instead treat them as a result of being uninformed, we are unlikely to understand and influence them. Thus, just as there are different types of motivated reasoning, there are different types of faulty perceptions depending on the process through which these are conceived and the level of emotional attachment people have to these beliefs (Strömbäck et al. 2022:187-188, Rekker 2022:226). Misperceptions are by nature often political or partisan (Hameleers 2022:18). This also makes misperceptions highly relevant in the discussion of democracy and the knowledge levels of citizens, as it may be more difficult to counteract compared to an uninformed citizenry (Lindgren et al 2022:188-192). Lindgren et al. (2022) write that some factual knowledge can with higher certainty be attributed to being uninformed/informed than to being misinformed, for example, the names of politicians. This is normally not a politically

contested question and thus the beliefs about it should not be subject to directional goals to a large extent. It however becomes more difficult when dealing with highly politicised questions such as immigration, where incorrect perceptions may be due to the respondent being either uninformed or misinformed. Therefore, it has become common to identify misperceptions through questions about certainty (Lindgren et al. 2022:188-192).

Misperceptions pose a challenge because a fundamental premise for democratic discussion to be possible is, at least to some extent, a basic agreement on facts (Rekker 2022). Suppose two people do not agree on whether a pot of paint is blue or yellow. In that case, the discussion about which colour to add to make green will not be productive as they perceive the fundamental facts of the situation differently. The same goes for issues such as climate change. If some believe it is caused by human activity and others do not, despite what research has found, the arrays of solutions differ greatly between the two camps. However, in a democracy, it is neither possible nor desirable to force everyone to adhere to the same worldview. Some suggest that to combat misperceptions and their potential complications for democratic discussion, a possible tool is teaching and empowering individuals to better navigate information online (Journell 2024:6; Miller et al. 2024). With the increased responsibility upon individuals to navigate media, the presence of opportunities gives individual abilities and motivation more influence over what we consume (Prior 2007:94-95). Therefore, media literacy, which is often seen as a tool to protect against negative media effects (Potter 2022), may help decrease the risks of mis- and disinformation by mitigating self-reflection and learning. The field of media literacy is however a somewhat difficult one to navigate which in turn poses challenges (Potter 2022).

2.4 The issue with media literacy

Media literacy is difficult to define. It seems as though the growing body of research, which should inform media literacy efforts, has not led to an accumulation that creates or builds on consensus. Instead more diverse understandings of the concept are created with detailed definitions that widely differ from paper to paper (Potter 2022). Potter (2022:681) has analysed common themes within different media literacy definitions and found that it is often seen as a tool to protect against negative media effects, that it is multidimensional and something that needs to be developed. The specifics, like how it is developed and what the different dimensions entail however differ from definition to definition (Potter 2022:681). This may partly be because when media literacy is viewed from an objective perspective, focused on skills and knowledge, the current media environment then creates a massive challenge in determining which abilities are important (Schofield et al. 2023:133). This is due to two different reasons. First, the media environment is constantly changing (Schofield et al. 2023). For example, AI-generated content is growing online and an updated framework for testing media literacy abilities could thus have to include usage and understanding of AI services. Second, several

authors also underline the importance of contextual issues, such as different media systems and differences between the experiences of different age groups (Schofield 2023:133; Wyuckens 2022:176).

Another issue with the media literacy field is that although the objective perspective is relevant and skills are undoubtedly important for the development of media literacy, processing information is a complicated process, subject to social and emotional influence (Journell 2024; Sude & Knobloch-Westerwick 2022). As previously mentioned, if we overlook the influence of motivation in processes of media interaction, an important perspective is lost. Media literacy efforts have focused much on teaching students the skills and knowledge necessary to identify false information (Journell 2024:27). These types of initiatives may combat an uninformed citizenry but when people hold misperceptions they are also likely guided by directional biases and will therefore not be persuaded simply by information countering their perceptions (Lindgren et al. 2022:177). Therefore, several scholars have argued for the need for a change in the media literacy field, that includes a broader understanding of the subjective experience of media literacy (Potter 2004b; Journell 2024).

2.5 Reframing media literacy

Although there is some research on subjective perspectives of media literacy, the field, as previously mentioned, largely focuses on more objective approaches, where skills are central (Journell 2024:29). This also means many definitions exclude the subjective understanding of media literacy. Schoefield et al. (2023:134) argue that several measures of media literacy should be implemented at the same time to create a measure with high validity. They suggest combining measures of proficiency, through testing for example reflective skills, knowledge, through asking fact-questions, and self-reports of media literacy. However, because this is methodologically difficult, Schoefield et al. (2023:134) also suggest that scholars can instead focus on delimited aspects of the concept as a way of dealing with diverging definitions. Potter (2022) also underlines the importance of giving a clear and precise account of how media literacy is understood and to explain any alterations made to already existing definitions. A fully subjective approach, such as self-perceived media literacy is thus useful as long as scholars are explicit in what they are measuring and do not claim to have captured media literacy as a whole. Therefore, a more explicit discussion now follows with a suggestion of how media literacy can be operationalised to allow for a subjective perspective, and more importantly how it is understood in this thesis.

A broad umbrella definition that allows for subjective perspectives and that differs from many other media literacy definitions is one that Potter (2004a:58) uses in his cognitive theory of media literacy: " *The set of perspectives from which we expose ourselves to the media and interpret the meaning of the messages we encounter*". Compared to other definitions, Potter does not define it as a skill set, or as certain knowledge but rather as a state. Media literacy is in this case understood as an

ever-developing process rather than something fixed and the theory focuses on the empowerment of the individual to learn and be motivated. This type of definition is quite broad and general, which allows for creativity, exploration and interdisciplinary contribution. It may however also overturn the ability to develop shared knowledge and risks dividing the field into groups of researchers who have different opinions on what media literacy is, making cooperation over different paradigms of research difficult in the long run (Potter 2022:39). Another general definition provided by Potter (2022:37) quite a few years later is “*Media literacy is a tool that people can use to improve on their experiences with the media.*” Although, he writes that this broad of definition is of little explanatory value and becomes difficult to separate from other similar concepts. On the other hand, a broad definition provides the ability to work with different delimited aspects and can be useful as long as there is transparency and an understanding of the need for explicit operationalisation.

I would therefore suggest an optional definition based on the ones mentioned so far. **Media literacy is a set of skills and perspectives from which people can draw experiences to improve their interpretation of and interaction with media when adhering to an accuracy goal.** While presenting yet another definition of media literacy may appear problematic, this specific definition does not necessarily exclude previous conceptualisations as it is still quite broad. This definition is also adapted to include subjective media literacy perspectives without discarding the importance of more objective skill sets. Using the word interaction also allows for the inclusion of both production and consumption and including the words perspectives and skills entails both the motivations and the abilities that influence media use. This definition opens the possibility that people can be aware of perspectives without choosing to draw experiences from them, shifting focus away from the assumption that knowledge automatically improves media literacy. Using the word interpretation refers not only to the understanding of the content of messages but also to the context in which they exist. Further, this definition assumes a directional goal, in difference to the definition by Potter (2004a). Improving the interaction is based on an accuracy goal. Potter (2004a) emphasises empowerment of the individual as an important goal of media literacy. Each person should be empowered to develop the skills and knowledge structures necessary for becoming more media literate to act in line with personal goals. He adds that some societal standards may help guide the individual in normative questions about media consumption, but ultimately, the individual should be guided by their own goals (Potter 2004a:101). While individuals can not be forced to adapt to the goals that most favour democracy, operating outside an explicit democratic normative ideal when dealing with questions of mis- and disinformation may be problematic as empowerment of the individual may then entail empowerment of for example misperceptions or anti-democratic beliefs. The operational definition in this thesis will thus be as suggested above. This operationalisation enables the inclusion of SPML, which is one of the few subjective operationalisations that have occurred when reviewing media literacy research. SPML, which is the central subjective concept in this thesis, focuses on how people perceive their abilities in media literacy (Vraga et al. 2015).

2.6 Explaining self-perceived media literacy

Although abilities and self-perceived abilities may be related, they are two different things (Vraga et al. 2015). This is also in part what enables a subjective/objective divide. There are only a few prominent articles on SPML and it is clear that while some scholars (Potter 2004b; Journell 2024) are arguing for a more comprehensive perspective on media literacy, the field of SPML is still young. The key findings in the area so far are, in broad strokes, as follows. First, media literacy is not necessarily related to SPML (Vraga et al. 2015), however, it is possible to use media literacy messages to boost SPML (Tully & Vraga 2018). Tully & Vraga (2018:780) tested the relationship between news media literacy (NML, an objective measure) SPML and political self-efficacy, which is the confidence in one's own ability to participate in politics. They write *“First, all of the NML messages were successful in boosting individuals’ confidence in their ability to evaluate news messages, and this heightened SPML was associated with people feeling more efficacious about participating in politics (IPE) and discovering the truth about political issues (EPE). Therefore, the effects of NML messages are not limited to an individual’s relationship to the news, but may extend to encouraging people to feel better equipped to participate in the political process.”* There is thus a chance that SPML and political efficacy are also related in some way (Tully & Vraga 2018).

When it comes to SPML and mis- and disinformation, there are a few studies but SPML has mainly been used as a moderating variable in various studies. Some support has been found for a relationship between higher SPML and engagement with disinformation, specifically about COVID-19 (Miller et al. 2024:13). However, it also seems that SPML may moderate the relationship between misperceptions about the COVID-19 virus and exposure to homogenous online discussion, which would normally lead to increased misperceptions (Su et al. 2022). Further, Borah and Lorenzano (2023:9) found that SPML is positively associated with rumour refutation, but only alongside higher levels of reflective judgement. Lastly, a moderating effect of higher SPML has also been found on the relationship between incidental news exposure and COVID-19 misperceptions (Borah et al. 2022). So far, we thus know little about what causes different levels of SPML and little can be said about the effects of it. It does however sometimes seem to have a moderating effect on the formation of misperceptions when people are exposed to homogenous or false information.

The lack of congruent research results within SPML research prompts consulting adjacent areas to theoretically argue for the importance and possible mechanisms of SPML. One strong argument for the importance of SPML is that perceptions matter. In a well-cited work, Walter Lipman (2004) writes *“...whatever we believe to be a true picture, we treat as if it were the environment itself”*. Meaning, perceptions guide our actions, irrespectively of how representative they are of the real world. Although perceptions are seldom representative of actual abilities (Dufner et al. 2019), this may be exactly where their importance lies in the case of media literacy.

While there is some support for the lack of congruence between SPML and actual media literacy (Vraga et al. 2015), there is more general research on self-perceptions that falls in line with the notion that they are not necessarily accurate (Dufner et al. 2019; Krueger, Dunning 1999). For example, people tend to hold unrealistically positive self-views, which is known as self-enhancement. At the same time, there is also a tendency to underestimate to which degree one uses self-enhancement, creating an illusory self-perception (Dufner et al. 2019). Self-enhancement is often measured by comparing self-reports to objective measures similar to how Tully et al. (2015) compared SPML to knowledge and ability measures. Dufner et al. (2019) write in a meta review that extensive support has been found for a positive relationship between self-enhancement and personal adjustment (subjective well-being and mental health). This relationship seems to hold both long-term and short-term and is both self-reported and reported by outside informants. This implies it may be emotionally rewarding to overestimate one's abilities or that people with higher personal adjustment are less self-aware (Dufner et al. 2019:65).

Another theory that strengthens the notion that self-perceptions are misrepresentative of the real world is the Dunning-Krueger effect. This effect is when people with little knowledge in a subject overestimate their abilities within that subject, because knowing little about a subject also means knowing little about what it means to be good at it (Krueger, Dunning 1999). One example is a study by Motta et al. (2018) where over a third of respondents believed to have as much or more knowledge than doctors and scientists about the causes of autism. This type of overconfidence was however found to be most common among those least knowledgeable and most misinformed about the subject. Thus, when hypothetically applying this principle to SPML, those who know least about media may be those who overestimate their abilities most. Interestingly, and possibly obviously, this also means that to correctly perceive your abilities, you need to be knowledgeable about media literacy. A possible scenario is then that those who become misinformed due to poor media literacy skills may also be those who report high SPML. Therefore, it is also possible that those who are skilled are aware of what it means to be media literate and either know that they are well equipped or they become aware of how much there is to know and therefore estimate their abilities lower. Either way, it seems some metacognitive abilities are necessary for the recognition of capacity (Dunning & Kruger 1999). More research is however needed on the potential occurrence of self-enhancement in this context.

2.7 Theorising antecedents

The possibility of SPML and more objective media literacy being related should not be fully discarded but if the case is that SPML is not simply informed by the level of actual media literacy abilities, as the study by Vraga et al. (2015) suggests, it is interesting to understand what else may influence it. For example, there may be factors that affect both objective media literacy and SPML separately. Because there is barely any previous research on this, some theories that are commonly

used to explain motivations in information processing will instead guide which antecedents are relevant to test against SPML.

First, considering some demographic aspects, age, sex and education are relevant to include in the analysis. Due to different age groups within the population growing up in largely different media environments, it is likely they also experience media differently. This is, according to Schofield et al. (2023:133) a concern within media literacy research because it hinders the generalisability of which objective media skills are most important. The skills required to be media literate and likely to also feel equipped to handle media vary largely between different age groups (Schofield 2023:133). Compare for example an adolescent girl and her grandfather's media environments. Can they be assumed to use the same media outlets, learn the same things and require the same skills? Do they experience the same level of agency in different media situations?

Further, a large portion of media literacy research is related to education (Kutlu-Abu & Arslan 2023). People who went to school 30 years ago have likely not taken part of the resulting media literacy educational methods and initiatives developed to the same extent as people currently undergoing education. This also underlines the relevance of analysing the relationship between SMPL and education. Controlling for gender is interesting because previous media literacy research has shown inconsistent results pointing to both men and women being more media literate (Mehmet & Mehmet 2024:17). A gender difference in SPML could either be indicative of an actual difference in media literacy or a larger occurrence of self-enhancement in either group.

Another process that may influence the formation of SPML, which is extensively researched, is motivated reasoning. It is a form of directional bias where information processing is guided by preconceptions (Sude & Knobloch-Westerwick 2022:88). Directional biases, such as motivated reasoning can be dependent on from which source the information in question comes (Sude & Knobloch-Westerwick 2022:90-91). Sude and Knobloch-Westerwick (2022:90-91) write that whether the source is neutral, congruent or incongruent with people's attitudes matters for how persuaded they are by the information. When we are exposed to evidence that contradicts our prior beliefs about something, cognitive dissonance occurs. This is uncomfortable and it is instead easier to avoid contradicting evidence or to counter-argue it (Sude & Knobloch-Westerwick 2022:90-91). When applied to SPML, motivated reasoning could potentially play a part in how information from trustworthy sources is judged and in turn how informed people become and perceive themselves. The potential overestimation of one's media literacy abilities could be related to distrust of legacy media. For example, according to Hameleers (2022:2), populism tends to promote a picture where legacy media is made into the enemy, and as the ones who spread lies. In turn, people are presented with "alternative truths" that better match their personal experiences and preconceptions (Hameleers 2022:2). As previously stated, people can be (and feel) informed although the information they have consumed is flawed or untrue (Lindgren et al. 2022:187). If people then consider alternative sources to be more trustworthy and as a result of this feel informed, a false sense of being media literate could

appear. Therefore, general media trust is an interesting antecedent to investigate. Further, as previously mentioned, the sources of news may also affect both how informed people become (Strömbäck & Andersen 2021) and how informed they perceive themselves (Schäfer 2020; Leonhard et al. 2020). Social media news consumption for example creates a more superficial understanding of news and an incorrect perception of one's level of knowledge (Strömbäck & Andersen 2021; Schäfer 2020; Leonhard et al. 2020). It is not unlikely that the self-perception of being informed functions similarly to the self-perception of media literacy, which more touches on the process of becoming informed. Therefore, media use may matter for SPML and several different types of media use are included in the analysis, including alternative media. However, it is important to remember that different motivations in information-seeking also interact with each other. An interest in politics may increase the consumption of non-partisan news, even though someone has a preference for partisan news (Strömbäck et al. 2022:58-59).

Through similar processes as media trust, identity and social factors may also be relevant antecedents of SPML. According to Rab et al. (2022), people tend to favour the in-group and rely on cues from it when making judgements. This is not necessarily problematic because people often share basic values with for example their partisan in-group and if little information is available when making a judgement, relying on partisan cues may be the best option (Rabb et al. 2022). Thus, on a group level, the judgement of which sources are reliable and which preconceptions information has to be integrated into can be shared (Kossowska et al. 2022). According to Kossowska et al. 2022, being part of a group is sometimes a stronger influence than the goal of being correct because group belonging strengthens social identity and allows people to avoid social harm. Therefore, exploring a political group belonging, namely ideology as a possible antecedent to SPML is interesting as it may in part inform one's self-perception in relation to media. A pattern in the relationship between ideology and SPML may also demonstrate norms within different ideological groups.

A more specific example where the political in-group can inform the relationship to media lies is the levels of trust towards legacy media in Sweden. Generally, there is high media trust in Sweden but one group of voters sticks out (Andersson & Ghersetti 2022:37-38). Although public service media in Sweden has time and again been found to not be systematically politically biased (Johansson 2022:14), voters of the far-right Sweden Democrats are more sceptical towards it compared to voters of other parties (Jakobsson et al. 2022:102-104). Public service has been shown to have a good impact on democracy and people living in countries where public service has a high presence are more informed about politics and society than those living in more commercialised media environments (Strömbäck & Shehata 2022:56-58). However, right-wing citizens hold a lower trust in public service media (and legacy media in general) in Sweden (Jakobsson et al. 2022). This has a few implications for SPML and misperceptions. First, this may mean that right-wing citizens in Sweden and particularly voters of the Sweden Democrats, are affected by motivated reasoning due to their critical attitude towards Public Service and are thereby less likely to believe in the messages they

encounter from that source. If they still consider themselves media literate, although their perception of the trustworthiness of public service does not match scientific consensus, this could indicate misperceptions of their own media literacy and they may even be subject to the Dunning-Krueger effect.

If we turn our attention toward more straightforward processes, political knowledge and political interest are other possible antecedents. If these are related to SPML it could simply demonstrate that individuals with a higher degree of general political sophistication also have higher SPML. There is a well-established relationship between education and political knowledge, which has also been related to the OMA model (Barabas 2014). Education provides opportunities for learning about politics, it allows students to develop abilities necessary for acquiring knowledge and through socialisation, motivates students to learn and engage in the political world (Barabas 2014:842). These opportunities, motivations and abilities could potentially also boost SPML. The questions used in the current study also pertain to knowledge which has been found to have an association to education. Political knowledge can be understood as something multidimensional, and the questions used here (see section 3.2.2 table 2) fall into a category of static-general facts, as they pertain to the institutions, “the players of the game”, instead of specific policies and to more static facts rather than current developments. Barabas (2014) found support for the static-general type of knowledge being associated with education and the alternative, asking about current events and policies, would require a certain dependence on learning the facts from media. Thus, this knowledge may also be highly related to education levels which may also increase SPML.

2.8 Theorising consequences

Because the aim of this thesis is to explore SPML and the potential implications for combatting misperceptions, two different possible consequences of SPML are of high interest. First, if SPML predicts lower levels of misperceptions, targeting efficacy within media use may be a potential aid in combating misperceptions. Second, if SPML predicts higher levels of misperceptions, it would prompt more research on why. If none of these relationships occur, it may very well be that other theories better capture the processes in information processing. Thus, one of the most important questions about the consequences of SPML is how it relates to misperceptions.

Although some research has shown a moderating effect of SPML on misperceptions (Su et al. 2022; Borah et al. 2022), little is known about how SPML relates to different information-searching behaviours. However, broadly, self-perceptions are related to something called epistemic motivation. Epistemic motivation, according to Kossowska et al. (2022), has to do with how confident someone feels in their knowledge, and thereby how motivated they are to search for information. This motivation can be caused by uncertainty which in turn can lead to information searching. People with lower confidence in their abilities to achieve certainty also tend to be less close-minded, meaning they

engage in more effective information searching (Kossowska et al. 2022). If a person is very certain in their perceptions, they may instead disregard or fully avoid new information that contradicts them. People who rate their SPML high can therefore be assumed to be confident in their abilities to achieve certainty and thus less open-minded. Either, this confidence comes from being equipped with tools for achieving certainty, or alternatively they misperceive their abilities. Misperceptions are often operationalised as faulty beliefs held with certainty, to distinguish them from people who are uninformed or making guesses (Vraga & Bode 2020:136). Thus, people who hold misperceptions according to this operationalisation are confident and their epistemic motivation and need for information searching may therefore be low. This speaks for the possibility of misinformed people rating their SPML higher. On the other hand, an argument for the link between SPML and accurate perceptions put forth by previous scholars (Borah & Lorenzano, 2023:2) is that SPML may function similarly to self-efficacy, which has been shown to enhance accuracy motivations. Meaning, feeling media literate may lead one to be more influenced by accuracy goals. Previous research has also found a moderating effect where SPML leads to people being less affected by different types of news exposure that would normally increase misperceptions (Borah et al. 2022; Su et al. 2022). Borah et al. (2022:129) write *“Fortunately, our study reveals a protective effect of SPML in the current context. That is, individuals with higher self-perceived media literacy are less likely to internalize misinformation”*.

The two possible scenarios do not necessarily exclude each other. People who report higher SPML could be both more and less likely to become misinformed if there is a nonlinear relationship between SPML and misperceptions. SPML may, as mentioned, have to do with epistemic motivation for both correctly informed and misinformed people. Further, there is the possibility that the influence of SPML is topic-dependent. Previous studies have tested the effects of SPML within specific subjects, such as COVID-19 (Su et al 2022). While political knowledge that is static and does not change much over time is more dependent on education, questions that fall into the dimension referred to as “surveillance”, and pertain to current events are more dependent on media consumption (Barabas et al. 2014). Meaning, subjects where questions are of less permanent character and that become relevant at specific times may also be more affected by any consequences that SPML has, as they are more media dependent. While the misperception indexes used in the current study (further described in chapter 6.1) are on different topics, they all pertain to politicised questions and are therefore likely to lean more toward surveillance.

2.9 Summary

To summarise, the increase of opportunities in the media landscape has led to more accessibility in creating and consuming both high-quality and mis- and disinformation (Strömbäck et.al 2022:57). It has also shifted the responsibility onto the individual to make responsible choices to

become informed (Prior 2007, Strömbäck et al. 2022:51,58). Therefore, media literacy has become increasingly important and although there are efforts and research on media literacy, it is largely missing a subjective perspective (Journell 2024:29). We therefore know little about what makes someone feel media literate or what the effects of feeling media literate are, other than that it may moderate the effect of false information on misperceptions (Borah et al. 2022; Su et al. 2022). Other theories and media research, such as the OMA model and directional biases can in part inform theoretically how self-perceptions function more broadly but looking at the relationship between SPML and misperceptions, and exploring possible antecedents for SPML begins to shed light on a largely unexplored research gap.

3. Material and method

3.1 Structure of analyses

To understand SPML and how it could potentially work for combatting misperceptions, two separate analyses were conducted. The first analysis tests the above discussed theoretically motivated antecedents' relationship to SPML, to answer research question one:

What are the antecedents of SPML?

The second analysis answers the two remaining research questions:

Does SPML have an effect on misperceptions and in what way?

Does the occurrence of an effect of SPML on misperceptions differ depending on the topic?

The two separate analyses both used the same operationalisation of SPML, control variables and the same material. Their analytical strategies and results are presented separately and all results are discussed in the final discussion.

3.2 Material

The material was collected by the Laboratory of Opinion Research (LORE), which is part of the SOM Institute at Gothenburg University for the research program Knowledge Resistance. The data was collected through online questionnaires, using their citizen panel, where respondents were collected using both non-probability and probability methods. Respondents were Swedish citizens from the age of 18 and older. The panel data has been collected in four waves, starting in 2020 with one year in between waves. The questions have varied somewhat during the four waves and for example, questions about SPML were not included in the first wave (Martinsson et al. 2022). In this thesis, wave number one was used for antecedents, wave two for the SPML variable and wave three for misperception variables to create a chronologic order of the variables. To be able to establish a causal effect, the cause has to precede the effect (Duckworth et.al 2010). By using three different consecutive waves, the antecedents precede SPML and SPML precedes the misperceptions, fulfilling the time-order demand.

The final population used consisted only of those who participated in all three waves used and responded to all items included in each analysis, making (n=3355) for analysis 1 and (n= 3315) for analysis 2. The missing responses in media use were coded into the media variables and thereby included. This is further discussed with the operationalisation of the variables. A filter was created, which filtered out all other missing responses from all other variables. The independent variables are grouped into the categories: demographic, political and media variables, (see Table 1). They are presented below in the same order as they are included in the regression models, starting with the demographic variables, which were included as control variables.

Table 1. All antecedent variables

Control variables	Age Education Gender
Political variables	Political interest Ideology Political knowledge
Media variables	Media trust, Traditional media use Social media news exposure Left alternative media use Right alternative media use

All variables included as antecedents to SPML in analysis 1 and as control variables in analysis 2.

3.2.1 Control variables

Three control variables were used in both analyses: education, sex and age. The education variable was measured by asking “*What school education do you have? Choose the option that you feel best describes your educational level.*” With the response options originally ranging from (1) Not completed elementary school to (9) PhD degree. Because education was also treated as a dummy variable to enable comparison between different education levels, the responses were recoded into fewer categories to make comparison easier and more readable. Using fewer categories also made each group larger, making the results somewhat less precise but also more generalizable. Education was thus recoded into 4 different categories ranging from “not finished high school”(1) to “3 years or more university education”(4).

Age is a variable that changed slightly over the waves. At the first point of data collection during wave 1, all respondents were 18 or older. Because the data is panel data, it measures the same individuals at different points in time. This means that because the respondent's age, the lowest age in the sample increased with one year each wave. The age variable was also in categories, ranging from “under 30” (1) to “70 or above” (6). Age was treated as a dummy variable, where the youngest was used as a reference. Finally, the control variable sex only had two response options, man and woman and woman was used as the reference category.

3.2.2 Political antecedents

The political variables included as antecedents are political interest, political knowledge and left/right placement, referred to as ideology. For political interest ($M=.738$ $SD=.229/M=.738$ $SD=.230$)¹ the question: “Generally speaking, how interested are you in politics?” was asked, with a four-point response scale including the options (1) Very interested, (2) Quite interested, (3) Not

¹ (Analysis 1/analysis 2) The numbers differ due to the first wave not filtering out missing respondents on misperception indexes. The same applies to all indexes with two means & standard deviations.

particularly interested, (4) Not at all interested. This variable was reversed so lower numbers indicate less political interest, making the results more readable. It was then normalised to range from 0-1 and included as an independent variable in both analyses.

Left/right placement, or ideology (M=2.949 SD=1.065/ M=2.961 SD=1.056) was measured on a ten-point scale. The question asked was: “In politics, people sometimes talk of “left” and “right”. Where would you place yourself on this scale, where 0 means the left and 10 means the right?”. The index was recoded to range from 1-5, where lower numbers meant more extreme left-placement and higher indicated more extreme right-placement, just as the original question. When recoding, the values 4, 5 and 6 became 3, making a broad reference category in the middle. This made a comparison between the middle and the more extreme values easier. Again, using a dummy variable with a larger amount of values allows for more precision but this recode allows for better readability and still captures political extremity and a comparison between the different sides. There was no “I don’t know option” for this item, meaning some may also have placed themselves at random.

Political knowledge was measured through an index, in which the questions ask about the duties of different institutions. This should make them less likely to tap into political biases (Lindgren et al. 2023:188). Political knowledge was measured by asking factual questions with five response options, where one was correct, four incorrect and one was “don’t know” (see table 2). The “don’t know” options were filtered out. The items were coded into an additive index (M=489 SD.159/M=.488 SD=.158) normalised to range from 0 to 1 with 1 being the highest possible political knowledge. Thus, all correct answers would be equal to 1.

Table 2. Political knowledge index

What institution has the right to propose new legislation in the EU?	(1) The council of the European Union, (2) The EU parliament, (3) The EU Commission , (4) Each member state, (5) Don’t know
What institution enacts the laws of Sweden?	(1) The government, (2) The parliament , (3) The Supreme Court, (4) The Council on Legislation, (5) Don’t know
Which political level has the primary responsibility for health care?	(1) The state, (2) Administrative boards, (3) County councils , (4) The local municipalities, (5) Don’t know
Which political level has the primary responsibility for the schools?	(1) The state, (2) Administrative boards, (3) County councils, (4) The local municipalities , (5) Don’t know

Correct answers are marked in bold writing. Questions and answers used in the political knowledge index, retrieved from the LORE online survey data (Martinsson et al. 2022)

3.2.3 Media trust

General media trust was measured by asking the question “Generally speaking, to what extent do you trust information from the news media in Sweden?”. The response options ranged from (1) Do not trust at all to (7) Trust completely. This index was then normalised into a 0-1 scale with higher values indicating higher trust ($M=.636$ $SD=.218$ / $M=.636$ $SD=.218$). General media trust was used as an independent variable in both analyses.

3.2.4 Traditional media

Traditional media use was originally based on the self-reported use of eight different traditional media outlets in Sweden. The question asked was “In a typical week, how often do you use the following news media, in their traditional formats or online?” with the response options “(1) 7 days a week, (2) 6 days a week, (3) 5 days a week, (4) 4 days a week, (5) 3 days a week, (6) 2 days a week, (7) 1 day a week, (8) More seldom” The following outlets were then listed: Aftonbladet, Expressen, Dagens Nyheter, Svenska dagbladet, Rapport i Svt, Aktuellt i Svt, Nyheterna i TV4, and Ekonyheterna i Sveriges radio. Creating an index for all types of traditional media use resulted in a low internal consistency ($\alpha=.610$). Thus, several indexes were instead created for different categories of media. To further examine the suitability of different indexes and identify underlying factors affecting the different items, a factor analysis was conducted.

There were correlations between the variables, making factor analysis relevant. The KMO-value was above .5 and the Bartlett test of sphericity showed a significance of $p < .000$, this indicates the variables are suited for exploratory factor analysis. An oblique rotation (promax) was used, as this is typically recommended (Watkins 2018). For the full results table of the factor analysis, see appendix 1. The analysis left three different factors, each containing two different media outlets. Factor 1 consisted of Aktuellt i SVT and Nyheterna i TV4, and was thus coded into an index called TV news. Factor two consisted of Aftonbladet and Expressen, which are both tabloids and were coded into a Tabloid news index. Third, factor 3 consisted of Dagens Nyheter and Svenska Dagbladet, which are both morning papers, creating a third index called Morning papers. Thus, traditional media use was recoded into three different variables. The alpha scores were however still low, $\alpha=.669$ for TV news, $\alpha=.407$ for Daily newspapers and $\alpha=.650$ for tabloids. This may be caused by the low number of items remaining and the fact that people may not use several news outlets of the same kind frequently. The results of the EFA suggest the removal of Ekonyheterna, which can also be theoretically motivated as Ekonyheterna is the only radio option. Rapport was also removed due to low communality. The groupings suggested are divided based on format or type of outlet and will thus be used. The final categories were recoded into three indexes and normalised ranging from 0-1, with 0 being the lowest possible use to 1 being the highest possible use. All missing values were coded as 0 because there was no “do not use option”.

3.2.5 Social media news exposure

Social media news exposure was measured by asking the question “*In a typical week, how often do you come across news or discussions about politics and society on the following social media?*” The scale ranged from Several times a day (1) to never (7). The media outlets included were Twitter, Facebook, Instagram and YouTube. When including all different types of social media news exposure, the index had an alpha of .575, prompting a factor analysis to determine if there was a better setup for a social media index. All variables were positively correlated and the Bartlett test of sphericity was significant ($p < .000$) ($KMO = 0.661$) making an exploratory factor analysis suitable. The items were however not normally distributed which is suboptimal. Only one factor was detected and all variables had a factor loading above .4, the commonality however for all except one item were lower than .5 which is not ideal either. Similar to traditional media, although not fulfilling all requirements of EFA, the social media index will be used according to the suggestions inferred from the results as it can be theoretically motivated. Although the alpha is low, it is likely that this is caused by people not using all types of social media equally as much. Instead, it seems more likely each respondent has one or a few options they report higher news exposure on than others. Thus, the final social media index consisted of Facebook, Instagram, Twitter and YouTube. The scale was normalised from 0-1, ($.252$ $SD = .201$ / $M = .344$ $SD = .182$)² with lower numbers indicating lower social media news exposure. Again, all missing values were coded as 0, because there was no “do not use option”.

3.2.6 Alternative media

Alternative media use was operationalised into two different variables, right-wing alternative media ($M = .021$ $SD = .015$ / $M = .021$ $SD = .109$) and left-wing alternative media ($M = .021$ $SD = .105$ / $M = .016$ $SD = .082$). In each category, four different media outlets were included with Arbetaren, Arbetet, ETC AND Expo in the left-wing category and Fria Tider, Samhällsnytt, Nyheter Idag and Ledarsidorna in the right-wing category. The question and response options were the same as for traditional media, except for which media outlets were listed.

Here, in contrast to the traditional media use, there is a clearer underlying ideological influence, making the internal consistency of the indexes higher (left-wing $\alpha = .83$, right-wing $\alpha = .89$). The alternative media variable did not include a response option where respondents were allowed to report never using the specific outlets and the lowest option was “more seldom” than the previous option “1 day a week”. Therefore, all missing values were recoded into the lowest response option, meaning the missing responses became valid responses at the lowest end of the scale. Finally, the indexes were normalised to range from 0-1, with lower values indicating less alternative media use.

² (Analysis 1/analysis 2) The numbers differ due to the first wave not filtering out missing respondents on misperception indexes.

3.2.7 Self-perceived media literacy

SPML was operationalised in the same way for both analyses using responses collected in the second wave of the panel survey. The questions are subjective estimates of knowledge levels and confidence (see Table 3). This specific index focuses on some delimited aspects of SPML, namely self-perceived abilities in searching for information and judging the level of truth in news.

Table 3. Self Perceived Media Literacy

Media literacy 1	I have enough knowledge to separate false from accurate information about politics and society
Media literacy 2	I have enough knowledge to see through attempts to mislead with statistics
Media literacy 3	I am confident in my ability to search for the most reliable information about politics and society
Media literacy 4	I am confident in my ability to judge the quality of news

Items included in the SPML index variable. Retrieved from the LORE online survey data (Martinsson et al. 2022)

The four items were measured on a seven-point scale ranging from “do not agree at all” (1) to “agree completely” (7). The higher numbers represented high SPML for all questions. The additive index originally ranged from 4-28 but was recoded into an index that ranged from 1 being the lowest possible SPML to 5 being the highest possible ($M= 3.781$ $SD=.919/M=3.766$ $SD=.923$) with the categories “low SPML” “medium SPML and “high SPML” in between. This way, the different levels of SPML could be compared to each other in the second analysis when the variable was used as a dummy variable but SPML could still be used as the dependent variable in the first analysis. The items included have a Cronbach's alpha of .88, indicating a strong internal validity.

3.3 Analytical strategy

A series of ordinary least squares (OLS) regressions was used to test which variables are antecedents of SPML. OLS regression analysis identifies the equation which best describes the relationship between two variables by estimating the value of y (the dependent variable) as a function of x (the independent variable). OLS regressions are suitable when an exogenous relationship is assumed between a dependent and independent variable, where the dependent variable is assumed not to affect the independent (Daniels & Minot 2020). In this case, because the dependent variables are all collected a year ahead of the dependent variable, the relationship is assumed to be exogenous. The regressions were set up in a hierarchical manner, to capture which subset of factors best predict SPML. Hierarchical models test theoretical claims at several levels and allow for comparison between

the levels. This type of model thus requires grouping the variables for each step (Turner 2015). Hence, the variables were grouped by demographic, political and media variables.

4. Results: analysis of antecedents

First, to better understand SPML within the population of the survey, table number 4 demonstrates how people generally rated their own media literacy. It seems as though the respondents are quite confident in their abilities because only 7.30 per cent of respondents rated their media literacy as either low or very low (see table 4).

Table 4. descriptive statistics of SPML

SPML	Frequency	Cumulative %
Very low	57	1.70
Low	245	7.30
Medium	834	24.86
High	1502	44.77
Very high	717	21.77
Total:	3355	100

Describes the distribution of respondents on the media literacy index.

The first analysis aimed to find out what the antecedents of SPML are, by including three categories of variables, political, media and demographic in a hierarchical regression. The results show that all categories in some way explain people's levels of SPML (see Table 5, model 1-3). The largest explanatory power was however found in the political variables ($\Delta R^2=.090$ $p<.000$) with political knowledge, political interest and the category “far to the right” in ideology being associated with higher SPML on a statistically significant level. For the far right-wing group, the correlation of ideology and SPML increased both in size and significance when adding media variables to the model, meaning it likely better explained SPML than the media variables did. Further, right alternative media use and SPML were positively correlated, whereas left alternative media use was not (see table 4, model 3).

The first model (see table 5, model 1), examined how demographic factors affect SPML through a multivariate regression only including the independent variables, sex education and age. This model explained about 6 per cent (adj. $R^2=.062$) of the variance in SPML, meaning the control variables have some explanatory value. For the age variable, the reference category under 30 was used, meaning the relationship between the other categories and SPML were compared to this age.

One or several of the media variables better explained the difference in SPML compared to age, because when adding the media variables, all relationships between SPML and age became insignificant. Further, the higher the education people had, the higher they reported their SPML compared to the lowest education level because the two highest education categories were positively correlated with SPML throughout all models. Finally, men also reported their SPML higher than women throughout all models.

The political variables, ideology, political interest and political knowledge was the category that added most explanatory value to how high or low people rated their SPML. They increased the explanatory value of the model from 6 per cent to 15 per cent ($p < .000$) (see table 5 model 2). People who reported higher interest in politics and those who could answer factual political questions correctly also rated their SPML higher at a statistically significant level. Further, on the left-right ideological scale, compared to the centre category, those who reported themselves as far to the right also had higher levels of SPML throughout the last two models at a statistically significant level.

The final model (see table 5, model 3) included all variables namely, control, political and media variables. The explanatory value increased by about one and a half percentage unit to 16.4 per cent. Thus, media variables did not add as much as political variables to explain why people report higher or lower SPML. All media variables had significant and positive relationships with SPML, except for left alternative media which was not significant and TV exposure which had a negative relationship, meaning those who reported watching TV-news rated their SPML lower than others.

Table 5. Model 1-3 SPML

DV: SPML	Model 1: control variables	Model 2 Political variables	Model 3 Media variables
Age ref under 30			
30-39	.032 (SE=.074)	.063(SE=.071)	.078 (SE=.071)
40-49	.035 (SE=.071)	.090 (SE=.067)	.117 (SE=.068)
50-59	.045 (SE=.069)	.069 (SE=.066)	.120 (SE=.068)
60-69	-.036 (SE=.068)	-.034 (SE=.065)	.052 (SE=.069)
70 or older	-.183** (SE=.069)	-.237*** (SE=.065)	-.135 (SE=.070)
Sex ref: female			
Male	.291*** (SE=.031)	.201*** (SE=.031)	.211*** (SE=.031)
Education ref: not finished high school			
Finished high school	.125** (SE=.048)	.083 (SE=.045)	.082 (SE=.045)
Post high school 1-3 years	.255*** (SE=.051)	.160** (SE=.048)	.148** (SE=.048)
3 years or more at university	.463*** (SE=.049)	.331*** (SE=.047)	.298*** (SE=.048)
Ideology reference: centre			
Far to the left	-	.100 (SE=.056)	.087 (SE=.056)
Left	-	.059 (SE=.039)	.051 (SE=.040)
Right	-	.009 (SE=.039)	.027 (SE=.039)
Far to the right	-	.160* (SE=.065)	.195** (SE=.066)
Political interest	-	1.096*** (SE=.067)	.987*** (SE=.070)
Political knowledge	-	.473*** (SE=.096)	.398*** (SE=.097)
Left alt media	-	-	.172 (SE=.185)
Right alt media	-	-	.383** (SE=.141)
Papers	-	-	.190** (SE=.064)
Tabloid	-	-	.124* (SE=.049)
TV	-	-	-.167** (SE=.057)
Social media news	-	-	.303** (SE=.088)
Media trust	-	-	.251** (SE=.074)
Adj. R ²	.062	.151	.164
ΔR ²	-	.090***	.015***
ΔF	-	59.446(6,334)***	8.336(7,333)***

*=p<.05, **=p<.01 ***=p<.001. Unstandardised. Reference categories: under 30, female, not finished high school, centre. (N 3355)

To summarise, these results show that all items except age and left-wing alternative media use have some type of statistically significant relationship with SPML in the final model, meaning nearly all variables added to explaining why people rate themselves as either more or less media literate.

Each model also added significant explanatory value. The explained variance was however quite low, explaining around 16.5 per cent of the variance in SPML, indicating something else explains about 84.5 per cent. These results point to the fact that it is likely difficult to explain exactly what causes one to feel media literate or not.

5. Analysis number two: SPML and misperceptions

The results of the first analysis seem to point in several different directions, with factors such as knowledge and education indicating higher SPML along with political variables, such as ideology or trust. Based on higher education levels, political knowledge and political interest being positively predictive of SPML, people who are politically sophisticated are likely also confident in their abilities to judge the quality and truthfulness of media content. However, political extremity and alternative media use, more evidently on the right-wing side also had positive correlations with SPML. These are factors which could indicate that people who consider themselves informed could be driven by their biases towards media and political in-groups. Therefore, examining how SPML is related to correct perceptions or misperceptions can extend the understanding of its interplay with politics and knowledge processing. Separating the misperception indexes also exposes any differences between subjects that may be more or less affected by SPML depending on for example their prominence on the media agenda at the point of data collection. In the second analysis, the following two research questions are examined:

RQ2: Does SPML have an effect on misperceptions and in what way?

RQ3: Does the occurrence of an effect of SPML on misperceptions differ depending on the topic?

5.1 Operationalisation of misperceptions

Operationalising misperceptions is a challenge, in part due to the difficulty of detangling misperceptions from being uninformed. Therefore, misperception variables were chosen based on what was high on the political agenda according to Swedish citizens at the time of data collection, based on a NOVUS report with 1003 respondents. This is to increase the likelihood of the questions being subject to differences in political opinion, which may lead to motivated reasoning, and thus misperceptions rather than a result of being uninformed. Being high up on the political agenda may also increase the likelihood of people having taken part in news about the subjects in question and thereby having some perception about what is true and not. Wave 3, which is used for the misperceptions variables in this analysis, was conducted between February and March 2022. There is a NOVUS report from March 2022, according to which the most important political subjects at the time were health care, law and order, school and education and integration/immigration (NOVUS 2022). There are questions representing each of these subjects in the data but due to the questions about education being few, this topic was excluded. Further, due to the prevalence of vaccine questions during 2022 because of the COVID-19 pandemic, questions on vaccines were included to represent the topic of health care.

Table 6. Operationalisation of misperceptions

Health care (vaccines)	<p>-Measles vaccines often have severe side-effects (false)</p> <p>-Herbal treatments are often as effective as medical treatments (false)</p> <p>-For most infectious diseases, it is important that as many as possible of the children are vaccinated to be able to fight the infectious disease (true)</p> <p>-The vaccine given against swine flu did in some cases cause narcolepsy (true)</p>
Law and order (One item was excluded due to unclear scientific consensus)	<p>-In most cases of rape reported to the police in Sweden, the victim knows the perpetrator (true)</p> <p>-In Sweden, there is a trend of increasing number of rapes reported to the police (true)</p> <p>-There is a greater risk of fatal violence in Sweden than in almost all other EU countries (false)</p>
Immigration/Integration	<p>-Immigration contributes to lowering the mean age of the Swedish population (true)</p> <p>-In Sweden, the costs of immigration are about as high as the costs of pensions (false)</p> <p>-After five years in Sweden, unemployment among immigrants is about the same as among native-born (false)</p> <p>-In Sweden, immigrants are overrepresented among those convicted of crimes (true)</p>

Questions asked in the misperception indexes. Retrieved from the LORE online survey data (Martinsson et al. 2022).

Further, the misperception variables were measured on a five-point scale with the options: (1) Very certain it's false, (2) Fairly certain it's false, (3) Uncertain whether it's true or false, (4) Fairly certain it's true, (5) Very certain it's true. This also measures how strongly the perceptions in question are held by the respondents, and as misperceptions are often measured as faulty perceptions held with confidence, (Lindgren et al. 2023:189). This makes the differentiation between misperceptions and being uninformed more trustworthy. Further, the risk of guesses affecting the results decreases as there is an option for those who are uncertain.

For each category of misperceptions additive indexes were used, all three index variables were then normalised to run from 0-1 (vaccines: $M=.780$ $SD=.180$. Immigration: $M=.647$ $SD=.133$).

Crime perceptions: $M=.649$ $SD=.156$). For all indexes, lower numbers indicate more misperceptions held with certainty and higher numbers indicate correct perceptions held with certainty. The internal consistency of the indexes was not very high, which can be expected because these indexes do not measure a congruent underlying attitude.

5.2 Analytical strategy

For the second analysis, again a series of regressions was used. Each set or category of misperceptions was included in separate multivariate regressions. SPML was treated as a dummy variable in order to identify non-linear relationships. To compare the relationship of SPML to the theorised antecedents of SPML, a stepwise regression analysis was conducted, only including SPML at the end. The antecedent variables in the first analysis can be viewed as a large set of control variables in this analysis, as to ensure there is not a spurious relationship between SPML and misperceptions caused by these variables.

First, to determine a correlation within the focal relationship, a Pearson's r was run on SPML and all misperception indexes. In the second step, the control variables sex, age and education were included in a separate multivariate regression for each of the misperception indexes. Again, they were treated as dummy variables to get a more nuanced understanding of the relationship. In all steps of the analysis, the same reference categories were used as in the previous analysis. In the third step, the control variables were kept and the political variables were added. In the fourth step, control variables and political variables were kept in the model and the media variables were added. Thus, the same model as in analysis 1 was regressed on the three categories of misperceptions. In the final step, SPML was added to the previous model. Once again, no VIF-scores exceeded 4, meaning there was no multicollinearity in need of attention.

6. Results: analysis of SPML and misperceptions

6.1 Vaccine perceptions

First, taking a look at how common misperceptions about vaccines are, the respondents are quite well-informed about the topic. Only 5.25 per cent fell below the halfway-point between strong misperceptions and strong correct perceptions. Thus, the misinformed group only makes up a very small portion of the population. The largest groups of respondents were the three with strongest held correct perceptions.

Table 7. Distribution of Vaccine Perceptions

Vaccine perceptions	Frequency	Cumulative %
Strong misperceptions	2	.06
2	4	.19
3	8	.44
4	23	1.15
5	48	2.64
6	84	5.25
7	162	10.29
8	282	19.05
9	419	32.07
10	469	47.48
11	543	64.36
12	535	80.98
Strong correct perceptions	612	100
Total:	3218	100

Describes the distribution of respondents on the vaccine perception index. These tables are based on the original indexes, filtered for missing values on all variables included in the second analysis.

A stepwise regression was applied to vaccine perceptions to determine if there is a relationship between SPML and misperceptions or correct perceptions about the topic. Other variables within the areas demographics, politics and media were included, to examine if SPML had a value on

its own despite many other potential explanatory factors being included. It ensures the other variables do not affect both media literacy and misperceptions separately, creating a spurious relationship.

The results of the stepwise regression indicate that people with the highest level of SPML had more correct perceptions about vaccines (see Table 8, model 4). Adding SPML to the model also increased the explanatory value (adj. R^2) from .106 to .111, meaning although the change was very small, SPML does explain some variance in vaccine perceptions. Further, other variables that explained more correct perceptions alongside SPML were: education, specifically the category “three years or more at university” and the variables media trust, political interest, political knowledge and those far to the left on the ideological scale. All of these had a positive correlation with correct perceptions, meaning that higher levels of the variable correlated with more correct perceptions. Misperceptions about vaccines were prominent among respondents being in the age group 50-59 and with higher TV news exposure. With all other variables, there either were no statistically significant relationships, or they disappeared as more variables were added.

Table 8. Political variables, media variables and SPML model 1-4

DV: Vaccine perceptions	Model 1	Model 2	Model 3	Model 4
Age ref under 30				
30-39	-.009(SE=.015)	-.006(SE=.015)	-.003(SE=.015)	-.004(SE=.015)
40-49	-.033*(SE=.014)	-.023(SE=.014)	-.018(SE=.014)	-.020(SE=.014)
50-59	-.046**(SE=.014)	-.038**(SE=.013)	-.028*(SE=.014)	-.031*(SE=.014)
60-69	-.035*(SE=.014)	-.032**(SE=.012)	-.019(SE=.014)	-.020(SE=.014)
70 or older	-.032*(SE=.014)	-.014**(SE=.012)	-.024(SE=.015)	-.022(SE=.015)
Sex ref: female				
Male	-.004 (SE=.006)	-.001(SE=.006)	.004(SE=.006)	.001(SE=.006)
Education ref: not finished high school				
Finished high school	.021*(SE=.010)	.018 (SE=.009)	.017(SE=.009)	.015(SE=.009)
Post high school 1-3 years	.033**(SE=.010)	.024* (SE=.010)	.021*(SE=.010)	.019(SE=.010)
3 years or more at university	.093*** (SE=.010)	.078**(.010)	.064*** (SE=.010)	.058*** (SE=.010)
Ideology reference: centre				
Far to the left	-	.035**(SE=.011)	.026 *(SE=.012)	.024*(SE=.012)
Left	-	.022**(SE=.007)	.015 (SE=.008)	.014(SE=.008)
Right	-	-.001(SE=.007)	.010 (SE=.008)	.009(SE=.008)
Far to the right	-	-.041**(SE=.012)	-.014 (SE=.014)	-.017(SE=.014)
Political interest	-	.062*** (SE=.014)	.061*** (SE=.013)	.044** (SE=.015)
Political knowledge	-	.126*** (SE=.020)	.112*** (SE=.020)	.106*** (SE=.020)
Left alternative media	-	-	.019(SE=.038)	.016 (SE=.038)
Right alt media	-	-	-.038(SE=.029)	-.044 (SE=.028)
Papers	-	-	.039**(SE=.013)	.035**(SE=.013)
Tabloid	-	-	.012 (SE=.010)	.010 (SE=.010)
TV	-	-	-.046*** (SE=.012)	-.043*** (SE=.012)
Social media	-	-	-.016 (SE=.018)	-.021(SE=.018)
Media trust	-	-	.134*** (SE=.015)	.129*** (.015)
SPML, ref lowest SPML				
Low SPML	-	-	-	.010 (SE=.026)
Medium SPML	-	-	-	.009 (SE=.024)
High SPML	-	-	-	.033 (SE=.024)
Highest SPML	-	-	-	.051* (SE=.024)
Adj. R²	.045	.075	.106	.111

*=p<.05, **=p<.01 ***=p<.001. Unstandardised table. Reference categories: under 30, female, not finished high school, centre. (n=3218)

The first model had an adjusted R² value of .045 meaning the control variables accounted for around 4.5 per cent of the variance in vaccine perceptions. When the political variables were added, the adjusted R² value rose to .075 and including the media variables led to the adjusted R² increasing from .072 to .106. The largest explanatory value could be found in the final model (see table 8, model 4) which explained about 11 percent of variance in vaccine misperceptions. This means that there is one or several factors other than the variables included that explains around 90 percent of variance in misperceptions.

6.2 Results immigration perceptions

Compared to the other topics, misperceptions were most common within the immigration topic with 19.42 per cent falling below the halfway point between strong misperceptions and strong correct perceptions.

Table 9³.Distribution of Immigration Perceptions

Immigration perceptions	Frequency	Cumulative %
Strong misperceptions	2	.06
2	2	.12
3	5	.28
4	18	.84
5	78	3.26
6	150	7.92
7	370	19.42
8	512	35.33
9	578	53.29
10	563	70.79
11	438	84.40
12	277	93.01
13	149	97.64
14	46	99.07
Strong correct perceptions	30	100
Total:	3218	100

Describes the distribution of respondents on the immigration perception index. These tables are based on the original indexes, filtered for missing values on all variables included in the second analysis.

SPML neither appears to increase nor decrease immigration perceptions (see table 10, model 4). The inclusion of SPML in the model however did increase the explanatory value of the model from 16.7 per cent to 17 per cent. Other things that did instead have a positive impact on immigration perceptions were belonging to the groups: 40-70 or older, men, 3 years or more at university, right, far right, having high political interest and knowledge and consuming right-wing alternative media. Interestingly, throughout all models, people far to the left held more misperceptions and people to the right more correct perceptions with all categories of ideology at a statistically significant level. With the inclusion of political variables, the third model had an explanatory value of 13.8 per cent. The explanatory value of the fourth model including all variables was 17 per cent, meaning this model had

³ The scales vary somewhat between different misperception indexes for two reasons. First, some values did not occur among the respondents and second, the indexes contained different amounts of questions.

more explanatory value for the topic immigration compared to vaccines but that there is still a large portion of variance left unexplained.

The fact that there were no significant correlations with SPML indicates that the other variables better explain why someone has correct or incorrect perceptions about SPML, but also that the impact of SPML is indeed topic-dependent as it had an effect on vaccine perception

Table 10. Political variables, media variables and SPML model 1-4

DV: Immigration perceptions	Model 1	Model 2	Model 3	Model 4
Age ref under 30				
30-39	.017(SE=.011)	.019(SE=.011)	.013(SE=.010)	.013(SE=.010)
40-49	.034**(SE=.011)	.029**(SE=.010)	.023*(SE=.010)	.022*(SE=.010)
50-59	.040***(SE=.010)	.030**(SE=.010)	.026*(SE=.010)	.025*(SE=.010)
60-69	.049***(SE=.010)	.041***(SE=.012)	.036***(SE=.010)	.035***(SE=.010)
70 or older	.041***(SE=.010)	.024*(SE=.012)	.021*(SE=.010)	.021*(SE=.010)
Sex ref: female				
Male	.063***(SE=.005)	.045***(SE=.005)	.040*** (SE=.005)	.039***(SE=.005)
Education ref: not finished high school				
Finished high school	.014*(SE=.007)	.005(SE=.007)	.005 (SE=.007)	.005(SE=.007)
Post high school 1-3 years	.023**(SE=.007)	.013(SE=.007)	.011(SE= .007)	.010(SE=.007)
University 3 years or more	.045***(SE=.007)	.033***(SE=.007)	.031***(SE=.007)	.029***(SE=.007)
Ideology reference: centre				
Far to the left	-	-.022**(SE=.008)	-.016 (SE=.008)	-.017*(SE=.008)
Left	-	-.019**(SE=.006)	-.013*(SE=.006)	-.013*(SE=.006)
Right	-	.038*** (SE=.006)	.035***(SE=.005)	.035***(SE=.006)
Far to the right	-	.052*** (SE=.010)	.039*** (SE=.010)	.038*** (SE=.010)
Political interest	-	.191***(SE=.010)	.091***(SE=.010)	.085***(SE=.011)
Political knowledge	-	.095***(SE=.014)	.096*** (SE=.014)	.093***(SE=.014)
Left alternative media	-	-	-.030(SE=.027)	-.033(SE=.027)
Right alt media	-	-	.129*** (.020)	.126***(SE=.020)
Papers	-	-	.017(SE=.009)	.016(SE=.009)
Tabloid	-	-	-.007 (SE=.007)	-.009(SE=.007)
TV	-	-	-.022** (SE=.008)	-.021(SE=.008)
Social media	-	-	-.045***(SE=.013)	-.046***(SE=.013)
Media trust	-	-	-.162*** (SE=.016)	-.062***(SE=.011)
SPML ref: lowest SPML				
Low SPML	-	-	-	.009(SE=.018)
Medium SPML	-	-	-	.006(SE=.017)
High SPML	-	-	-	.006(SE=.017)
Highest SPML	-	-	-	.027(SE=.018)
Adj. R²	.066	.138	.167	.170

*=p<.05, **=p<.01 ***=p<.001. Unstandardised table. Reference categories: under 30, female, not finished high school, centre. (n=3218)

6.3 Crime perceptions

Crime was the topic out of the three that had the second largest portion of respondents with misperceptions. 15.76 per cent fell below the halfway point (see table 11). There was however still a majority holding correct perceptions.

Table 11. Distribution of Crime Perceptions

Crime perceptions	Frequency	Cumulative %
Strong misperceptions	1	.03
2	5	.19
3	57	1.96
4	138	6.25
5	306	15.76
6	638	35.58
7	752	58.95
8	624	78.34
9	397	90.68
10	239	98.10
Strong correct perceptions	61	100
Total:	3218	100

Describes the distribution of respondents on the crime perception index. These tables are based on the original indexes, filtered for missing values on all variables included in the second analysis.

In the final misperception index, crime, there was again no significant relationship with SPML and the explanatory value even decreased from 16.6 per cent to 16.5 per cent when including SPML. Other factors that instead explained correct perceptions about crime on a statistically significant level were the highest two education categories, political knowledge, left and far left ideology, media trust, left alternative media and paper news consumption. Incorrect perceptions were more prominent among older people, men, right and far-right individuals and those consuming right alternative media. The other variables did not have significant relationships with the perception index in the model with all variables included (see table 12).

The control variables age, gender and education explained 7.8 per cent of variance in perceptions. Education behaved almost as in the previous indexes, with the highest level being positively correlated with correct perceptions throughout all models. However, in this index the positive relationship with the second highest level of education also remained significant.

The explanatory power of the model increased from 7.8 to 12.3 per cent with political variables included. All categories of the ideology item again had significant correlations throughout all models, with the right side holding more misperceptions. Crime is the only perception index where political interest was not significantly predictive of correct perceptions in any model, political knowledge on the other hand behaved in the same way as previous indexes with positive significant correlations throughout all models.

Table 12. Political variables, media variables and SPML model 1-4

DV: Crime perceptions	Model 1	Model 2	Model 3	Model 4
Age ref under 30				
30-39	.009(SE=.013)	.011(SE=.013)	.032 (SE=.014)	.017(SE=.012)
40-49	-.030*(SE=.013)	-.012(SE=.012)	-.007 (SE=.013)	-.001(SE=.012)
50-59	-.051***(SE=.012)	-.032***(SE=.012)	-.002(SE=.013)	-.015(SE=.012)
60-69	-.061***(SE=.012)	-.049***(SE=.012)	-.013(SE=.013)	-.028*(SE=.012)
70 or older	-.075***(SE=.012)	-.061***(SE=.012)	-.034***(SE=.013)	-.041***(SE=.012)
Sex ref: female				
Male	-.026***(.005)	-.017***(SE=.005)	-.012* (SE=.005)	-.013*(SE= .005)
Education ref: not finished high school				
Finished high school	.013(SE= .008)	.017*(SE=.008)	.016 (SE=.008)	.015 (SE=.008)
1-3 years post high school	.031***(SE= .009)	.027** (SE=.008)	.023** (SE=.008)	.022***(SE=.008)
3 years or more university	.045***(SE=.008)	.036***(SE=.008)	.021***(SE=.008)	.020*(SE=.008)
Ideology reference: centre				
Far to the left	-	.072***(SE=.010)	.057***(SE= .009)	.057***(SE=.010)
Left	-	.035***(SE=.007)	.024***(SE=.007)	.024***(SE=.007)
Right	-	-.039***(SE=.007)	-.027***(SE=.007)	-.027***(SE=.007)
Far to the right	-	-.082***(SE=.011)	-.056***(SE=.011)	-.057***(SE=.011)
Political interest	-	.023(SE=.012)	.019 (SE=.012)	.015(SE=.012)
Political knowledge	-	.056***(SE=.017)	.040*(SE= .017)	.039*(SE=.017)
Left alternative media	-	-	.093***(SE=.032)	.091***(SE=.032)
Right alt media	-	-	-.098****(SE=.024)	-.100****(SE=.024)
Papers	-	-	.039***(SE=.011)	.037***(SE=.011)
Tabloid	-	-	-.008(SE=.008)	-.009(SE=.008)
TV	-	-	-.045****(SE=.010)	-.044****(SE=.010)
Social media	-	-	.028(SE=.013)	.024(SE=.015)
Media trust	-	-	.120****(SE=.019)	.119****(SE=.0139)
SPML ref:lowest SPML				
Low SPML	-	-	-	.010(SE=.022)
Medium SPML	-	-	-	.001(SE=.020)
High SPML	-	-	-	.004(SE=.020)
Highest SPML	-	-	-	.020(SE=.021)
Adj. R²	.078	.123	.166	.165

*=p<.05, **=p<.01 ***=p<.001. Unstandardised table. Reference categories: under 30, female, not finished high school, centre. (n=3218)

To summarise, the second analysis covering the relationship between misperceptions and SPML intended to answer the research questions: Does SPML have an effect on misperceptions and in what way? And, does the occurrence of an effect of SPML on misperceptions differ depending on the topic?

According to the results found in this analysis, SPML does not appear to have any large effect on misperceptions, although it is not completely nonexistent. There was also a slight difference depending on the topic where the strength, significance and explanatory power varied. In crime perceptions, adding SPML took away explanatory power, while it added more explanatory power on both of the other topics. Many other demographic, political and media variables appeared to better explain why someone is misinformed or not.

6.4 Limitations

A challenge in the operationalisation of misperceptions is deciding what is the correct answer to different questions. Scientific consensus may very well vary over time, and something considered a misperception at one point in time may not be considered one at a later point (Vraga & Bode 2020). These specific questions build on scientific consensus at the time and although it may be harder to define in politically contested questions, as long as a scientific consensus exists it provides somewhat of a distinction between accurate and inaccurate statements (Vraga & Bode 2020:137). This is also why a question where the scientific consensus is unclear has been excluded from the data.

Further, this data is collected in Sweden, which is somewhat of an exception when it comes to questions of media trust. Both the media systems and the political systems in Sweden and the US differ a lot, making it difficult to discern to what extent research in a US context applies to the Swedish context. Sweden is a highly digitalised country with widespread use of digital media where the internet is ranked as the most important source of information by citizens (Nord & Grusell 2021:121-122). There is however also a very high trust towards legacy media in general (Andersson & Ghersetti 2022:38). This makes a generalisation of opportunities and abilities difficult. Psychologically motivated mechanisms, such as the dunning Kreuger effect should however still be somewhat more broadly applicable.

7. Discussion and conclusions

The aim of this thesis has been to examine SPML and its potential implications for misperceptions. The analyses have added to knowledge about SPML, but it has also shed light on what we do not yet know. Beginning with what the results did show, according to the first analysis, SPML appears to be most affected by the political variables, which were political ideology, political trust and political knowledge.

It becomes apparent that self perceived media literacy does not occur in a vacuum. It is not only a reflection of self perceptions, but of self perceived agency within a media context. All participants in this study share a national media environment and have access to the same traditional media sources. This shared context makes it particularly interesting to consider the influence of ideology. Ideological beliefs may lead individuals to interpret these common media sources differently, affecting their levels of trust in various outlets. Therefore, it can not be assumed all respondents make the same assumptions about what “attempts to mislead with statistics” means. Who they imagine is attempting to mislead them and what the statistics are, inevitably depends on their perceptions of what information and which outlets they trust. The results demonstrated that right-wing citizens reported higher SPML although they generally have a more negative attitude towards legacy media in Sweden (Jakobsson et al. 2022:108). There is therefore also a possibility that the results demonstrate a difference of positive or negative attitudes toward external actors, versus their own ability. If one trusts their own abilities over institutions, they are likely to be positive in self-assessments but negative in the assessment of that which lies externally. As previously mentioned, they may also be subject to the Dunning-Kruger effect.

However, this type of mechanism would be more apparent if a negative correlation between media trust and SPML had been found. There are two different possible explanations within the data and operationalisations which could lead to this type of relationship being present but not captured. First, general media trust was only measured through one question, which is dependent on the respondent's perception of what “the news media in Sweden” entails. If someone consumes alternative media, they may consider alternative outlets when answering the question and thus report higher trust even if they do not trust legacy media. Second, those who reported using right alternative media often were only a very small portion of the total sample and the same goes for the far right-wing category, which only made up around 5 per cent of the population in wave one. This means that even if there were to be a negative correlation between media trust and SPML for this specific group, it may not be captured in the regressions due to the large sample size.

The first analysis also showed that age and education had a positive impact on SPML. The fact that people over 60 report their SPML as lower may not come as much of a surprise. The media environment has seen a fast development over the last decade, and become something different to

what it has been for the majority of their lives, making adaptation harder than for younger people. This can be linked to a difference in opportunities between the different age groups. Further, as mentioned previously, higher education also has a well-established relationship with political knowledge due to an increase in opportunities, motivations and abilities (Barabas 2014). The same was expected to apply to media literacy. Political knowledge also positively affected SPML and the type of political knowledge measured in the index used is, as previously mentioned, according to Barabas et al. (2014), quite dependent on education. Either, it is possible that the variables known to boost or be correlated with knowledge also lead to respondents being equipped with tools to approach media critically which in turn leads to people becoming and perceiving themselves as media literate. Alternatively, taking into consideration that all variables are measured by self-reports, if using traditional media, being interested in politics and becoming educated are socially perceived as something knowledgeable people do, it is possible that those who engage in these behaviours also perceive themselves as knowledgeable and thus report higher on other variables, such as SPML, which can be associated with this self-perception. Further, men also consistently rated their SPML higher but it seems unlikely that SPML is something inherently linked to one's sex, meaning something else is likely causing this correlation. As discussed previously, research points in different directions when it comes to gender differences in media literacy so either, this could be an indication that men are more media literate, or it has to do with self-enhancement and is thus possibly rather a product of gender norms.

However, possibly the clearest result from analysis one is that all of these things taken together explain very little about SPML. 16.4 per cent of the variance in SPML was explained by the final model meaning 83.6 per cent remain unexplained. This prompts the question of what SPML actually is affected by and in turn, what it captures. A question that likely requires more research, and possibly an exploration into different operationalisations of SPML. As Schoefield et al. (2023:134) suggested, maybe it is better to combine knowledge and proficiency tests with subjective questions when examining media literacy even though it is methodologically difficult. Thus, feeling media literate is multifaceted and there is a possibility that other theoretical or operational approaches better capture people's self-perception of media abilities. Possibly, taking a more psychological approach more focused on explicit cognitive processes and thinking styles would reveal further explanations as to why someone feels media literate (or not).

Continuing onto the second analysis, the results showed that SPML had different influences on different topics. Again, the relationship found was however not very strong. It can not be assumed that SPML directly affects misperceptions, in the way that more objective skills within media literacy may but at the same time they are not completely unconnected. Although the results of this specific study were not very strong, SPML has previously been found to have a moderating effect on misperceptions (Su et al. 2022; Borah et al. 2022) and possibly it has more value as such than as an antecedent for perceptions. Further examining the fact that SPML had a slight influence on

specifically vaccine perceptions would also be interesting. At the time of data collection, vaccines were a highly prominent subject due to the COVID-19 virus. This is also the only topic in which no ideological category had a significant relationship to correct perceptions or misperceptions. The topic of COVID-19 was highly on the Swedish media agenda at the time (Andersen et al. 2024:6), meaning the media coverage at the time can have a large impact on people's perceptions of vaccines. Returning to how political knowledge can be categorised according to Barabas (2014), as mentioned in section 2.3 and 2.4, vaccines can be seen as somewhat of a static topic but at the same time also surveillance dependent because of the increased media prominence at the time. Thus, it is possible that what creates the divide between topics in which SPML matters or not is the type of political knowledge and how dependent on or affected it is by frequency of occurrence in news media. Looking back at previous research as well, Tully and Vraga (2018) found that exposure to news media literacy messages increased respondents' SPML. A possibility is that respondents have been primed to think more critically about vaccine-related questions due to a prevalence of the topic during the pandemic and are therefore more affected by accuracy goals compared to other issues. This is also how the temporal dimension of political knowledge may affect the relationship with SPML.

What is also notable is that ideology had the least impact on the topic where SPML had the most impact. This may also be due to for example the level of media coverage or the operationalisation of the perception index. While the far-right group demonstrated statistically significant correct perceptions on the immigration index but statistically significant misperceptions on the topic of crime, the left-wing side demonstrated the opposite, with more correct perceptions of crime and more misperceptions about immigration. The different indexes may tap more or less into motivated reasoning in different groups depending on how central the topic in question is for them. This could mean that in questions where political attitudes have a large impact, they override the effect of SPML. In order to draw any conclusion about this, more research would be needed on the interplay between SPML and political attitudes. To fully examine this, a broader assortment of attitude and opinion related variables would need to be included in future studies. SPML could also be examined alongside more measures of trust towards institutions, media and peers.

Previous research on SPML has however found it to have a moderating effect on exposure to media situations that normally would increase misperceptions. Considering one's own media literacy could be a way of bringing attention to media literacy, which in turn could mean that it is not the self-perception that matters but rather the reminder of critical thinking. As per my previously presented definition, one can have experiences but choose not to draw knowledge from them but possibly, being reminded about media literacy can remind people to use the knowledge they have. When critical thinking within a specific area has been salient in the public agenda, drawing knowledge from the debate may potentially be easier than in other areas, making people more accurate in their perceptions.

7.1 Conclusions

The final questions are, is self-perceived media literacy as useful and important as theorised by previous scholars (Potter 2004; Journell 2024) and does it have any valuable implications for misperceptions? Based on the findings in the theoretical review researching media literacy without taking the subjective aspect into account is a clearly limiting approach. Also, the data analysis identified an influence of political aspects on SPML in the first half and this is a potential subject for future research. Therefore, fully discarding the concept is not yet called for. Although this study did not find a very strong connection, the concept may have potential in other operationalisations or research designs, or possibly other subjective perspectives, such as VML (the value attributed to media literacy by respondents) have more potential. I can not but agree with Schoefield et al. (2023:134), that the best approach would be utilising questions about knowledge, proficiency tests and subjective estimates all at once but preferably separately to better understand the interrelations between the three. This also allows taking more inspiration from the OMA model and considering opportunities, motivations and abilities. The media literacy field is in need of a comprehensive framework accounting for both objective and subjective aspects at the same time and although this has at large been done by Potter in 2004, an updated framework accounting for the influence of the high choice media environment is overdue. Possibly then, it could have more clear implications for misperceptions. However, the fact that SPML seems to be influenced by ideology further strengthens its potential implications for misperceptions, as they are usually political by nature. In conclusion, much more research is needed to determine the potential of a subjective approach to media literacy.

7.2 Future research

As suggested in the discussion, future research should focus on developing the media literacy concept with an inclusion of subjective perspectives, taking either SPML or possibly measures such as the value of media literacy into account. The theoretical arguments for why exclusively focusing on objective media literacy is problematic remain solid, because it is apparent that subjective processes have a large influence over information processing. Another finding that requires more attention is the linkage between political variables and SPML, as this could have implications for how the subject is understood and used in the future.

Bibliography

- Andersen, K. (2021). *Media Platforms and Political Learning: The Democratic Challenge of News Consumption on Computers and Mobile Devices*.
- Andersson, U., Ghersetti, M. (2022) Hur står sig public services förtroendekapital? In Bjerling, J. (Eds). *Public service: En svensk kunskapsöversikt* (Pp. 34-55). Nordicom, Göteborgs universitet. <https://doi.org/10.48335/9789188855640>
- Aufderheide, P. (1993). *Media literacy: A report of the National Leadership Conference on Media Literacy, The Aspen Institute Wye Center, Queenstown, Maryland, December 7 - 9, 1992*. Aspen Inst.
- Benkler, Y., Faris, R., Roberts, H. (2018). *Network propaganda - manipulation disinformation and radicalization in American politics*. Oxford press.
- Barabas, J., Jerit, J., Pollock, W., & Rainey, C. (2014). The Question(s) of Political Knowledge. *American Political Science Review*, 108(4), 840–855. <https://doi.org/10.1017/S0003055414000392>
- Borah, P., & Lorenzano, K. J. (2023). Who corrects misinformation online? Self-perceived media literacy and the moderating role of reflective judgement. *Online Information Review*. <https://doi.org/10.1108/OIR-12-2022-0656>
- Borah, P., Su, Y., Xiao, X., & Lai Lee, D. K. (2022). Incidental news exposure and COVID-19 misperceptions: A moderated-mediation model. *Computers in Human Behavior*, 129, 107173. <https://doi.org/10.1016/j.chb.2021.107173>
- Clawson, & Oxley, Z. M. (2021). *Public opinion: democratic ideals, democratic practice* (Fourth edition.) California: CQ Press.
- Curran, J., Brink Lund, A., Lyengar, S., Salovaara-Moring, I. (2009). Media system, public knowledge and democracy: A comparative study. *Media and Democracy*. Routledge. <https://doi.org/10.4324/9780203406878-10>

- Daniel. C Hallin, & Mancini, P. (2004). *Comparing Media Systems: Three Models of Media and Politics*. Cambridge University Press.
- Duckworth, A. L., Tsukayama, E., & May, H. (2010). Establishing Causality Using Longitudinal Hierarchical Linear Modeling: An Illustration Predicting Achievement From Self-Control. *Social Psychological & Personality Science*, 1(4), 311–317. <https://doi.org/10.1177/1948550609359707>
- Dufner, M., Gebauer, J. E., Sedikides, C., & Denissen, J. J. A. (2019). Self-Enhancement and Psychological Adjustment: A Meta-Analytic Review. *Personality and Social Psychology Review*, 23(1), 48–72. <https://doi.org/10.1177/1088868318756467>
- Flynn, D. J., Nyhan, B., & Reifler, J. (2017). The Nature and Origins of Misperceptions: Understanding False and Unsupported Beliefs About Politics. *Political Psychology*, 38(S1), 127–150. <https://doi.org/10.1111/pops.12394>
- Hameleers, M. (2022) *Populist disinformation in fragmented information settings. Understanding the nature and persuasiveness of populist and post-factual communication*. Routledge.
- Jakobsson, P., Lindell, J., Stiernstedt, F. (2022). Vad tycker medborgarna om public service? (Pp.92-112) In Bjerling, J. (Eds). *Public service: En svensk kunskapsöversikt*. Nordicom, Göteborgs universitet. <https://doi.org/10.48335/9789188855640>
- Johansson B. (2022) Är public service medierna partiska? (Pp.14-33) In Bjerling, J. (Eds). *Public service: En svensk kunskapsöversikt*. Nordicom, Göteborgs universitet. <https://doi.org/10.48335/9789188855640>
- Journell, W. (2024). Psychosocial processes and human desire: An inconvenient truth about online misinformation. *Journal of Research on Technology in Education*, 56(1), 25–39. <https://doi.org/10.1080/15391523.2023.2264962>
- Kossowska, M., Czarnek, G., Szumowska., Szwed, P. (2022). Striving For Certainty: Epistemic Motivations and (Un)Biased Cognition. (Pp. 207-221). In Strömbäck, J., Wikforss, Å., Glüer, K., Lindholm, T., & Oscarsson, H. (Eds.). *Knowledge Resistance in High-Choice Information Environments* (1st ed.). Routledge. <https://doi.org/10.4324/9781003111474>

- Krueger, J., Dunning D. (1999). Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments. *Journal of Personality and Social Psychology*, 77(6) 1121-1134.
- Kutlu-Abu, N., & Arslan, R. (2023). Evolving trend of media literacy research: A bibliometric analysis. *Journal of Media Literacy Education*, 15(1), 85–98. <https://doi.org/10.23860/JMLE-2023-15-1-7>
- Leonhard, L., Karnowski, V., & Kümpel, A. S. (2020). Online and (the feeling of being) informed: Online news usage patterns and their relation to subjective and objective political knowledge. *Computers in Human Behavior*, 103, 181–189. <https://doi.org/10.1016/j.chb.2019.08.008>
- Lisa Daniels & Nicholas Minot. (2019). *An Introduction to Statistics and Data Analysis Using Stata From Research Design to Final Report*. SAGE publications, inc.
- Martinsson, J., Andreasson, M., Andersson, F., Carlsten-Rosberg, J., Cassel, S., (2022), Technical report Citizen Panel 45, Gothenburg: University of Gothenburg, LORE.
- Mehmet, V., Mehmet, K. (2024). An investigation of students and teachers' new media literacy: the contributing characteristics with the moderator role of gender. *Research and Practice in Technology Enhanced Learning*, 19, 029. <https://doi.org/10.58459/rptel.2024.19029>
- Miller, S., Menard, P., & Bourrie, D. (2024). I'm not fluent: How linguistic fluency, new media literacy, and personality traits influence fake news engagement behavior on social media. *Information & Management*, 61(2), 103912. <https://doi.org/10.1016/j.im.2023.103912>
- Motta, M., Callaghan, T., & Sylvester, S. (2018). Knowing less but presuming more: Dunning-Kruger effects and the endorsement of anti-vaccine policy attitudes. *Social Science & Medicine*, 211, 274–281. <https://doi.org/10.1016/j.socscimed.2018.06.032>
- NOVUS (2022) *Rapport: Viktigaste politiska frågan*. Mars 8. <https://novus.se/wp-content/uploads/2022/03/novusviktigastefraganmars2022.pdf>
- Nord, L., Grusell, M. (2021) Media and politics in Sweden (Pp 113-134). In Skogerbø, E., Kristensen, N. N., Nord, L., & Ihlen, Ø. (Eds.). *Power, Communication, and Politics in the Nordic Countries*. Nordicom. <https://doi.org/10.48335/9789188855299>

- Nyhan, B. (2020). Facts and Myths about Misperceptions. *Journal of Economic Perspectives*, 34(3), 220–236. <https://doi.org/10.1257/jep.34.3.220>
- Potter, J. (2004)A. *Theory of media literacy A cognitive approach*. SAGE publications, inc.
- Potter, W. J. (2004)B. Argument for the Need for a Cognitive Theory of Media Literacy. *American Behavioral Scientist*, 48(2), 266–272. <https://doi.org/10.1177/0002764204267274>
- Potter, W. J. (2010). The State of Media Literacy. *Journal of Broadcasting & Electronic Media*, 54(4), 675–696. <https://doi.org/10.1080/08838151.2011.521462>
- Potter, W. J. (2022). Analysis of definitions of media literacy. *Journal of Media Literacy Education*, 14(2), 27–43. <https://doi.org/10.23860/JMLE-2022-14-2-3>
- Rabb, N., Kossowska, M., Wood, J. T., Schulte, D., Vourloumis, S., Jarke, H. (2022). Responsiveness to Evidence: A Political Cognition Approach. (Pp 128-147). In Strömbäck, J., Wikforss, Å., Glüer, K., Lindholm, T., & Oscarsson, H. (Eds.). *Knowledge Resistance in High-Choice Information Environments* (1st ed.). Routledge. <https://doi.org/10.4324/9781003111474>
- Rekker, R. (2022) Political Polarization Over Factual Beliefs. (Pp 222-236). In Strömbäck, J., Wikforss, Å., Glüer, K., Lindholm, T., & Oscarsson, H. (Eds.). *Knowledge Resistance in High-Choice Information Environments* (1st ed.). Routledge. <https://doi.org/10.4324/9781003111474>
- Schofield, D., Kupiainen, R., Frantzen, V. M., & Novak, A. (2023). Show or tell? A systematic review of media and information literacy measurements. *Journal of Media Literacy Education*, 15(2), 124–138. <https://doi.org/10.23860/JMLE-2023-15-2-9>
- Schäfer, S. (2020). Illusion of knowledge through Facebook news? Effects of snack news in a news feed on perceived knowledge, attitude strength, and willingness for Discussions. *Computers in Human Behavior* 103 (2020) 1–12.
- Semetko, H., & Scammell, M. (2012). *The SAGE Handbook of Political Communication*. SAGE Publications Ltd. <https://doi.org/10.4135/9781446201015>

- Strömbäck, J. (2005). In Search of a Standard: Four models of democracy and their normative implications for journalism. *Journalism Studies*, 6(3), 331–345. <https://doi.org/10.1080/14616700500131950>
- Strömbäck, J., Wikforss, Å., Glüer, K., Lindholm, T., Oscarsson, H. (2022) Introduction: Toward Understanding Knowledge Resistance In High Choice Media Environments. In Strömbäck, J., Wikforss, Å., Glüer, K., Lindholm, T., & Oscarsson, H. (Eds.). *Knowledge Resistance in High-Choice Information Environments* (Pp 1-28) (1st ed.). Routledge. <https://doi.org/10.4324/9781003111474>
- Strömbäck, J., Boomgarden, H., Broda, E., Damstra, A., Lindgren, E., Tsfati, Y., Vliegenhart, R. (2022) From Low-Choice to High-Choice Media Environments: Implications For Knowledge Resistance. (Pp 49-68). In Strömbäck, J., Wikforss, Å., Glüer, K., Lindholm, T., & Oscarsson, H. (Eds.). *Knowledge Resistance in High-Choice Information Environments* (1st ed.). Routledge. <https://doi.org/10.4324/9781003111474>
- Strömbäck, J., Shehata, A. (2022) Bidrar public service till bättre informerade medborgare? (Pp.56-73) In Bjerling, J. (Eds). *Public service: En svensk kunskapsöversikt*. Nordicom, Göteborgs universitet. <https://doi.org/10.48335/9789188855640>
- Su, Y., Borah, P., & Xiao, X. (2022). Understanding the “infodemic”: Social media news use, homogeneous online discussion, self-perceived media literacy and misperceptions about COVID-19. *Online Information Review*, 46(7), 1353–1372. <https://doi.org/10.1108/OIR-06-2021-0305>
- Sude, D., Knobloch-Westerwick, S. (2022) Selective Exposure and Attention to Attitude-Consistent and Attitude-Discrepant Information: Reviewing the Evidence. (Pp 88-105). In Strömbäck, J., Wikforss, Å., Glüer, K., Lindholm, T., & Oscarsson, H. (Eds.). *Knowledge Resistance in High-Choice Information Environments* (1st ed.). Routledge. <https://doi.org/10.4324/9781003111474>
- Taber S. C, Lodge. M. (2012) Motivated skepticism in the evaluation of political beliefs. *A Journal of Politics and Society*. 24(2) 157-184 <https://doi-org.ezproxy.ub.gu.se/10.1080/08913811.2012.711019>

- Tully, M. (2018). *A Mixed Methods Approach to Examining the Relationship Between News Media Literacy and Political Efficacy*.
- Turner, J. R. (2015). Hierarchical Linear Modeling: Testing Multilevel Theories. *Advances in Developing Human Resources*, 17(1), 88–101. <https://doi.org/10.1177/1523422314559808>
- Vliegthart, R., Stromback, J., Boomgaarden, H., Broda, E., Damstra, A., Lindgren, E., Tsfat, Y., & Van Remoortere, A. (2023). Taking Political Alternative Media into Account: Investigating the Linkage Between Media Repertoires and (Mis)perceptions. *Mass Communication & Society*, 1–25. <https://doi.org/10.1080/15205436.2023.2251444>
- Vraga, E. K., & Bode, L. (2020). Defining Misinformation and Understanding its Bounded Nature: Using Expertise and Evidence for Describing Misinformation. *Political Communication*, 37(1), 136–144. <https://doi.org/10.1080/10584609.2020.1716500>
- Vraga, E., Tully, M., Kotcher, J., Smithson, A.-B., & Broeckelman-Post, M. (2015). A Multi-Dimensional Approach to Measuring News Media Literacy. *Journal of Media Literacy Education*. <https://doi.org/10.23860/jmle-7-3-4>
- Watkins, W. M. (2018). Exploratory Factor Analysis: A Guide to Best Practice. *Journal of Black Psychology*. Vol. 44(3) 219–246.
- Wuyckens, G., Landry, N., & Fastrez, P. (2022). Untangling media literacy, information literacy, and digital literacy: A systematic meta-review of core concepts in media education. *Journal of Media Literacy Education*, 14(1), 168–182. <https://doi.org/10.23860/JMLE-2022-14-1-12>

Appendix 1: variables

1. Factor analyses

1.1 Traditional media use

	Factor 1	Factor 2	Factor 3	Communality
Rapport i SVT	.879	-.032	.046	.308
Aktuellt i SVT	.883	.007	.019	.784
Nyheterna i TV4	.691	.229	-.277	.623
Aftonbladet	.026	.825	.021	.686
Expressen	.028	.835	.122	.700
Dagens nyheter	-.055	.027	.780	.604
Svenska dagbladet	-.053	.237	.692	.515
Ekonyheterna i sveriges radio (cross loading)	.414	-.248	.554	.446

1.2 Social media news exposure

Item	Factor 1	Communality
Facebook	.073	.494
Twitter	.586	.343
Instagram	.715	.511
Youtube	.648	.419

2. Descriptive statistics

2.1 Analysis 1

Descriptive	Min	Max	Mean	SD
Age*	1	6	3.979	1.530
Sex	1	2	1.537	.499
Education (dummy)	1	4	2.679	1.082
SPML (dummy)	1	5	3.781	.919
Political knowledge	0	1	.489	.159
Political interest	0	1	.738	.229
Left/right (dummy)	1	5	2.949	1.065
Tradmedia tabloid	0	1	.347	.356
Tradmedia papers	0	1	.198	.271
Tradmedia TV	0	1	.398	.320
Social media	0	1	.252	.201
Right alt media	0	1	.021	.105
Left alt media	0	1	.016	.082
Media trust	0	1	.636	.218

*Age is coded into subcategories, the numbers do not represent years.

(N=3355)

2.2 Analysis 2

Descriptive	Min	Max	Mean	SD
Age*	1	6	3.765	.923
Sex	1	2	1.536	.499
Education (dummy)	1	4	2.661	1.082
SPML (dummy)	1	5	3.766	.923
Political knowledge	0	1	.488	.158
Political interest	0	1	.738	.230
Left/right (dummy)	1	5	2.961	1.056
Tradmedia tabloid	0	1	.473	.286
Tradmedia papers	0	1	.285	.240
Tradmedia TV	0	1	.473	.286
Social media	0	1	.344	.182
Right alt media	0	1	.021	.109
Left alt media	0	1 (.931)	.016	.082
Media trust	0	1	.636	.218
Vaccine misperceptions	0	1	.780	.180
Immigration misperceptions	0 (.125)	1	.647	.133
Crime perceptions	0 (.091)	1	.649	.156

Numbers in parenthesis are lowest or highest in the sample when filtering for missing responses. (N=3218)

*Age is coded into subcategories, the numbers do not represent years

Appendix 2: results

Model 1: Pearsons' correlation all perception indexes

Misperception indexes	SPML
Vaccines	.158
Immigration	.138
Crime	.086