Experts: Same, Only Different – Explaining Politicians' and Citizens' Perceptions of the Credibility of Expert Advice on Health Policy Issues

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Introduction

Even though experts' status in the public sphere has a long history of scholarly concern (Gieryn 1999; Jasanoff and Simmet 2017; Petersen, Heinrichs, and Peters 2010; Weingart 1999), questions about citizens' and politicians' decreasing confidence in experts seem to dominate public discourse these days. These questions have gained prominence over the past years thanks to the rise of (right-wing) populist movements questioning experts' role in the politics of various countries (Mede and Schäfer 2020; Mudde and Rovira Kaltwasser 2012), Trump's presidency in the United States (Jasanoff and Simmet 2017), as well as several controversies over various expert claims in the United Kingdom's referendum to withdraw from the European Union (Dommett and Pearce 2019). Most recently, concerns about skepticism towards experts have gained renewed attention in the wake of the COVID-19 pandemic (Lavazza and Farina 2020). Such concerns are not only present in the expert community, but have also been raised by journalists, politicians, and the wider public. Despite the centrality of experts' role and the broad recurring interest in these questions, our knowledge of what makes citizens and politicians believe or doubt what experts say is limited, to say the least. This dissertation aims to fill this gap and to contribute to a nuanced understanding of how citizens and politicians come to rely on experts.

While scholarly discussions on the role expert knowledge plays in decision-making have been marked by controversies (Centeno 1993; Howlett 2009; Parsons 2002), there is little doubt that expert knowledge is a crucial source of information for politicians and citizens alike. Expert advice helps individuals make personal decisions (e.g., getting a flu shot) (Hendriks and Kienhues 2019; Maibach et al. 2006), but also contributes to their understanding of policy problems, to the formation of their opinions, and eventually to their political decisions (e.g., voting for mandatory vaccination)

(Boswell 2009; Boudreau and MacKenzie 2014; Bullock 2011; Loewen, Rubenson, and McAndrews 2021; Petersen, Heinrichs, and Peters 2010). Expert knowledge is particularly important in policy fields close to science and technology, such as health policy (Balthasar 2010; Frey 2012; Sabatier and Jenkins-Smith 1993). In fact, evidence-based policymaking originated in the field of health policy (Nutley, Walter, and Davies 2007; Solesbury 2001). A paradigmatic example is the subfield of clinical preventative medicine, where experts contribute to developing and distributing new vaccines or disease-screening methods.

Skepticism toward expertise, especially in health policy, has severe consequences. Achieving public health goals often requires collective action (Siegal, Siegal, and Bonnie 2009). Take the case of vaccine hesitancy: while there is a strong consensus on the safety and effectiveness of vaccines (Attwell et al. 2017), vaccine skepticism prevents a nation from achieving herd immunity and constitutes a global health threat (World Health Organization (WHO) 2012). Therefore, believing the experts who outline vaccinations' safety and effectiveness is key. A related issue arises when only certain politicians or sectors of the public, such as specific ideological groups, doubt experts. Such phenomena can increase polarization and may complicate public deliberation because there is no agreement on the factual basis of a particular discussion (Blank and Shaw 2015; Nyhan 2010). Imagine, for example, that certain groups believe a disease is harmless despite an expert consensus that the respective disease has serious consequences for public health. In such situations, discussing potential solutions becomes increasingly difficult. Those who share the opinion that the disease causes little to no harm will see no point in acting, while those whose opinions align with experts' information will call for immediate action.

Understanding what affects citizens' and politicians' perceptions of and reactions to expert advice is therefore paramount to successfully managing public health problems. Skepticism towards expert advice can take various forms, such as failing to act in line with expert advice. This dissertation, however, focuses on an earlier stage: namely on people's perceptions of the credibility of expert advice. Expert advice credibility is key to rendering expert advice relevant (Weiss and Bucuvalas 1980), but it is also an important driver of attitude change (Alt, Lassen, and Marshall 2016; Lupia 2000; R. Petty, Cacioppo, and Goldman 1981) and behavioral responses (Iyengar and Valentino 2000; Muñoz, Anduiza, and Gallego 2016). In fact, expert advice needs to be credible if it is to unfold any communicative effect. Therefore, by studying expert advice credibility, this dissertation focuses the prime manifestation of skepticism toward experts.

I investigate how citizens and politicians evaluate the credibility of expert advice in the context of health policy and what factors influence these evaluations. With its focus on health policy issues and, more specifically, on clinical preventative medicine (flu vaccination and colorectal cancer screening), this dissertation makes a significant contribution to the literature on skepticism toward experts, which has so far heavily focused on environmental and ecological issues (Schrögel and Humm 2019, 505).

Moreover, I focus on a specific type of expert advice: mass-mediated expert advice. Citizens and politicians are increasingly exposed to expert advice on political issues through the mass media (Petersen, Heinrichs, and Peters 2010; Schrögel and Humm 2019; Weingart 2011), because journalists rely on experts in their reporting more and more often (e.g., Albæk 2011; Elmer, Badenschier, and Wormer 2008; Huber 2014; Soley 1994). This is especially the case when it comes to health-related topics (Schütz-Lerace 2010). At the same time, the mass media are a crucial means through

which experts communicate with the public, enabling the transfer of knowledge from science to the public and legitimizing research (Kohring et al. 2013; Schäfer, Kessler, and Fähnrich 2019; Weingart 2011). Empirical studies show that citizens obtain their knowledge about science mainly through the mass media and, most notably, through traditional newspapers and television (A. A. Anderson et al. 2012; Schäfer et al. 2018; Schrögel and Humm 2019, 496). In a similar fashion, politicians rely on the mass media to learn about policy evaluations (Bundi et al. 2014) and expert opinions (Melenhorst and Van Aelst 2017; Walgrave et al. 2017), to glean information about important topics (agenda setting), or to find argumentative ammunition and/or form their opinions (Petersen, Heinrichs, and Peters 2010). Mass-mediated expert advice is a cost-efficient type of policy advice that busy politicians can use to stay up to date on the various topics on their agenda (Petersen, Heinrichs, and Peters 2010).

The most pressing question therefore is what exactly makes such expert advice credible to citizens and politicians. By integrating research from the fields of evidence-based policy-making (EBPM), knowledge utilization (KU), and science communication, I focus on key explanatory variables situated at three tiers: the provided expert advice, the individual evaluating the advice, and the decision-making context. I therefore ask: *How do citizens and politicians evaluate expert advice credibility on health policy issues, and how can the properties of expert advice, individual traits, and context-specific factors contribute to explaining these evaluations?* In so doing, this dissertation fills at least three important gaps in existing research on perceptions of expert advice and, more specifically, mass-mediated expert advice.

First, unlike most scholars, I adopt a broad understanding of what constitutes expert advice in an effort to more accurately reflect the political reality and the reality of mass-mediated expert advice. Scholars often define expert advice quite narrowly, as

knowledge provided by scientists or produced by academic research. Nevertheless, various researchers have pointed to the increasing diversity of policy advisory systems. Scientists are not the only people who provide such advice; representatives of the bureaucracy, corporations, think tanks, or NGOs also do so (P. R. Brewer and Ley 2013; Craft and Howlett 2012; Diamond, Bernauer, and Mayer 2020; Doberstein 2017). This is particularly true when it comes to mass-mediated expert advice, where journalists define who is an expert and what constitutes expert advice (Albæk 2011). Individuals may perceive some of these experts as representatives of vested interests rather than providers of expertise (Lavertu and Weimer 2011). This in turn, may affect whether they deem these experts credible or not. Due to the frequently narrow definitions of 'experts' existing studies adopt, much remains unclear about how citizens and politicians view different types of experts (Doberstein 2017). Nevertheless, previous research has identified several factors that may affect perceptions of expert advice, which are related both to the source and to the content of the advice (Hendriks and Kienhues 2019). Building on these studies, I focus on three properties of expert advice that are key to understanding the perceived credibility of mass-mediated expert advice: the expert type (academic, administration, and corporation), the evidence base of the advice (evidence-based vs. opinion-based), and the degree to which the expert advocates for policy solutions (weak vs. strong).

Second, I extend existing research by investigating expert advice perceptions not only among citizens, but also among politicians. Including both groups is important because both citizens' behavior and politicians' decision-making should rely on expert advice to achieve public health goals. Scholars of science communication have paid a lot of attention to citizens' traits, such as education, attitudes, or ideology, in an effort to understand perceptions of expert advice (e.g., Blank and Shaw 2015; Nisbet, Cooper,

and Garrett 2015; Pechar, Bernauer, and Mayer 2018; Rutjens and van der Lee 2020; Schäfer et al. 2018). Nevertheless, scholars have only shown limited interest in how politicians perceive expert advice. Research on EBPM and KU, with its focus on how decision-makers use expert advice in political decision-making, has mainly focused on how much institutions and decision-making processes use expertise in the aggregate (e.g., Balthasar 2006; Balthasar and Mueller 2016; Boaz et al. 2019; Dolder, Rohrbach, and Varone 2017; Foss Hansen and Rieper 2010; Frey 2012; Jasanoff 2005; Radaelli 1999; Weible 2008). We thus need to develop the individual-level foundations that will help us understand how politicians process expert advice. Some of the few contributions that focus on individual politicians build on insights derived from studies of citizens. They show that, for example, ideology or prior attitudes are important predictors of politicians' reliance on expert advice (e.g., Baekgaard et al. 2019; Christensen and Moynihan 2020; Demaj and Schedler 2014; Demaj, Summermatter, and Schedler 2012; Eberli 2019; Hird 2005a, 2005b). However, additional variables may be(come) relevant when we study politicians as individuals with power and influence. This dissertation therefore focuses on one particularly relevant individual trait for each of these two populations. At the citizen level, I investigate the role political ideology plays in perceptions of expert advice—a trait that several studies on skepticism toward experts have explored in the US context with regards to environmental or ecological issues (Blank and Shaw 2015; P. R. Brewer and Ley 2013; McCright et al. 2013; Myers et al. 2016; Nisbet, Cooper, and Garrett 2015). At the politician level, this dissertation analyzes the role of elected representatives' beliefs about their voters' ability to hold them accountable (accountability beliefs)—a variable that existing research has largely ignored, particularly when it comes to perceptions of and reactions to expert advice (Sheffer et al. 2018). The shared underlying theoretical framework of this dissertation

also ensures that the results shed light on how the same variables affect citizens and politicians differently. This aspect is of crucial importance since citizens and politicians may differ in their motivations and abilities to evaluate expert advice (S. E. Anderson and Harbridge 2014; Baekgaard et al. 2019; Lee et al. 2020).

Third, and building on the discussion in the previous paragraph, this project explores whether the two target groups perceive all experts similarly. A rising scholarship argues that understanding skepticism toward experts as more prevalent among some groups is an oversimplification. Subgroups of the population may be skeptical about some types of expert advice, but not about others (e.g., Carlisle et al. 2010; McCright et al. 2013). In short: not everyone perceives expert advice in the same way. To date, science communication scholars have focused heavily on studying whether some subgroups of the population differ in their perceptions of and reactions to expert advice (e.g., Blank and Shaw 2015; Kahan, Jenkins-Smith, and Braman 2011; Nisbet, Cooper, and Garrett 2015). Meanwhile, EBPM and KU scholars have invested heavily in understanding what kind of expert advice is most likely to be heard by decision-makers (e.g., Campbell et al. 2007; Weiss and Bucuvalas 1980). Consequently, previous research provides limited information about how explanatory variables at the individual level interact with those at the expert-advice level. To start filling this gap, this dissertation investigates whether some subgroups of citizens (based on ideology) and politicians (based on accountability beliefs) prefer certain types of expert advice more than others.

The subsequent chapter outlines the theoretical framework underlying this dissertation. I then present the questions addressed by each of the three papers and describe the empirical strategy chosen to answer them. The penultimate section summarizes the central findings of the three papers. I conclude by discussing these

findings and their contribution to the literature, as well as this dissertation's limitations

and further avenues for research.

Theoretical framework

This section presents the theoretical framework of this dissertation (see Figure 1). The key dependent variable is the credibility of expert advice. The next two sections explain the concepts of 'expert' and 'expert advice credibility' that are at the heart of this dissertation. I then outline the main explanatory variables at the context level, the expert-advice level, and at the individual level.

Figure 1. Theoretical framework
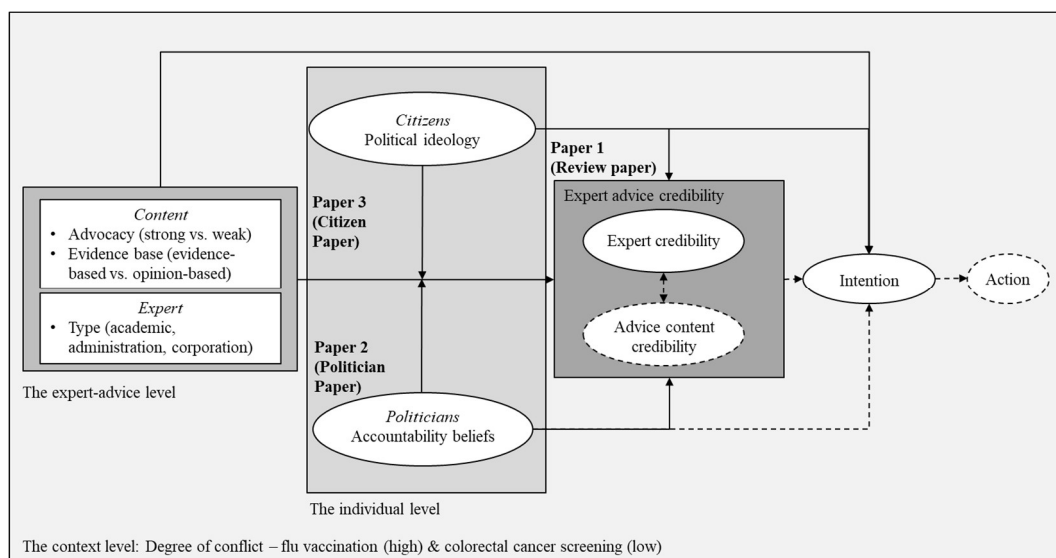
Note: The solid arrows indicate the causal links studied in the papers. The dotted lines denote links and constructs that are not the focus of this dissertation.

Defining 'experts'

Psychologists, sociologists, and communication scientists have adopted different conceptualizations of 'experts.' According to psychologists, what distinguishes experts from laymen are their superior competence and talents (Ericsson 2006). Within sociology, however, individuals become experts because they are ascribed specific roles in society (Meuser and Nagel 2002). This sociological perspective encompasses a relational dimension: a client demands an expert's expertise (Hitzler 1994). Communication scientists have also been interested in experts as sources in media

reporting or as public figures discussing risk issues (for a summary, see Huber (2014)).

Here, Peters (1994) has advanced an influential definition that combines the

psychological and the sociological perspectives and includes Nowotny's typology of

scientists' functions (Nowotny 1981). Accordingly, Peters defines experts as individuals

with specialized knowledge in a specific domain (psychological perspective), who

provide their knowledge in a client-expert relationship (sociological perspective), and

who apply their knowledge to practical problems (the third function of scientists

according to Nowotny (1981)) (H. P. Peters 1994). I build on Peters' (1994) definition,

but extend his science-centric perspective by also including non-scientific experts, since

experts providing policy advice can be found in various spheres of society outside

academia (Craft and Howlett 2012; Maasen and Weingart 2005; Nowotny, Scott, and

Gibbons 2001). Because my focus is on mass-mediated expert advice, I understand

experts as scientists and non-scientists who provide their specialized knowledge to the

public through the mass media to contribute to our understanding of political issues and

to identify potential policy solutions.

Expert advice credibility: the key variable

For any communicative effect such as attitude change or action to unfold, individuals

need to accept expert advice. Credibility is thus a crucial factor that constitutes the key

variable of my research. Weiss and Bucuvalas (1980) state that perceptions of the

credibility of expert knowledge, in addition to its utility, are key to render expertise

relevant. The credibility of information can, for example, lead to attitude change (Alt,

Lassen, and Marshall 2016; Lupia 2000; R. E. Petty and Cacioppo 1981; Weitz-Shapiro

and Winters 2017) or foster behavioral responses (Iyengar and Valentino 2000; Muñoz,

Anduiza, and Gallego 2016). I understand credibility as a situational evaluation

involving information processing (Go et al. 2016), which distinguishes credibility from

related concepts such as trust.

Credibility is one of the most important concepts in communication research (Kiousis 2001). Within psychology and communication science, credibility is generally understood as a quality individuals ascribe to different objects or subjects (Hovland, Janis, and Kelly 1953; Metzger et al. 2003; Schweiger 1999). More specifically, it describes a perceiver's assessment of the believability of information sources or messages (Simons 2002). Despite its prominence, however, the construct's conceptualization and measurement remain debated. First, while existing research differentiates between the credibility attributed to sources, media (communication channels), and messages, conceptual differences between source and media credibility remain unclear (Kohring and Matthes 2007). Second, media scholars often conceptualize source credibility as multidimensional, but disagree on what the relevant dimensions are (Berdahl et al. 2016; McCroskey and Teven 1999). Third, although scholars see message credibility as one of the three main credibility constructs (see above), detailed definitions and measurement instruments for this construct are rare (Metzger et al. 2003). More important, however, we lack conceptualizations and measurement instruments specifically targeted to the credibility of experts and their advice. Empirical studies interested in the credibility of expert advice often rely on more general credibility measures (e.g., Doberstein 2017; Lachapelle, Montpetit, and Gauvin 2014; Vraga et al. 2018). Only few studies have tried to specifically conceptualize and operationalize the credibility of expert advice (Haynes et al. 2012; Hendriks, Kienhues, and Bromme 2015).

Paper 1 (Review paper) of this dissertation makes a first contribution by providing a comprehensive review of how media research has conceptualized and measured the credibility of sources, media, and messages. Not only does this review

describe areas of agreement and disagreement in conceptualizing and measuring credibility, it outlines ways to move forward, as well. Moreover, the review also provides the building blocks for conceptualizing and measuring (see 'Empirical strategy') 'expert advice credibility'—the key dependent variable of this dissertation.[1] To facilitate readers' understanding, I anticipate the 'Central findings' of the paper here and outline how I conceptualize expert advice credibility based on the results of Paper 1.

The review highlights the need for context-sensitive conceptualizations of credibility constructs and corresponding measurements. Therefore, not only do I make use of the heritage of media research when I conceptualize expert advice credibility; I also include insights from the sociology of science.

I focus on two credibility constructs: the credibility of experts themselves and that of their advice products. As far as the former is concerned, I follow Hovland and colleagues' (1953) influential conceptualization of source credibility and adopt a two-dimensional understanding of an expert's credibility, defining it as perceptions of trustworthiness and expertise. This definition is consistent with science sociologists, who understand the first dimension as an expert's integrity, honesty, and disinterestedness, and describe the second dimension as perceptions of an expert's competence, expertise, and knowledgeability (Gieryn and Figert 1990; Shapin 1994). However, science sociologists have mainly been concerned about experts' trustworthiness and have emphasized the importance of objectivity for an expert's credibility (Daston and Galison 2007; Gieryn 1999; Gieryn and Figert 1990; Shapin and

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[1]   Details about the research questions addressed in this first paper and the chosen empirical strategy can be found in the section 'Empirical strategy.'

Schaffer 1985). Some scholars have argued for a third dimension—namely perceptions of an expert's benevolence or concern about the common good (Haynes et al. 2012; Hendriks, Kienhues, and Bromme 2015; Shapin 2010). Nevertheless, I consider such perceptions not as a dimension in their own right, but as part of trustworthiness (H. P. Peters 1992).

As far as the credibility of the advice content is concerned, I follow the majority of media scholars and define it as a unidimensional construct (see 'Central findings'), consisting of perceptions of plausibility, accuracy, and consistency (Shapin 1994). Other aspects used to describe the credibility of an expert's advice include validity, comprehensiveness, and quality, thereby emphasizing the role of scientific methods (Berdahl et al. 2016; Thomm and Bromme 2012; Weiss and Bucuvalas 1980). Information and communication scientists provide similar conceptualizations (Metzger and Flanagin 2013). Building on these research strands, I understand the credibility of expert advice content as perceptions of accuracy and validity.

Explaining credibility perceptions: three sets of explanatory variables

What explains why citizens and politicians believe or reject mass-mediated expert advice? My literature review of the fields of science communication, evidence-based policy-making (EBPM), and knowledge utilization (KU) reveals three key levels of analysis where explanatory variables are situated: the decision-making context, the expert advice itself, and the individual evaluating the advice (see Figure 1). While this dissertation considers variables at all three levels, its main interest lies in analyzing how the individual and the expert-advice levels interact to shape perceptions of expert advice credibility. The subsequent paragraph outlines the theoretical framework in more detail.

The context level

KU and EBPM scholars have emphasized the role of contextual factors in understanding the use of expert advice in political decision-making (Frey 2012; Sabatier and Jenkins-Smith 1993; Weiss 1999). This dissertation focuses on the role of one specific variable that is particularly relevant to credibility perceptions: the degree of conflict (Frey 2012; Sabatier and Jenkins-Smith 1993; Schrefler 2010; Weible 2008). Scholars have argued that in highly conflictual situations, expertise cannot contribute to solving problems and finding a common ground. In conflictual circumstances, expert advice is used—if it is used at all—for strategic purposes, such as to bolster one's position (Whiteman 1985). However, others have argued that a certain degree of conflict can amplify the influence of expertise, since controversial issues are often highly relevant, which can increase the need to collect all available expertise (Balthasar and Müller 2014; C. Z. Mooney 1993).

Nevertheless, existing research has produced ambiguous results about conflict's effect on the use of expert advice (for a summary, see Eberli (2019, 67)). Moreover, scholars have mainly focused on conflict's effect on the actual use of expert advice, despite important arguments about why conflict also affects credibility perceptions: controversial issues are generally marked by disagreement about how the problem is understood and what the goals to achieve are, meaning that political actors do not share the same values and aims (Hoppe, 2010). Controversial issues therefore entail more than a single position (Guinaudeau and Persico 2014). Experts who provide advice on controversial issues are therefore more likely to be perceived as siding with one side in the debate, which can decrease perceptions of experts' objectivity and may result in lower perceptions of credibility (Vraga et al. 2018).

Investigating conflict's effect on perceptions of expert advice credibility is particularly relevant in the field of health policy, because expert advice is not only key to defining problems and finding policy solutions (Balthasar 2010), but also because the achievement of public health goals strongly depends on collective action (Siegal, Siegal, and Bonnie 2009). Consequently, if conflict indeed decreases expert advice credibility, the consequences are especially dire in the realm of health policy. By comparing how politicians and citizens evaluate the credibility of expert advice on a conflictual health policy issue (i.e., flu vaccination) and a non-conflictual issue (i.e., colorectal cancer screening), this dissertation contributes to filling an important gap in the literature.[2]

Yet, this study's main focus is not on context variables, but on variables at the individual level and at the level of the expert advice itself.

The expert-advice level

Communication, psychology, and public opinion scholars have long acknowledged the power information characteristics wield in explaining individuals' reaction to information (e.g., Bakker et al. 2013; Druckman 2001; O'Keefe 2003; R. E. Petty and Cacioppo 1981; Weitz-Shapiro and Winters 2017). This also holds when it comes to perception of and reaction to expert advice as specific type of information (e.g., P. R. Brewer and Ley 2013; Carlisle et al. 2010; Frey and Widmer 2013; Lachapelle,

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[2]   My issue selection allows me to hold additional variables of the decision-making context, which are potentially relevant to credibility judgements, constant. These include the policy fields' closeness to science and technology (i.e., great closeness due to the focus on health policy issues) (Sabatier and Jenkins-Smith 1993), the focus on policy instruments (i.e., vaccination and cancer screening) rather than goals (Pielke 2007; Weible 2008), and the degree of uncertainty about the knowledge (Boswell 2009; H. P. Peters 1994; Radaelli 1999). Papers 2 and 3 provide details on the issue selection.

Montpetit, and Gauvin 2014; Myers et al. 2016; K. A. Oliver et al. 2014; Weiss and Bucuvalas 1980).

This dissertation centers on the explanatory power of three characteristics of expert advice: *the type of expert, the evidence base of the expert advice, and the degree of advocacy of the provided advice.* These three characteristics are of paramount importance to perceptions of expert advice credibility, since they affect whether or not expertise is perceived as fair and unbiased – the foundation of credibility perceptions of expert advice (Gieryn 1999; Shapin 1994). Moreover, they are vital when it comes to mass-mediated expert advice, as we shall see.

When they decide whether and how to react to expertise, individuals often rely on source cues (P. R. Brewer and Ley 2013; Druckman 2001; Lachapelle, Montpetit, and Gauvin 2014). McCright et al. (2013) for example show that trust in scientists varies depending on the type of scientists. In a similar vein, Myers et al. (2016) find that trust in the research of governmental agencies varies depending on the agency in question. The *type of expert* is therefore crucial for individuals' evaluations of expert advice credibility. This is especially the case when individuals deal with mass-mediated expert advice, where journalists decide who is considered an expert, resulting in a variety of experts present in the news (Huber 2014).

I therefore compare citizens' perceptions of three types of experts particularly relevant within health policy: academic experts, administration experts, and corporation experts. Academic experts, such as scientists affiliated to universities, are important in various policy fields. However, public health science has tried to influence political and social discourse more than other scientific disciplines (K. E. Smith and Stewart 2017). For example, Swiss public health scholars have actively engaged in the debate about a ban on tobacco advertising as a means to protecting minors (Sprumont et al. 2019).

Experts affiliated to governmental units play a crucial role, as well. They spread information about public health issues especially—but not only—during public health crises (Jang and Baek 2019; Tang and Zou 2021; Vraga and Bode 2017). More important, they are vital sources of expertise as far as informing decision-makers and the public about public health measures, such as recommended vaccinations, is concerned. Finally, corporation experts, such as pharmaceutical companies, are key in the development of medical technologies, such as vaccines, as the COVID-19 pandemic aptly illustrates (Sanofi 2020). Not only do they conduct research themselves, but they also fund research to develop new drugs (e.g., clinical trials) (Besley et al. 2017; Chopra 2003).

The institutional affiliations of these experts inform individuals about the context of production of the expert advice and the potential interests the expert has in relation to the advice provided (Mitchell et al. 2006; Shapin 1994; Yamamoto 2012). This can result in different credibility evaluations. Academic experts are often considered highly credible sources due to their alleged independence (Gieryn 1999; Shapin and Schaffer 1985). Various empirical studies confirm this assumption for citizens (e.g., P. R. Brewer and Ley 2013; Metag and Schäfer 2020) and for members of the public administration (e.g., Doberstein 2017). Similarly, administration experts have recently been shown to enjoy high levels of trust (Carlisle et al. 2010; Myers et al. 2016). By contrast, citizens tend to exhibit lower levels of trust in corporation experts (Besley et al. 2017; Metag and Schäfer 2019; Sanz-Menéndez and Cruz-Castro 2019). This is likely related to corporation experts being more than mere information providers: they are also representatives of vested interests (Lavertu and Weimer 2011; R. G. Peters, Covello, and McCallum 1997).

Nevertheless, most studies that focus on the effects expert sources exert on individuals depart from a rather narrow understanding of expert advice and define it as knowledge provided by scientists or scientific institutions (e.g., Lachapelle, Montpetit, and Gauvin 2014; McCright et al. 2013). Consequently, studies comparing the influence of academic and non-academic experts are scarce (e.g., Carlisle et al. 2010; Doberstein 2017). By comparing different expert types, this dissertation therefore makes a crucial contribution to understanding how citizens and politicians alike respond to the increasing diversity in policy advisory systems and the potential influence these experts can have on policy processes (Craft and Howlett 2012).

While source cues are powerful in shaping individuals' perceptions of information, scholars have also identified message content as an important variable explaining why individuals believe information in general (Johnson, Maio, and Smith-McLallen 2005) and expert advice in particular (Hendriks and Kienhues 2019; Thon and Jucks 2017). Scholars have argued that the more convincing expertise is, the more credible it is and the more likely decision-makers are to rely on it (Frey 2012; Weiss and Bucuvalas 1980). What makes expert advice convincing? Previous research suggests that the type of *evidence* one uses to support his/her arguments matters (Hendriks and Kienhues 2019; O'Keefe 1990; Reynolds and Reynolds 2002). When they offer their expertise, experts often not only provide facts, but also include their interpretations and opinions of different problems or solutions. To back their arguments, experts will, for example, refer not only to research findings (e.g., "Studies have shown"), but also to their professional opinions (e.g., "I am convinced") (Albæk 2011; Stucki 2016). This is what their customers—journalists, politicians, and citizens— expect (Albæk 2011; H. P. Peters 2008). By doing so, they "express opinions or convictions which (however scientifically founded) cannot in any way be identified

with knowledge [*savoir*] in the strict sense which science generally affords this term"

(Roqueplo 1995, 176–77).

The type of evidence (evidence-based or opinion-based) experts provide for their statements can affect how credible individuals perceive experts to be. Petty and colleagues (1981) show that when messages contain references to statistics or data, individuals perceive them as more convincing than when they are opinion-based or narrative in nature. Recent studies support these early findings (Allen et al. 2000; Peralta et al. 2017). For example, Peralta et al. (2017) find that individuals are more likely to select health information that contains numerical evidence than information containing narrative evidence. This suggests that, whether or not providing evidence enhances credibility depends, among other things, on the type of available evidence (Hornikx 2005). Yet, existing research has mainly focused on the difference between statistical and narrative/anecdotal or causal evidence, respectively (Hornikx 2005). By comparing evidence-based and opinion-based evidence, this dissertation therefore contributes to the large body of literature dealing with the role evidence plays in persuading others (O'Keefe 1990; Reynolds and Reynolds 2002). At the same time, it accurately reflects the reality of how expert advice is portrayed in the media (Albæk 2011).

The third variable of interest is also located at the message level. As outlined above, experts do not only provide facts when they engage with their clients. In addition to drawing on different types of evidence, they can also engage in *advocacy*. Donner (2014) defines advocacy as one extreme on a continuum ranging from a science-dominant end, where advice is more objective, to an advocacy end, where expert advice

becomes more normative.[3] For example, an expert from the science-dominant end may state that flu vaccination can effectively prevent the flu, whereas an expert leaning towards the advocacy end may argue that flu vaccination should be promoted. Whether experts should engage in advocacy and how it affects the public's perception of experts has fueled and still fuels scientific debate (Pielke 2007; Schrögel and Humm 2019). The idea that experts and, more specifically, academic experts act as political advocates conflicts with traditional notions of expertise (i.e., science) as something that informs and educates the public and politicians about scientific facts (H. P. Peters 2008), and therefore with the notion of "Speaking Truth to Power" (Wildavsky 1979). Advocating personal positions, some have argued, may decrease perceptions of an expert's fairness and disinterestedness and ultimately harm his/her credibility (Lackey 2007). Others, however, consider advocacy as an important activity that experts can engage in, as it may help overcoming important problems (Dietl and Flessa 2018; Nelson and Vucetich 2009; Scott, Rachlow, and Lackey 2008). The degree to which an expert decides to engage in advocacy depends on the expert him/herself (K. Smith 2013; K. E. Smith and Stewart 2017). When interacting with journalists, however, the latter may explicitly demand that experts go beyond mere facts and outline what should be done to overcome particular problems (Huber 2014; H. P. Peters 1994). Investigating whether credibility varies across different degrees of advocacy that experts adopt therefore constitutes a key issue in research on mass-mediated expert advice.

Nevertheless, the arguments for or against advocacy remain largely normative and empirical evidence on the effects of advocacy is scant (Schrögel and Humm 2019). The two empirical studies I identify suggest that experts do have a certain leeway to

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[3]   Others have suggested multi-categorical (Pielke 2007) or binary models (Lackey 2007).

engage in advocacy, but that advocating for specific policies can indeed reduce an expert's credibility (Beall et al. 2017; Kotcher et al. 2017). Building on this small body of research, this dissertation compares the effect of different degrees of advocacy to extend the few empirical findings and to contribute to filling this gap in the literature.

The individual level: politicians and citizens

The previous section discussed how sender and message characteristics affect evaluations of expert advice credibility. However, since this dissertation conceptualizes expert advice credibility as a perceptual variable, the assessment of credibility depends on who makes these judgements—the receiver of the issued advice. This dissertation focuses on two key types of receivers: citizens and politicians. Including both groups is crucial because achieving public health goals, particularly goals related to preventative medicine, not only depends on politicians making policy decisions but is also heavily contingent on individuals behaving in accordance with public health expertise. Politicians and citizens may differ when they evaluate expert advice. Two main arguments support this assumption. First, the same variables can affect citizens' and politicians' credibility evaluations differently, because each actor processes expert advice in response to different motivations. Second, different variables may explain politicians' and citizens' credibility evaluations.

Psychologists generally distinguish two types of motivations that condition the way individuals process information. Individuals can be driven by either accuracy motivations (they are motivated to reach the most accurate conclusion) or directional motivations (they are motivated to reach specific conclusions) (e.g., conclusions in line with their pre-existing attitudes or identities) (Kunda 1990). Scholars have argued that the manifestation of these motivations can vary between citizens and politicians: Politicians may yield to accuracy motivations more often as a result of their fear of

electoral sanctions or due to their stronger sense of duty (A. A. Anderson et al. 2012; Mullinix 2018). At the same time, politicians may also dispose of higher directional motivations because they are more likely to hold issue attitudes than citizens and are partisans by definition (S. E. Anderson and Harbridge 2014; Kahan 2013). While stronger accuracy motivations could result in more systematic and careful processing of expert advice, with politicians paying more attention to source or message cues than citizens do (Tversky and Kahneman 1974), stronger directional motivations could manifest in politicians' evaluations of expert advice credibility being more strongly affected by politicians' beliefs, attitudes, or political ideology (Kunda 1990). However, few studies have directly compared the information processing of citizens to that of politicians—and even fewer have specifically focused on expert advice. The scarce empirical evidence suggests that both groups engage in motivated reasoning (Baekgaard et al. 2019), but that biased reasoning can be stronger among politicians than among citizens (Christensen and Moynihan 2020; Esaiasson and Öhberg 2020).

Although this dissertation contributes to filling this gap by describing how similar variables affect both citizens and politicians, it focuses on the second aspect: the question of what individual-level variables bear special importance for citizens' and politicians' credibility evaluations, respectively.

When it comes to *citizens*, scholars have made a case for understanding individuals' attitudes towards science as intertwined with individuals' social, cultural, and political environments (Kahan, Jenkins-Smith, and Braman 2011; Schäfer, Kessler, and Fähnrich 2019, 92). Indeed, scholars in science communication have recently emphasized the role of political ideology and partisanship. Most of these empirical studies (that mainly focus on the United States) find that citizens on the political right hold less positive attitudes towards expertise than their left-wing counterparts (Blank

and Shaw 2015; Gauchat 2012; McCright et al. 2013; Myers et al. 2016). Such polarization in attitudes towards expert advice has severe consequences. If sectors of the public are skeptical about expertise, they are unlikely to change their behavior to follow experts' advice. This is particularly problematic in policy fields where expertise is highly relevant and where solutions to policy problems require collective action. It may explain why scholars have so far focused on environmental issues when investigating the role political ideology plays in perceptions of expertise (e.g., Carlisle et al. 2010; McCright et al. 2013; Myers et al. 2016). However, public health issues share many similarities with environmental issues in that expertise is highly relevant to both spheres (Frey 2012) and many public health goals also depend on collective action (e.g., herd immunity) (Siegal, Siegal, and Bonnie 2009). Building on the outlined body of research, this dissertation therefore investigates the role political ideology plays in citizens' evaluations of expert advice credibility on health policy issues.

Existing explanations of how ideology affects perceptions of expert advice can be divided into two strands. The first strand argues that some aspects inherent to right-wing (e.g., preserving traditions) or populist ideologies (e.g., anti-expert tendencies) explain the more negative perceptions of expertise right-wing and populist voters hold (Forchtner, Kroneder, and Wetzel 2018; C. Mooney 2005; Motta 2018; J. E. Oliver and Rahn 2016). The second strand claims that this is an oversimplification of the relationship between ideology and attitudes towards expertise: whether right-wing or left-wing citizens are more critical of expertise depends on the context (Blank and Shaw 2015; McCright et al. 2013; Nisbet, Cooper, and Garrett 2015). The scholars defending this 'contextual thesis' have focused on how ideological groups' skepticism toward experts depends on the issue at stake. They find that both right-wing and left-wing citizens exhibit greater skepticism towards expertise on issues that threaten their values

(Blank and Shaw 2015; Kahan 2013; Nisbet, Cooper, and Garrett 2015). However, a smaller share of scholars belonging to this second strand has advanced the argument that political ideology may affect what type of expertise citizens prefer (Carlisle et al. 2010; McCright et al. 2013; Myers et al. 2016). This dissertation follows the tradition of these scholars arguing that the type of expertise matters. More specifically, I seek to understand whether some ideological groups are generally more skeptical towards expertise or whether skepticism depends on the provided expert advice, namely the type of expert and the degree of advocacy they engage in (see previous chapter). This dissertation therefore does not only extend previous research by focusing on a new cultural (i.e., Switzerland)[4] and issue (i.e., health) domain. It also contributes to our understanding of the mechanisms underlying ideologically motivated skepticism towards expert advice by focusing on the role of the provided expert advice.

When it comes to how *politicians* perceive and use expertise, KU and EBPM scholars have mainly focused on institutions. By doing so, scholars implicitly assume that the individual members of the political elite are mainly influenced by the institutions they work in. While I do not maintain that institutions are irrelevant, this dissertation makes a case for understanding the micro-level mechanisms of how politicians come to believe expert advice. Individual characteristics are especially relevant in the first stages of knowledge use—namely, in the reception and perception of knowledge (Webber 1991). Consequently, they are paramount to evaluating the credibility of expertise.

The few studies that focus on individual politicians show that individual characteristics (e.g., prior attitudes, political ideology, professionalization, experience)

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[4] See 'Empirical strategy' for details about the case selection.

can indeed contribute to explaining why politicians choose to rely on expertise (Askim 2009; Baekgaard et al. 2019; Demaj and Schedler 2014; Demaj, Summermatter, and Schedler 2012; Eberli 2019; Hird 2005a, 2005b). While these studies highlight the importance of individual-level variables, they focus heavily on more systematic and object-bound expert advice, such as evaluations or performance information. However, when we deal with perceptions of mass-mediated expert advice, another variable comes to the fore: politicians' *beliefs about their (potential) voters' ability to hold them accountable*. The public nature of mass-mediated expert advice may affect how politicians react to such advice, as they must at least assume that such advice can potentially affect their voters (Cohen, Tsfati, and Sheafer 2008). Consequently, politicians who strongly believe that their voters can and will hold them accountable should be influenced by these accountability beliefs when evaluating mass-mediated expert advice.

How politicians' beliefs about their constituents affect politicians' behavior has been of crucial interest to political scientists (e.g., Broockman and Skovron 2018; Butler and Nickerson 2011; Fenno 1978; Kingdon 1967; Miler 2010; Miller and Stokes 1963). In fact, broad claims that accountability beliefs affect politicians' behavior were already formulated in the 1960s: Kingdon (1967) argued that if politicians feel closely observed by voters, they may feel more constrained in their actions. However, to the best of my knowledge, there are no empirical studies investigating such potential relationships. The only study exploring the effect of accountability on elected politicians focuses more generally on choice anomalies (i.e., risk seeking, commitment escalation, future time discounting) and not on the processing of expertise (Sheffer et al. 2018). By shedding light on the role of accountability beliefs, this dissertation therefore highlights an explanatory variable that merits more attention given the increased visibility of

politicians and political processes due to the rise of social media and the mediatization of politics.

To derive my hypotheses, I rely on theoretical and empirical contributions from cognitive psychology. Scholars in these fields argue that accountability affects individuals' motivations, which in turn can affect information processing (Ahluwalia 2002; Chen, Duckworth, and Chaiken 1999; Lerner and Tetlock 2003). Drawing on this research, one would expect accountability beliefs to affect politicians' motivations to process expertise in at least three ways. First, politicians should be more motivated to gauge their electorate's perception of the provided expertise (Would my voters believe it? Would they want me to believe it?). Second, they should be more motivated to identify the most accurate expertise (Is this likely to be true?). Finally, they should be more concerned about looking for expertise that can justify their actions (Can this expert advice legitimize my decision?). Regardless of which of these motivations is at play, accountability beliefs should have observable implications for how politicians process expertise.

Empirical strategy

Each of the three papers focuses on a specific part of the previously outlined theoretical framework (Figure 1).

Paper 1 (review paper) seeks to provide conceptual clarification and asks: *How has media research defined and measured credibility?* The goal of this comprehensive literature review is to identify patterns and trends in defining and measuring credibility in media research. In so doing, this paper not only provides an exhaustive overview of the existing research that uses the credibility construct, but also constitutes the stepping stone for the main outcome variable the two empirical papers engage with: expert advice credibility.

Paper 2 (politician paper) then focuses on politicians' perceptions of expert advice credibility. The paper advances politicians' accountability beliefs as a variable key to understanding perceptions of mass-mediated expert advice. Specifically, the paper asks: *Do accountability beliefs moderate the impact of the characteristics of expert advice on perceived expert credibility?*[5] Thus, this contribution seeks to understand whether perceptions of strong voter control affect how politicians process expert advice.

Paper 3 (citizen paper) again focuses on how an individual trait (political ideology) interacts with the characteristics of expert advice. This paper sets out to answer the question *whether right-wing and left-wing citizens react differently to different types of expert advice when it comes to expert credibility and intention to take personal action.* This third study goes beyond the paper on politicians in focusing not only on perceptions (expert credibility), but also on their effects on behavioral intentions.

While the politician and citizen paper focus on several interaction effects between variables at the individual level and at the level of the expert advice, both papers also provide results for the main effects of different characteristics of expert advice, as well as for the role of similar individual-level variables used for both groups (e.g., prior attitudes). Moreover, separate analyses for each issue in each paper allow us to make conclusions about the role of the context.

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5   I derived the credibility measures based on confirmatory and exploratory factor analysis using data from a large pretest of 728 Swiss citizens (for more details, see the appendices to *Papers 2 and 3*). The measures of expert credibility (politicians: α=.93/IIC=.70; citizens: α=.95/IIC=.75) and advice content credibility (politicians: α=.91/IIC=.72; citizens: α=.92/IIC=.74) show high reliability and internal consistency. For both papers, I only analyzed the effect on expert credibility.

The three papers of this dissertation have different goals regarding the knowledge they generate. *Paper 1 (review paper)* seeks to derive generalizable statements about how media research scholars define and measure credibility constructs. By contrast, *Paper 2 (politician paper)* and *Paper 3 (citizen paper)* seek to causally link the effects of individual characteristics, expert advice, and the general context to evaluations of expert advice. To do so, the dissertation triangulates methodological approaches. I rely on data derived from a descriptive literature review (*review paper*) and employ factorial survey experiments (*citizen and politician paper*) (Table 1).

Descriptive literature review: review paper

Reviewing the relevant literature is an essential part of each research endeavor that aims to build on existing knowledge and provide new knowledge. However, a literature review can also serve as a proper research methodology. *Paper 1 (review paper)* relies on data from such a comprehensive literature review of media research spanning more than six decades (1951-2018). Literature reviews, particularly descriptive literature reviews, allow scholars to identify the patterns and trends guiding previous research (state-of-the art) (Paré and Kitsiou 2017). In descriptive reviews, authors code each of the identified studies for certain characteristics of interest (e.g., specific construct, measurement items) (Sylvester, Tate, and Johnstone 2013). Conducting a descriptive literature review was therefore particularly suitable for achieving the aims of the review paper. In a first step, we had to identify the relevant literature. We conducted an exhaustive search to ensure that the review was as comprehensive as possible (Paré and Kitsiou 2017), and relied on a two-level screening to decide which articles to include in the review (at the level of the abstracts and based on the full texts). Thereafter, two coders coded the relevant studies based on a codebook. The first unit of analysis is the article (N=181). The second unit of analysis is the credibility scale identified in each

article (N=259).[6] To analyze the dataset, we relied on frequency and cluster analysis.

The main benefit of conducting such a comprehensive literature review has to do with external validity. Not only does the review span a significant period of time, it also employs a broad search strategy and includes articles from all relevant communication journals (see *Paper 1*).

Factorial survey experiment: Paper 2 and Paper 3

I collected data for Papers 2 and 3 from citizens and politicians in Switzerland. By focusing on Switzerland, I extend previous research, which has mainly investigated skepticism toward experts in the US context (Diamond, Bernauer, and Mayer 2020). Discussions about an increase in skepticism toward experts emerged not only during Trump's presidency, but also with the rise of populist movements across Europe (Dommett and Pearce 2019; Mede and Schäfer 2020). With its strong right-wing populist party, whose leaders have devalued academics and questioned the practical value of science, Switzerland is no exception to this trend (Skenderovic 2009; Stadler 2009; Tribelhorn 2017).

Switzerland is also an interesting case because compared to other countries' citizens, Swiss citizens and politicians may have a higher demand for expert advice. At the citizen level, this is a result of the direct-democratic system, which places higher informational demands on citizens, as they not only appoint their representatives, but also directly make policy decisions (Boudreau and MacKenzie 2014). At the politician level, we can assume that a higher demand of expert advice stems from members of parliament's (MPs') relatively low degree of professionalization both at the national and

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[6]   The number of scales is bigger than the number of articles because 51 articles contained more than one credibility scale.

at the regional (cantonal) levels (Bundi, Eberli, and Bütikofer 2017). This low degree of professionalization implies that politicians have less time to specialize in policy fields and to build up their own expertise. This can increase politicians' need for external expert advice when they try to keep up to date on a variety of topics in different policy fields (Eberli 2019, 50; Petersen, Heinrichs, and Peters 2010).

Data for *Paper 2* and *Paper 3* were obtained through factorial survey experiments on a sample of over 1,100 elected members of Swiss regional (cantonal) parliaments *(Paper 2)* and a sample of more than 2,400 Swiss citizens *(Paper 3)*. Both surveys achieved good response rates (46.1% for politicians, and 29.7% for citizens) and both samples are representative of key characteristics of the respective populations (see Tables A1 in the appendices to Papers 2 and 3, respectively).

Factorial survey experiments are the perfect methodological approach to study the research questions of *Paper 2* and *Paper 3*. First, (survey) experiments in general enable us to derive causal conclusions: researchers manipulate certain aspects of the questionnaires randomly, which ensures that post-treatment outcomes are only attributable to the aspect the experiment manipulates (Hainmueller, Hopkins, and Yamamoto 2014). As such, the main strength of experimental approaches lies in their internal validity. To further maximize internal validity and avoid that external factors potentially bias responses (McDermott 2011), I relied on a meticulous pre-testing of the planned manipulations (see the appendices to the respective papers). Moreover, at least for the citizen paper, I used multiple dependent variables including not only attitudinal measures (expert credibility), but also behavioral intentions (intention to take action). Second, the specific approach of factorial survey experiments is especially well suited for studying multidimensional choices, such as the perception of and reaction to expert advice, which can be influenced by the type of expert, the evidence base, or the degree

of advocacy—the advice properties of interest in this dissertation. In factorial survey experiments, these attributes are randomly varied, thereby overcoming a limitation inherent to other survey experiments: they allow for multiple experimental variations simultaneously. Third, the same design could be applied to both contexts, which allows for a direct comparison between citizens and politicians. In addition, the chosen design is especially well suited for studying the differences between population subgroups, namely, citizens of different political ideologies and politicians with varying levels of accountability beliefs (Auspurg and Hinz 2015; Hainmueller, Hopkins, and Yamamoto 2014). Finally, integrating experiments in a survey allows us to reach a large number of participants, which increases our models' statistical power (Auspurg and Hinz 2015; Druckman et al. 2011).

Such survey experiments are increasingly used by political scientists (Hainmueller, Hopkins, and Yamamoto 2014), and specifically tailored to investigate citizens' understanding of science (e.g., Carlisle et al. 2010; Druckman and Bolsen 2011; Vraga et al. 2018). Yet, few studies provide experimental evidence on politicians' reactions to expert advice (e.g., Baekgaard et al. 2019; Christensen and Moynihan 2020), since politicians are generally hard to access and especially hard to subject to experiments (Druckman and Lupia 2012, 1178). This dissertation therefore also innovates from a methodological perspective by using a survey experiment to investigate not only citizens', but also politicians' evaluations of expert advice.

I conducted the same factorial survey experiment among politicians and citizens. Both groups read a factually correct quotation of an expert in favor of either flu vaccination or colorectal cancer screening that was said to have appeared in a newspaper article. I selected these issues as they represent a high conflictual issue (flu

vaccination) and a low conflictual issue (colorectal cancer screening), but otherwise

share relevant characteristics (see footnote 2) (Golder et al. 2014; Milic et al. 2016).

Table 1 summarizes the core research question for each paper, their data

sources, and the methodological approaches each of them employs.

Table 1. Overview of data and research designs

Paper	Research question	Data sources	Methodological approach
Paper 1 (Review paper)	How has media research defined and measured credibility?	A descriptive literature review in media research covering the years 1951 to 2018 and including 181 articles containing 259 credibility scales.	Descriptive literature review (Frequency and cluster analysis)
Paper 2 (Politician paper)	Do accountability beliefs moderate the impact of the characteristics of expert advice on perceived expert credibility?	A factorial survey experiment conducted among French- and German-speaking members of regional (cantonal) parliaments (N=1,191) that manipulates a) the type of expert, b) the evidence base, c) the degree of advocacy, and d) the issue at stake.	Factorial survey experiment (linear regression analysis (OLS))
Paper 3 (Citizen paper)	Do right-wing and left-wing citizens react differently to different types of expert advice when it comes to expert credibility and intention to take action?	A factorial survey experiment conducted among French- and German-speaking citizens (N=2,465) that manipulates a) the type of expert, b) the evidence base, c) the degree of advocacy, and d) the issue at stake.	Factorial survey experiment (linear regression analysis (OLS))

Central findings

This chapter summarizes the main findings of the three papers that form this dissertation.

Paper 1 (Review paper): Deriving a measurement for expert advice credibility

Paper 1 (Review paper) seeks conceptual clarification and provides an overview of the definitions and measures that credibility constructs rely on. This descriptive literature review is, to the best of our knowledge, the first of its kind to focus on credibility research and complements the previous findings of narrative reviews (e.g., Metzger et al. 2003). The results of the review enable scholars to take full advantage of the rich legacy of credibility research when they measure credibility.

More important, however, the review yields four main findings that proceed to constitute the building blocks at the heart of this dissertation's conceptualization and operationalization of expert credibility. First, the review highlights that the constructs of source and message credibility are distinct not only at the conceptual level but—to some extent—also at the empirical level. Consequently, this dissertation elaborates a conceptualization and a measurement of expert *and* advice content credibility. Results from factor analyses using data of a pretest of 728 Swiss citizens confirm this two-factor solution. Second, the review finds that scholars frequently describe source credibility as multidimensional, and agree that expertise and trustworthiness are the most prominent dimensions. I have argued that this also holds for expert credibility. A factor analysis (see footnote 5) provides empirical support for this expectation, showing that trustworthiness overlaps with a suggested third dimension of an expert's benevolence or public good orientation (e.g., Haynes et al. 2012; Hendriks, Kienhues, and Bromme 2015). Third, despite the fact that message credibility has received less

attention as a dependent variable (Metzger et al. 2003), the review identifies 74 message credibility scales, which are almost exclusively conceptualized as unidimensional. I therefore also conceptualize advice content credibility as unidimensional in this dissertation. The resulting scale for advice credibility covers the most frequently used aspects of message credibility as identified by the review paper (e.g., accurate). Finally, the review emphasizes the relevance of context-specific conceptualizations and measurements, as well as the importance of establishing a clear link between concept and measurement. This dissertation complies with this prerequisite by combining media research with the literature on the sociology of science (see 'Expert advice credibility: the key variable'). The measures derived for expert credibility and advice content credibility constitute parsimonious measurement instruments that are valid and reliable for both citizens and politicians. Scholars who wish to measure expert credibility or the credibility of their communicative products therefore have an additional measurement at their disposal, and these variables are not only theoretically founded, but have been empirically tested.

The following two papers mainly focus on expert credibility, the source credibility construct. The politician and citizen papers aim to explain how accountability beliefs (politicians) and political ideology (citizens) affect perceptions of expert credibility using data from factorial survey experiments.

Paper 2 (Politician paper): Making a case for accountability

The *politician paper* focuses on how politicians' beliefs about voter control (accountability beliefs) affect how they evaluate perceived expert credibility. This paper argues that politicians with strong accountability beliefs may be more motivated to make accurate decisions and/or to justify their decisions, which may result in

preferences for certain types of expert advice over others. The paper provides strong evidence for this argument.

First, politicians with strong accountability beliefs are less likely to identify experts who may have a more obvious stake in the outcome and could therefore be perceived as biased by their voters as credible (corporation experts operationalized as experts working for the pharmaceutical industry), than those of their colleagues who perceive less voter control. These differences are substantial: Credibility perceptions of MPs with strong accountability beliefs decrease by more than half a point on the 7-point scale, while MPs with weak accountability beliefs do not perceive corporation experts as significantly less credible than experts working in academia.

Second, the results provide some support that politicians with strong accountability beliefs are also less likely to punish experts for engaging in strong advocacy. In other words, they are somewhat more hesitant to ignore experts who call for specific political action. While the differences between the MPs are rather small, the findings hold across a range of robustness checks.

Contrary to my expectations, however, I find politicians with strong perceptions of voter control to care less about the evidence base of expert advice. While this effect holds for various robustness checks, it does not hold equally for both issues. On the issue of flu vaccination, politicians evaluate experts who use evidence-based language as more credible than experts using opinion-based language, regardless of politicians' accountability beliefs. When it comes to colorectal cancer screening, however, evidence-based language only increases the credibility perceptions of politicians with weak accountability beliefs. This indicates that when issues are less conflictual, such as in the case of the cancer screening issue, politicians with strong accountability beliefs

are probably less afraid of electoral sanctions. Consequently, they care less about the evidence base of expert advice.

Paper 3 (Citizen paper): Expert advice through an ideological lens

By focusing not only on credibility perceptions, but also on behavioral intentions, the *citizen paper* goes beyond the politician paper and seeks to approximate how expert advice can ultimately affect citizens' behavior. Previous findings indicate that right-wing citizens are more skeptical of expert advice than left-wing citizens (Blank and Shaw 2015; Gauchat 2012). In this paper, I argue that whether an ideological group exhibits greater skepticism toward experts than another depends on the provided expert advice (i.e., type of expert and degree of advocacy). This study finds strong support for this thesis.

First, the results demonstrate that citizens evaluate experts more positively if they represent institutions aligned with citizens' beliefs, although previous research has produced mixed findings about this source-ideology interaction (Carlisle et al. 2010; McCright et al. 2013). For instance, right-wing citizens, known for their strong pro-economy and anti-regulation attitudes, do not perceive corporation experts as significantly less credible than academic and administration experts. In contrast, the credibility perceptions of industry-skeptic left-wing citizens increase significantly and substantially when these citizens are provided with advice from an academic or administration expert compared to when they receive advice from a corporation expert. An expert's affiliation therefore provides a critical cue to citizens. These findings are robust over a range of checks and model specifications. However, once decisions become more consequential (when citizens are asked about their behavioral intent), skepticism about corporation experts increases among right-wing citizens even if such

experts represent an institution these citizens generally view positively (i.e., corporations).

Second, left- and right-wing citizens differ in their reactions towards experts who advocate for specific courses of action. As expected, advocacy has a stronger negative effect on right-wing citizens than on left-wing citizens, at least when it comes to one's intention to act. Therefore, and as Paper 3 argues, advocacy may indeed amplify the pre-existing doubts right-wing citizens hold about the expert's objectivity (Funk et al. 2019; Steel, Lach, and Satyal 2006). The results about the two issues provide further support for this assumption: right-wing citizens are especially disapproving of advocacy on the issue of flu vaccination. The higher degree of conflict surrounding this issue (Golder et al. 2014) may amplify right-wing citizens' perceptions of an expert's partisanship. Overall, the results corroborate descriptive poll results from the US showing that right-wing citizens tend to perceive experts as less objective and prefer it if experts stay out of policy debates (Funk et al. 2019).

Finally, I corroborate previous research on the US context that finds that while right-wing citizens generally perceive experts as less credible than their left-wing counterparts, they still evaluate experts as rather credible (Blank and Shaw 2015; Myers et al. 2016).

Additional findings along the framework

Papers 2 and 3 share a similar underlying theoretical framework and rely on the same factorial survey experiment. Therefore, the papers provide additional findings for explanatory variables at the individual, the expert advice, and the context levels. This section summarizes these findings by simultaneously highlighting the similarities and the differences between citizens and politicians.

At the individual level, both papers highlight the explanatory power of *prior attitudes*. Lending further support to a considerable body of research, I show that citizens are more likely to evaluate expert advice as credible if it aligns with citizens' prior attitudes (e.g., P. R. Brewer and Ley 2013; Christensen and Moynihan 2020; Druckman and Bolsen 2011). The effect is substantial: experts' credibility on the 7-point scale increases by almost 1.5 points when citizens agree with the expert. Moreover, citizens' intention to act increases by more than 3 points. The effect of prior attitudes on the perceived credibility of expert advice also shows in the analyses of politicians' perceptions and is comparable in size.[7] This suggests that although politicians are partisans by definition, they are not driven by their previously held attitudes more strongly than ordinary citizens. These findings corroborate the few existing empirical findings on the topic (Baekgaard et al. 2019), although some contributions find that the effects of prior attitudes can be stronger among politicians under specific circumstances (Christensen and Moynihan 2020; Esaiasson and Öhberg 2020). I also find evidence of differences across *language regions*: French-speaking citizens evaluate expert credibility significantly higher than German-speaking citizens. An additional survey question (not included in the citizen paper) confirms that French-speaking citizens also

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[7]   Citizens holding attitudes that contradict the expert advice evaluate the expert's credibility at 3.86 (colorectal cancer screening) and 3.63 (flu vaccination), whereas citizens who agree with the advice asses the expert's credibility at 5.34 (colorectal cancer screening) and 5.11 (flu vaccination), holding all other variables constant. For politicians agreeing with the expert, credibility ratings increase from 4.34 to 5.55 (colorectal cancer screening) and from 4.29 to 5.49 (flu vaccination), respectively. Prior attitudes also affect citizens' intention to act: citizens who disagree with the expert intend to get a screening or a flu shot at a rate of 1.81 and 1.19, respectively, whereas one's intention is at 5.09 (screening test) and 4.57 (flu shot) when one agrees with the expert.

view expert involvement in political decision-making more favorably.[8] When this variable is included as an additional control variable, the effect of region slightly decreases, suggesting that part of the linguistic differences are linked to different understandings of experts' role in politics.[9] This may be related to German-speaking cantons' stronger preferences for popular inclusion in decision-making through direct democratic instruments in contrast to French-speaking cantons' stronger preference for representative democracy (e.g., via local parliaments) (Stadelmann-Steffen and Freitag 2010). Swiss scholars have discussed the linguistic cleavage underlying citizens' differences in voting behavior (e.g., Bolliger 2007; Büchi 2000; Herrmann and Leuthold 2003). My results suggest that scholars wishing to explain citizens' perceptions of and reactions to expert advice may want to consider this cultural variable as well.[1011]

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[8] Respondents answered a series of four questions that covered the expertise dimension of technocracy as suggested by Bertsou and Caramani (2020). I calculated a mean index of the four items ranging from 1 (weak role of experts in political decision-making) to 7 (strong role of experts in political decision-making). This index was also used in the politician survey and the descriptive analysis shows that French-speaking politicians also favour expert involvement significantly more (M=4.69, SD=1.13, p=0.000) than German-speaking politicians (M=4.25, SD=1.21).

[9] Mere cross-regional differences in the citizens' attitudes towards flu vaccination and colorectal cancer screening cannot explain this effect since I controlled for prior issue attitudes.

[10] However, including the language variable in the main effects model of the politician paper showed no significant influence on politicians' perceived expert credibility.

[11] In addition, the control variables gender and age employed in Papers 2 and 3 did not significantly contribute to explaining the variation in citizens' and politicians' perceptions of expert credibility. Holding a higher educational degree slightly increases politicians' perceived expert credibility, but the effect is at the margins of statistical significance (10%-level).

At the expert advice level, both papers provide overwhelming support for the hypotheses that the three properties of expert advice (type of expert, evidence base, and degree of advocacy) contribute to explaining citizens' and politicians' credibility perceptions, as well as citizens' intention to act.[12] The *type of expert* is the most powerful of the three variables in both studies. This finding emphasizes the important role that source cues play in individuals' evaluations of expert advice (e.g., Lachapelle, Montpetit, and Gauvin 2014; Yamamoto 2012). Both groups (citizens and politicians) are more skeptical of experts who have a more obvious stake in the outcome (corporation experts), while individuals evaluate the credibility of academic and administration experts similarly. The size of the effect is comparable between citizens and politicians, suggesting that in contrast to existing findings (e.g., Weitz-Shapiro and Winters 2017), more politically sophisticated individuals (politicians) are not necessarily more likely to detect potential source bias. An explanation is that politicians are more likely to develop personal ties to corporation experts (Eberli 2019), which

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[12]   Overall, the three characteristics of expert advice lead to changes of around half a point on the 7-point credibility scale for both groups. For example, politicians attribute a credibility of 5.28 (colorectal cancer screening) and 5.26 (flu vaccination), respectively, to an academic expert making an evidence-based statement that is low in advocacy. Compared to that, they rate the credibility of a corporation expert using opinion-based language and engaging in strong advocacy at 4.61 (colorectal cancer screening) and 4.60 (flu vaccination), respectively. For citizens, the respective values for the high-credibility conditions (i.e., academic expert, evidence-based, weak advocacy) are 5.04 (colorectal cancer screening) and 4.87 (flu vaccination). For the low-credibility conditions (i.e., corporation expert, opinion-based, strong advocacy), citizens give experts credibility ratings of 4.50 (colorectal cancer screening) and 4.33 (flu vaccination). Finally, the findings about the effects of all three properties of expert advice are also robust for citizens' intention to act. In fact, their effect on citizens' intentions is even stronger than their effect on citizens' credibility perceptions.

could decrease the difference in the perceived credibility of corporation experts and experts working in academia or the administration.

Nevertheless, individuals react not only to source cues, but also to characteristics related to the content of the advice. First, I find that compared to opinion-based advice, *evidence-based* expert advice increases citizens' and politicians' perceptions of expert credibility. These results go beyond the existing literature by showing that references to specific research findings and statistics *as well as* more general references to research increase the persuasiveness of provided information (Allen et al. 2000; Hornikx 2005; Peralta et al. 2017). Second, the observed effects for *advocacy* underpin the aforementioned results in that more normative language affects expert credibility negatively. Expert credibility suffers if experts advocate for specific policy solutions. These results contrast somehow the few existing empirical insights, which indicate that experts may have certain leeway when they engage in advocacy, especially when the proposed solutions are not controversial (Beall et al. 2017; Kotcher et al. 2017). In my experiments, the experts advocated for more money for information campaigns on flu vaccination and colorectal cancer screening, respectively. While clearly falling within the realm of advocacy, the proposed policy is rather uncontroversial compared to other policies (e.g., mandatory vaccination or screenings). Although the effect is rather small, these results point to advocacy's detrimental effects on an expert's credibility, even when experts advocate for uncontroversial policies.

Various scholars have argued that politicians may process information more systematically than citizens since their accuracy motivation may be stronger due to the importance of their decisions (e.g., failure of win re-election) (S. E. Anderson and Harbridge 2014). Consequently, variations in the evidence base and the degree of advocacy could have stronger effects on politicians' credibility perceptions than on

citizens' perceptions (Lin, Hwang, and Lai 2017; R. Petty, Cacioppo, and Goldman 1981). While the effects of both characteristics are slightly stronger for politicians than for citizens, the differences are rather small. This corroborates existing empirical findings in that politicians and citizens process information (Sheffer et al. 2018) and expertise similarly (Baekgaard et al. 2019).

At the context level, the results reveal several differences between the conflictual (flu vaccination) and the non-conflictual issue (colorectal cancer screening). For example, citizens perceive experts talking about the *conflictual* issue as less credible and are less likely to act upon expert advice on this issue. Moreover, the properties of the advice content have different effects depending on the issue. Regarding the advice's evidence base, both papers provide strong support that compared to opinion-based statements, evidence-based statements only increase perceptions of expert credibility in the case of flu vaccination. A similar pattern emerges regarding advocacy: advocacy only has a significant negative effect on an expert's credibility when it comes to flu vaccination. This suggest that conflict increases the role advice content properties play in credibility evaluations. This is not surprising since more conflictual issues may raise doubts about the neutrality of the experts providing the advice (Vraga et al. 2018). Evaluating information more carefully and devoting more attention to advice content may therefore become more important. Moreover, scholars have argued that experts talking on controversial topics in public might be perceived as having a political position in general (Schrögel and Humm 2019). Consequently, using opinion-based language and actively advocating for specific policies may be especially harmful when conflict is high, as it amplifies individuals' pre-existing perceptions of bias. These results resonate with the few existing empirical insights on the topic, which show that

the effect of advocacy varies depending on the issues at stake and is mainly negative

when issues are controversial (Beall et al. 2017).

Discussion

While different types of information influence political decision-making, advice provided by experts plays a vital role, especially insofar as complex policy problems related to public health questions are concerned. However, concerns about citizens' and politicians' skepticism towards experts speaking on health policy issues, such as vaccination, remain and have most recently gained renewed attention in light of the COVID-19 pandemic. I therefore set out to answer the following research question: *How do citizens and politicians evaluate expert advice credibility on health policy issues, and how can expert advice properties, individual traits, and context-related factors contribute to explaining these evaluations?* The comprehensive theoretical framework of this dissertation has proven its worth: variables on the individual, the expert-advice, and the context levels all contribute to understanding why citizens and politicians believe expert advice.

Individual-level variables constitute the core of this dissertation. My work yields three findings that significantly further our understanding of perceptions of expert advice. First, I shed light on an individual trait relevant for understanding politicians' perceptions of expert advice, which has so far remained largely unexplored (Sheffer et al. 2018): accountability beliefs. The results demonstrate that politicians with strong accountability beliefs systematically differ from politicians who perceive less voter control when they evaluate expert credibility. Accountability beliefs, I am convinced, merit further attention beyond the particular context of this study. In a world where politics and science are increasingly mediatized, politicians' reactions to expertise on political issues are increasingly visible to the public. Additionally, citizens' access to science-based information has become easier since the turn of the century (Hendriks and Kienhues 2019). Such increased (capacity for) public scrutiny of politicians should

amplify the role of accountability beliefs in politicians' information processing and decision-making beyond mass-mediated expert advice. By introducing a new individual trait that directly concerns politicians, these findings also advance research in the fields of EBPM and KU, which to date have shown limited interest in micro-level mechanisms (Eberli 2019). Moreover, it contributes to research on politicians' information processing (Baekgaard et al. 2019; Sheffer et al. 2018; Stolwijk and Vis 2020; Walgrave et al. 2018), and to the literature interested in the role politicians' beliefs about their constitutions play in shaping politicians' behavior more generally (Broockman and Skovron 2018; Butler and Nickerson 2011; Fenno 1978; Kingdon 1967; Miler 2010; Skovron 2018). Second, this dissertation confirms what various scholars have firmly established: namely, that individuals are biased information processors who tend to evaluate new information in light of their prior attitudes (Kunda 1990; Taber and Lodge 2006). I show that prior attitudes play a dominant role in explaining both citizens' and politicians' expert evaluations. Empirical evidence on this issue has so far been scant (e.g., Baekgaard et al. 2019; Christensen and Moynihan 2020; Esaiasson and Öhberg 2020). Third, this dissertation finds that the same expert advice can result in different reactions depending on one's ideology, not merely because the content of the advice is not convenient to one's political views (Blank and Shaw 2015; Nisbet, Cooper, and Garrett 2015). This is because citizens belonging to different ideological groups prefer certain types of expert advice over others—a hypothesis only few have tested empirically so far (e.g., Carlisle et al. 2010; McCright et al. 2013; Myers et al. 2016). With this dissertation, I have shown that political ideology is an important explanatory variable beyond highly polarized political contexts (e.g., the US) and beyond perceptions of science in general or environmental and ecological issues (Blank and Shaw 2015; P. R. Brewer and Ley 2013; McCright et al. 2013; Myers et al.

2016; Nisbet, Cooper, and Garrett 2015). In sum, this dissertation helps explain how people evaluate expert advice in moderately polarized contexts (Switzerland) (Boxell, Gentzkow, and Shapiro 2020) and on other science-based issues (health policy issues).

Insofar as *expert advice properties* are concerned, two findings merit attention. First, both papers find that while source cues (expert affiliation) are dominant, expert advice properties at the advice level (evidence base and advocacy) also affect credibility perceptions. These findings align with recent contributions in that citizens are not simple cue-takers, but instead use other information if such information is available (e.g., Boudreau and MacKenzie 2014; Dür 2019). This is a hopeful message as it indicates that both politicians and citizens assess expert advice not only by relying on easy-to-use cues, but also by paying attention to the content of the advice (Lin, Hwang, and Lai 2017; R. Petty, Cacioppo, and Goldman 1981). Second, the fact that different types of expert advice affect citizens and politicians differently supports this dissertation's chosen approach of defining expert advice more broadly, and not only as a product of scientists' work and scientific research. Such an approach not only better aligns with the existing realities in mass media (Albæk 2011) and politics (Craft and Howlett 2012), but it also furthers our understanding of why individuals accept or reject expert advice.

At the *context level,* this dissertation has focused on the role conflict plays by comparing the effects on two issues: flu vaccination (conflictual) and colorectal cancer screening (non-conflictual). In general, the results highlight that experts are perceived as less credible when they talk about conflictual issues. Their advice is therefore less likely to be followed under such circumstances—at least when it comes to citizens. This aligns with previous empirical studies on the meso level that show that expert advice is less likely to affect political actors' positions and actions when conflict is high (e.g.,

Boswell 2009; Frey 2012; Rissi and Sager 2012). Moreover, the findings suggest that a higher degree of conflict results in a more careful processing of expert advice. Three results support this assumption. First, the properties of advice content (evidence base and advocacy) have a stronger effect on citizens' and politicians' credibility perceptions when it comes to the conflictual issue. Second, right-wing citizens are especially disapproving of advocacy when it comes to flu vaccination. Finally, while politicians with strong accountability beliefs perceive experts using evidence-based language as more credible than experts using opinion-based language in the case of flu vaccination, they do not do so when it comes to colorectal cancer screening. In sum, these findings emphasize the need to consider the decision-making context when analyzing perceptions of and reactions to expert advice (Frey 2012).

While this dissertation makes important contributions to the existing research on perceptions of expertise, various decisions taken over the course of this project may be considered *limitations* that merit discussion. A first limitation is the dissertation's focus on a perceptual outcome variable—namely, expert credibility. While credibility certainly is a crucial precursor to attitudes and behavioral intentions (Druckman and Bolsen 2011; Iyengar and Valentino 2000; Lupia 2000; Muñoz, Anduiza, and Gallego 2016), some might argue that skepticism toward experts only becomes relevant when it is reflected in actual behavior (e.g., vaccine refusal, non-compliance with physical distancing, voting against expert consensus). However, perception is a key step in the causal chain between expert advice and actual behavior. In essence, credibility perceptions are seen as a precondition of behavioral change, making it a crucial variable (Iyengar and Valentino 2000). This being said, Paper 3 (citizen paper) includes citizens' intentions to act as an outcome variable, thus focusing on a precursor of behavior that is more immediate than credibility perceptions (Fishbein and Ajzen 1975; Kim and Hunter

1993). I find that several of the identified effects also hold when we seek to explain

variation in behavioral intentions; in some cases, they even are stronger (see footnote

12), highlighting the fact that the examined variables are relevant to citizens' actual

behavior, as well.

Second, focusing on a specific group of politicians—Swiss subnational members

of parliament—might limit the findings' generalizability to other types of politicians

and beyond the Swiss context. Indeed, the chosen group of politicians has a rather low

degree of professionalization (Bundi, Eberli, and Bütikofer 2017), and acts in open-

ballot systems with proportional representation and weak parties. Whether the results,

particularly those regarding the role of accountability beliefs, also apply to more

professionalized or executive politicians can only be determined by future research.

Cantonal members of parliaments' low degree of professionalization may explain why I

find little difference in how politicians and citizens evaluate expert advice. More

professionalized and specialized politicians could for example be better equipped to

critically examine expert advice than the politicians in my sample, leading to greater

differences in how they react to variations in the type of expert advice. However,

multiple studies produced in recent years have shown that politicians are not very

different from average citizens insofar as using heuristics in (complex) decision-making

is concerned (Vis 2018). This being said, for the purpose of this dissertation, studying

the direct effects of expert advice in such a context of low professionalization highlights

the external validity of the study's design because in everyday politics, expert advice

also reaches politicians directly, without any preselection and filtering by staffers.

A third limitation is this project's focus on a very specific form of expert advice:

mass-mediated expert advice. Mass-mediated expert advice is a type of expert advice

that is key for politicians and citizens alike. It is a person-bound and—most relevant to

the political context—public form of expert advice. However, politicians find more systematic forms of expert advice relevant, as well (Ledermann 2014). These include statistical data, research studies, or systematic reviews (K. A. Oliver and de Vocht 2017). One might argue that these types of expertise are more private and less accessible by 'ordinary' citizens, which may raise questions about the generalizability of my results to such expertise. However, general expertise is increasingly accessible by the public via the Internet. Moreover, systematic expertise often also sparks public debates as the COVID-19 pandemic has recently demonstrated (Martin and Hanna 2020). As such, the results of this dissertation are relevant—although maybe to a more limited extent—to more general perceptions of expert advice.

Finally, opting for an experimental design carries limitations regarding the projects' external validity. It is difficult to generalize beyond the specific experimental situation and population used in this study (McDermott 2011). While the multifactorial approach specifically seeks to make treatments more realistic, like every other experimental setting, it is prone to neglecting real-world features that could affect credibility perceptions (e.g., competing forms of information and topics). However, if one wishes to compare two different populations, as this dissertation has done, there are few alternatives to conducting an identical experiment on the populations of interest.

I identify three promising avenues for *future research*. First and to establish the generalizability of my findings, future research would benefit from investigating the way accountability beliefs affect executive politicians, who are more visible to the public, other types of expert advice (e.g., less public ones), other political contexts (e.g., systems with stronger parties), as well as a broader variety of issues and policy fields. Moreover, scholars may seek to unravel the underlying causal mechanisms between accountability beliefs and perceptions of expert advice: Do politicians with strong

accountability beliefs differ from politicians with weak accountability beliefs because they are afraid of taking a 'wrong' decision or because they want to conform to their electorate's preferences? Such approaches could better focus on the actual use of expert advice, as different motivations may result in different types of use (Weiss 1977). While the former (accuracy motivation) may lead politicians to use expert advice instrumentally in order to make better decisions, the latter (directional motivation) may lead to more political or strategic uses. Process tracing and other case study techniques might provide suitable approaches to building on the insights generated by my project's experiment.

Second, various questions about the interaction between political ideology and perceptions of expert advice remain unanswered. While prior attitudes have an impressive effect on evaluations of expert advice, I find preliminary evidence that certain types of experts have the power to affect citizens' expert evaluations even when their advice contradicts citizens' attitudes—at least for certain ideological groups. Left-wing citizens always perceive corporation experts as less credible than academic or administration experts, no matter whether the experts' stance is in line with their beliefs or not. By contrast, regardless of the position the experts take, right-wing citizens do not consider academic and administration experts as more credible than corporation experts. This finding provides an interesting starting point for scholars interested in exploring how misinformation and misperceptions can be counteracted (e.g., van Stekelenburg et al. 2020; Vraga and Bode 2017). In addition, this dissertation holds individual expert traits, such as their gender or cultural background, constant. An expert's background may, however, interact with a receiver's political ideology. For example, individuals may discriminate in favor of experts who belong to their cultural ingroup or discriminate against experts who belong to an outgroup (M. B. Brewer 2016), and right-

wing citizens may be more prone to engage in such discrimination (Besco 2015; Portmann and Stojanovic forthcoming). Future research could therefore investigate how an expert's individual traits interact with respondents' political ideology.

Finally, future research could devote more attention to comparing politicians' and citizens' perceptions of expert advice. Understanding how the same expert advice affects the perceptions and behaviors of these groups is crucial. Not only is this so because achieving policy goals depends on both elected political decision-makers' and citizens' behavior—especially when it comes to public health—but also because expert advice has become more easily accessible to citizens and politicians thanks to the Internet. Comparative contributions remain scant (e.g., Baekgaard et al. 2019; Christensen and Moynihan 2020; Esaiasson and Öhberg 2020; Stolwijk and Vis 2020). Although my results indicate that citizens and politicians are similar in how they evaluate expert advice, this may be a result of the specific group of politicians I have examined (i.e., low professionalization) or of the particular policy field and issues this dissertation has focused on. We may find greater differences on more complex issues that are more difficult to understand and less directly relevant to individuals. Moreover, I did not directly compare politicians to citizens. It would be interesting to explore whether ideological polarization is also observable in politicians' perceptions of expert advice. Scholars provide competing hypotheses in this regard. Some argue that political polarization in perceptions of expert advice should be weaker among politicians, since the latter are professionals in possession of great issue expertise, which works to reduce cognitive biases. Others argue that such polarization should be higher among politicians since they are partisans by definition (Lee et al. 2020).

The questions addressed in this dissertation are interesting and relevant beyond academia. Overall, the results underscore the need for experts to understand the

audience they engage with and the context they act in in order to tailor their communication accordingly (Cairney and Kwiatkowski 2017).

First, politicians perceive administration experts to be as credible as academic experts, and citizens attribute even more credibility to the former than to the latter. This is a hopeful message for governmental health units, given the powerful role public officials play on health policy issues (Jang and Baek 2019; Vraga and Bode 2017). Yet, the results also suggest that depending on the issue, collaboration with academic experts may be a more successful route to communicate expert advice—citizens still prefer academic, rather than administration experts, on the issue of flu vaccination. On a more pessimistic note, however, the low credibility of corporation experts is problematic, especially regarding health policy. Corporation experts, such as the pharmaceutical industry, not only provide valuable expert advice themselves, but they also significantly contribute to funding research (Besley et al. 2017). Such experts may consider drawing on the credibility of academic or administration experts, and using these experts as mediators. In sum, the results demonstrate that communicators of expert advice should take the role of expert sources into account.

Second, the insights on the role of individual-level variables highlight the need for communication strategies specific to particular target groups. There is no one-size-fits-all solution. Therefore, choosing the afore-mentioned strategies also depends on the particular audience communicators of expert advice are dealing with. Right-wing citizens, the presented data shows, are more skeptical towards administration experts than their left-wing counterparts. Expert advice providers may therefore reflect on which communicators are most likely to reach particular audiences and deliver their advice via sources most likely to enjoy credibility among their targeted segments of the public (Van Bavel et al. 2020). In a time when targeted personalized information

provision has become the norm, this might already constitute a standard practice in many areas.

        Third, the findings also emphasize that communication needs to be context-specific. Individuals evaluate expert advice differently depending on the issue at hand. The results suggest that in conflictual situations, expert advice may be more successful in reaching its audience, if it uses more evidence-based language and sticks as close to the facts as possible, and when it avoids any indication of an issue position, meaning that one should be careful with advocacy.

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