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Opting for Polarizing Emotions: Strategies of Czech Pro-Vaccination Discussants in the Emotionalized Public Sphere and Debate on a Measles Epidemic

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Drawing upon a case study of a heated public online debate on vaccination related to a measles epidemic in the Czech Republic in 2019, this article's contribution is twofold: First, it adds to recent debates about the emotionalization of the (online) public sphere, and second, it examines communication strategies of vaccination supporters. To capture the heterogeneity of the online debate, we analyzed the discussion forums of 3 mainstream online news servers. Providing observations relevant to current debates surrounding anti-COVID-19 vaccination, our data reveal that the deliberative potential of online debate concerning vaccination is undermined by the offensive nature of pro-vaccination comments. These comments tend to be uncivil, toxic, and offensive mainly due to the use of communication strategies employing destructive emotions. We conclude that by labeling their opponents and constructing dichotomies in which they associate them with individualism and irrationality, the pro-vaccination discussants contribute to further polarization of stances toward vaccination.

Keywords: deliberation, comment sections, emotions, polarization, public sphere, vaccination

Despite the long tradition stressing the importance of rationality in public communication on important issues (Calhoun, 1992; Habermas, 1989), scholars started to turn their attention to the role emotions play in political and public communication and persuasion decades ago. Following the affective

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turn (Hoggett & Thompson, 2012), they have increasingly considered emotional dynamics as essential to political debates. The focus on emotions gained even more prominence in the 21st century with the rapid development of digital communication platforms and social networks (Howard & Parks, 2012).

In this article, we do not follow the dualism of rationality versus emotionality in public communication and instead accept the importance of both modes in the creation of what has been coined an emotional public sphere (Lunt & Stenner, 2005; Richards, 2010, 2018; Rosas & Serrano-Puche, 2018). Departing from this designation, we use the term "emotionalized" rather than "emotional" to stress the processual nature and constant transformation of the public sphere in which rationality and emotionality coexist (Wahl-Jorgensen, 2018). In other words, we emphasize the inevitable duality, rather than dichotomy, of emotions and rationality. Therefore, we stress that emotions do not substitute rationality and that both rational and emotional modes of communication coexist, making it necessary for communication researchers to recognize "the central and inevitable place of emotion" as "inseparable from rational decision-making" (Wahl-Jorgensen, 2018, 2019, p. 3).

Contemporary vaccination debates represent an ideal arena to examine discussions in the emotional public sphere. Although the role of emotions has often been evoked in accounts of the posttruth era—notably concerning allegedly antiscientific, misinformed antivaccination stances (Numerato, Vochocová, Štětka, & Macková, 2019)—we hypothesize that emotions can similarly underpin the pro-vaccine argumentation. We assume that the topic is strongly related to scientific knowledge, pure rationality, and legitimate concerns, but it is highly emotionalized at the same time, as any vaccination-related communication is connected with potential risks, matters of health, human life, and childhood and thus triggers strong emotions.

Some academic accounts have emphasized the role of digital media and online communication in vaccination debates. Their exploration into the nature of the vaccine controversy has primarily focused on an in-depth understanding of the antivaccine position (e.g., Kata, 2012; Xu & Guo, 2018). However, much less attention has been paid to researching the communication strategies of vaccination proponents and to the argumentation in favor of vaccinations, despite the fact that some scholars explicitly stress the need to employ pro-vaccination parents to promote vaccine acceptance and influence the hesitant through online communication (Brunson, 2013; Opel & Marcuse, 2013).

Against this backdrop, we have systematically studied everyday online pro-vaccination argumentation. We thus extend the thematically focused research on pro-vaccine social movements (Martin, 2015, 2018; Vanderslott, 2019) and the campaigning of health authorities (Altay & Mercier, 2018) by addressing the following questions: What strategies do the pro-vaccination discussants employ in dealing with the arguments of hesitant, critical, and antivaccination actors and in constructing their position in the debate? Moreover, what are the implications of this particular analysis for a broader theorization of the role emotions play in public debates?

Our article draws on the analysis of an extensive corpus of 2,724 contributions to comment sections related to online articles covering the measles epidemic between January and June 2019. To capture the heterogeneity of the online debate, we analyzed discussion forums in three mainstream online news servers

in the Czech Republic: the second most visited online daily, iDnes.cz, with 1.3 million unique users per month (www.netmonitor.cz—because the most read online news server, Novinky.cz, with 1.5 million unique users per month, does not archive discussions below their articles, the second most-read online news server was selected for analysis); an online daily from a rival publishing house Aktuálně.cz, targeting a more selective audience (0.73 million unique users); and an online version of the most popular tabloid, Blesk.cz, with 0.74 million unique users per month (www.netmonitor.cz).

The article is structured as follows: First, we discuss recent key theoretical observations that conceptualize the role of comment sections and discussion forums as sites of deliberation and the importance of emotions in this environment. Second, we provide a brief overview of the existing research focusing on pro-vaccination accounts. Following that is a discussion of the fundamental methodological underpinnings of the study and a discussion of the results, aiming to decipher the communication strategies employed by pro-vaccination discussants. Finally, we discuss the central outcomes of the research and outline the essential empirical and theoretical implications of our study for further research.

Online Discussion Forums and Deliberation in the Emotionalized Public Sphere

According to Dahlberg's (2011) model of deliberative digital democracy, the Internet environment can be perceived as an online substitute for the traditional Habermasian public sphere in which rational deliberation on important societal issues can take place (Habermas, 1989). Critiques stress the rather uncivil and nonproductive, polemic character of online discussions—according to Coe, Kenski, and Rains (2014), incivility "is a common feature of public discussions," with more than one in five comments considered uncivil in their analysis of newspaper website discussions (p. 673). They define uncivil comments as those mainly containing name-calling, vulgarity, or disparaging remarks about and words directed at other people or groups of people (Coe et al., 2014). Ziegele, Quiring, Esau, and Friess (2018) surmise that a skeptical position toward the role of user comments in public deliberation seems to be dominant in academia as "there is a disparity between the normative potential of comment sections as a forum for an inclusive, civil, and constructive discourse among citizens on significant issues and the observable reality of low-to-moderate participation rates and low discussion qualities" (p. 2).

Others stick to the Habermasian tradition and focus on the positive role that user comment sections may play in citizen empowerment by enabling new ways of participation and public expression and supporting interaction and discussion among citizens (Rowe, 2015; Ruiz et al., 2011). Gonçalves (2018) states that online news comment sections generate "high levels of participation and interaction," and he considers these online environments among the "most promising forums for discussion" (p. 604). Similarly, Rowe (2015) writes about the potential of user comment sections to empower citizens as he believes the environment provides its users with greater deliberative qualities than popular social network sites, such as Facebook. Furthermore, by summarizing previous studies, Ziegele et al. (2018) state that user comments have an impact on the attitudes and opinions of readers and their perception of specific topics.

The above-summarized perspectives only promise a fruitful and potentially influential debate if the discussion environment meets some standards, such as sufficient heterogeneity and civility. Nevertheless, the Habermasian ideal of a rational and respectful public sphere (Habermas, 1989) is challenged not only

by the above-mentioned authors, confirming high levels of incivility within online discussions, but also by the emotional nature of the public sphere (Lunt & Stenner, 2005; Richards, 2018) in relation to technologies as well as the health- and even life-related argument under scrutiny. As Crossley (1998) puts it, emotions represent an integrated part of communicative rationality.

Furthermore, the debate can also never remain strictly rational, neutral, and distant due to the polarization of opinions and the fragmentation or homogenization of the debate commonly occurring in these online environments (Yardi & boyd, 2010). Despite the fact that the homogenization thesis has become a very popular part of the common-sense knowledge related to the Internet, research on the issue offers a much more complicated picture. Some studies support the conclusion that users generally gather in homogeneous groups (the so-called bubbles or echo chambers) where they are affirming their perspectives rather than discussing new viewpoints (see Ruiz et al., 2011). On the other hand, others point to the diversity of discussion cultures and the existence of discussion spaces where minority voices are supported, and the debate is of satisfactory deliberative quality. According to Ruiz and colleagues (2011), it seems that at least two types of user discussions exist. Besides those almost homogeneous, where any meaningful exchange between bearers of opposing views barely occurs and where people tend to reproduce the same opinion, the authors describe some much more deliberative groups—they call them "communities of debate"—which support alternative views and a fruitful debate (Ruiz et al., 2011, p. 20).

Karlsen, Steen-Johnsen, Wollebaek, and Enjolras (2017) suggest that a heterogeneity of opinions exists in online debates, but it does not necessarily mean that deliberation occurs in these spaces. They describe the online environment as rather resembling "trench warfare" as one-sided arguments usually dominate, and cross-cutting debate is rather scarce (Karlsen et al., 2017, p. 257). These constellations, they suggest, only strengthen the initial beliefs of discussants and have little impact on the cultivation of opinion (Karlsen et al., 2017).

These accounts of the deliberative potential of online spaces were developed independently of the recently elaborated notion of the emotional public sphere, analyzing emotional modes of communication and their importance in more detail. Combining the conceptual tradition of these two perspectives, we aim to elucidate the mechanisms and processes contributing to the emotionalization of the public sphere.

While some authors relate the emotional public sphere to popular culture and focus on the public display of emotions (Lunt & Stenner, 2005), others connect it with political discourses and journalism and refer to the role of emotions in public debates (Dafonte-Gómez, 2018; Richards, 2018; Rosas & Serrano-Puche, 2018). Following the second stream of debates in particular, our aim was to understand the role of emotions in the public debate concerning vaccination.

Richards (2010) stresses the importance of emotions in political influence and persuasion and sees "emotionalized performance" as an "ever present dimension of all public discourse" (p. 302). He further distinguishes between two types of emotions in the public sphere: prosocial and reparative on the one hand and destructive and toxic on the other. He argues that the former type of emotions contributes "to emotional capital and social cohesion," while the latter adds to "emotional damage and social polarization" (Richards,

2018, p. 2043). This dichotomy of emotions informed our analysis and inspired us to explore a wider variety of emotionalization strategies.

As Richards (2010) summarizes elsewhere, the "emotional public sphere is always intertwined with the substance of the debates about values, policies, procedures and so forth that constitute the public sphere of would-be rational discussion" and that is why "a systematic study of the emotional public sphere" is necessary (p. 303). We believe we can contribute to this study by focusing on the ways in which pro-vaccination actors make use of the online discussion environment to pursue vaccination as a norm (Brunson, 2013; Opel & Marcuse, 2013).

Pro-Vaccination Arguments: Rearticulating the Taken for Granted

Compulsory vaccination and its positive aspects are commonly accepted, taken for granted, and not discussed. Compared with vaccine-hesitant and antivaccine communications, pro-vaccine attitudes are less visible, often viewed as unproblematized (Vanderslott, 2019) and uncontroversial, and without need of public articulation (McKeever, McKeever, Holton, & Li, 2016).

Taken-for-granted pro-vaccine attitudes are rearticulated during seasonal vaccination campaigns (Gunaratne, Coomes, & Haghbayan, 2019) or periods of crisis, such as decreasing immunization rates or outbreaks of vaccine-preventable diseases. Social responsibility, the necessity to protect others, and the perceived severity of vaccine-preventable disease, as well as advice from friends, family members, or experts with credibility, are presented as important driving forces for pro-vaccine communication. Supportive voices for vaccination derive from scientifically driven argumentation and include references to the perceived severity or risk of vaccine-preventable diseases, the history of vaccination, the credibility of expert knowledge, or herd immunity (Capurro, Greenberg, Dubé, & Driedger, 2018; Yaqub, Castle-Clarke, Sevdalis, & Chataway, 2014).

However, these primarily rational arguments are emotionalized. The strategies used in pro-vaccine communication are similar to those used in antivaccine activism—based on emotional and identity work (Xu & Guo, 2018)—and they could be even less rational when compared with the antivaccine argumentation (Faasse, Chatman, & Martin, 2016). Although drawing upon trust in biomedical expert knowledge, the pro-vaccine argumentation performed in other public arenas, including activism (Martin, 2018; Vanderslott, 2019), websites (Xu & Guo, 2018), media coverage (Capurro et al., 2018), or the wider public perception of vaccine refusals (Rozbroj, Lyons, & Lucke, 2019), is often accompanied with blaming, Othering, and the stigmatization of antivaccination actors, resulting in moral panic and calls for a stronger repressive system of sanctions (Capurro et al., 2018; Martin, 2015).

The previous accounts, which stressed the emotional, social, and identity work of the pro-vaccine argumentation, make relevant space to examine the deliberative potential of online media. In this article, we explore this potential in the case of a politicized, primarily nonpolitical debate surrounding the highly controversial, emotional, and health-related topic of vaccination. We thus contribute to previous scholarly debates about online deliberation developed primarily in relation to traditional political debates. Our analysis focused on answering the following empirically oriented main research question:

RQ1: What emotionalization strategies can be identified in the pro-vaccination argumentation of the discussants in online news comment sections?

This main research question was further refined with secondary research questions:

RQ2: What is the importance of rational argumentation and deliberation in pro-vaccination arguments?

RQ3: How is the position of the nonvaccinating or the vaccine-hesitant constructed in pro-vaccination comments?

In an attempt to contribute to a deeper understanding of the emotional public sphere, we further ask:

RQ4: What are the theoretical implications for further understanding of emotions in public debates?

Methods and Data

To address the research questions, we carried out a qualitative analysis of communication strategies supporting vaccination. We analyzed comment sections related to online news articles focusing on the measles epidemic in the Czech Republic from January to June 2019. This particular period was chosen because of a measles outbreak that spread across Europe in the first months of 2019 (World Health Organization [WHO], 2019a) and also featured the peak of this outbreak in the Czech Republic. In August 2019, the epidemic resulted in the loss of the measles elimination status in the Czech Republic and three other European countries (Albania, Greece, and the UK; WHO, 2019b). The topic thus triggered strong emotions due to its threatening character for society and because vaccination critics were portrayed as one of the main causes of the epidemic.

In the first analyzed online daily (iDnes.cz), a mainstream, center-right media outlet with the majority of readers having higher education and higher socioeconomic status, living in larger cities, and belonging in the 30–49 age cohort (www.netmonitor.cz), 18 articles about measles cases were identified between January and June 2019. Each of the articles was followed by a comment section. The liveliest debate had more than 1,500 comments; about half the sections did not exceed one hundred comments. In cases where the number of comments related to one article exceeded 100, we have selected the first 150 comments, which is sufficient to follow the principle of data saturation and to consider the redundancy of newly emerging data. The second online daily (Aktuálně.cz), an elite, liberally oriented online daily with the majority of readers with higher education and socioeconomic status, aged mainly between 20 and 49 years (www.netmonitor.cz), published 18 articles about the measles outbreak, and only 10 of them were commented on by readers. The number of comments rarely exceeded 100. The last news portal (Blesk.cz), an online version of the country's most popular tabloid with no specific political leaning, published 48 articles concerning measles cases. Only 28 of them were followed by reader discussions, and the most vivid discussions had about 30 comments. All comments subject to analysis (800 of 2,724 total in the sample, representing thus 29.4% of the sample comments) were clearly in favor of vaccination and/or supporting the current vaccination system in the Czech Republic. Some of the comments were reactions to other users'

statements, and we interpreted them in this context. However, our research does not examine users' interactions systematically as we are specifically interested in the pro-vaccination argumentation strategies.

The data were analyzed inductively using coding procedures—open and axial coding—inspired by grounded theory (Strauss & Corbin, 1998). This method, which allows researchers to reveal new structures in the data using an inductive logic, led to the identification of a set of categories and their relationships, offering answers to the above-stated research questions. We specifically focused on strategies constructing the position of the nonvaccinating or the vaccine hesitant in relation to pro-vaccination actors. We were further interested in the attribution of specific qualities to pro- and antivaccination positions and in the construction of dichotomies related to the stances toward vaccination. The data were coded qualitatively by two coders who (1) identified each of the main categories and their relations separately and (2) intersubjectively compared and systematized the data into a set of categories. The consensus about coding was reached during the two-step intercoder reliability test, performed on two distinct random samples of 150 comments. The reliability test enhanced the elaboration of the conceptual categories (see O'Connor & Joffe, 2020) and contributed to the improvement of the coding procedures. Krippendorff's alpha values were calculated with ReCal, an online tool developed by Freelon (2010), and reached a substantial level, ranging between the minimum value of 0.779 and 0.959. All coding procedures were conducted manually.

Research Results

Our analysis cannot support optimistic theses about the potential contribution of online spaces to a more deliberative or at least productive exchange of opinions, despite the fact that we take for granted the existence of the emotionalized public sphere—that is, the coexistence of rationality and emotions in public discourses. Although the comments sections do not represent homogeneous "echo chambers," and thus possibly have a potential to serve as platforms for democratic discussion among people holding different opinions, our data reveal a much more pessimistic reality, very close to the "trench warfare dynamic" described by Karlsen and colleagues (2017, p. 257). The vaccination proponents in the discussions do not appear as trying to convince those hesitant or holding different opinions about the positives of vaccination or to help them to overcome their concerns. Moreover, they do not make use of the potential that prosocial, positive emotions have in the public sphere (Richards, 2010, 2018).

On the contrary, they dominantly employ emotions that Richards (2010, 2018) labels as toxic and nonproductive, such as labeling, name-calling, vulgar language, or disparaging remarks about others (Coe et al., 2014), as well as other rather counterproductive strategies for deliberation—namely, the construction of an "us" vs "them" dichotomy. We have not found a significant difference in the discussants' approach on the three news servers despite targeting different audiences. It thus seems that the position and communication style of the vaccine proponents does not differ significantly based on the publication they read (nor other characteristics related to this media preference).

In other words, the passion of pro-vaccine argumentation is not coupled with compassion and efforts to understand the perspective of nonvaccinating or vaccine-hesitant Others. The passion is rather expressed in a denunciatory or angry way that excludes Others and is linked with different forms of argumentation fallacies (see, e.g., Longaker, 2014). Elaborating upon the concept of the emotional public

sphere, we identified three basic communication strategies employing destructive emotions, all of them based on polarization and contributing to the creation of nonvaccinating actors as Others associated with negative characteristics. We distinguish among (a) the form-related polarization of nonvaccinating actors through their labeling (including vulgar name-calling), (b) the content-related polarization of the vaccination debate based on the conflict between the interests of society and those of (vaccine-hesitant) individuals, and (c) the content-related polarization of the vaccination debate based on the dichotomy between rationality and irrationality.

The form-related strategy is not directly linked to the object of public debate (vaccination), but refers to the actors involved in the debate holding an opposing or different perspective. This emotional polarization does not exclude rationality as some comments refer to existing knowledge—for example, herd immunity, the significant decrease in mortality, the problem of the post-truth context, and alternative facts. However, the emotionalization is imprinted into the form in which this content is presented. We can identify various argumentation fallacies, employing emotionally charged words and phrases to bring about a desired effect—discussants often use appeals to guilt by association (for example, considering people who are vegans or ecologically aware automatically "irrational"), ergo decedo fallacy (suggesting that those who do not want to get vaccinated should live outside the rest of society, etc.), or various ad hominem fallacies to support their position (Longaker, 2014).

On the contrary, content-related emotionalization strategies are more firmly tied to the matter of debate—that is, the biomedical knowledge underpinning immunization policies or the responsible behavior of citizens concerning vaccination. While the form-related emotionalization is primarily addressing the Other and, more specifically, in the case of negative emotions, the Other's defects, content-related emotionalization represents a passionate defense of biomedical knowledge not allegedly embraced by nonvaccinating Others.

Polarization Through Labeling: "Crunchy Granola Mothers With Hippie Brains" and Other "Lunatics"

One of the basic strategies of Othering—that is, of excluding vaccination opponents or vaccine-hesitant people from the "in-group" of pro-vaccination discussants—is negative labeling, often including mockery. This form-related emotional and polarizing strategy is typically gendered in our data and targeted specifically at women—mothers who are believed to stick to "alternative" lifestyles, a label including pejorative references to a more healthy or sustainable way of life. The discussants name these women as "crunchy (vegan) granola moms," "eco-mothers," or "New Age mothers," using labels referring to veganism, interest in ecology and environmental issues, or esotericism (Aktuálně.cz, 2019a). These representations are further connoted with the dichotomy between reason and the lack of reason or emotions, suggesting that women labeled ironically as "brilliant eco-mothers," "New Age mothers," or "crunchy granola mothers with hippie brains" (Aktuálně.cz, 2019b) represent a dangerous, harmful irrationality or even insanity: "Human and especially female stupidity will cause a health catastrophe. A few idiots (crunchy granola mothers) and the damage is done" (Blesk.cz, 2019a). The following quote also illustrates this trend: "I hope that this article reaches the insane eco-mothers refusing to vaccinate their children" (Aktuálně.cz, 2019b).

The label is tightly related not only to vaccine hesitancy but also exploits the sexist logic attributing responsibility for vaccine hesitancy specifically to women in the role of mothers, perceiving them as irrational and less intelligent and blaming them for endangering both the general public ("Let's thank all the activist mothers who refuse to vaccinate and draw their pearls of wisdom from eMimino.cz"; iDnes.cz, 2019a; eMimino.cz is a Czech online parenting forum aimed at the exchange of experience among parents and is used predominantly by women) and their own children: "The eco-mothers will play heroes until they print eco-funeral cards for their children" (Aktuálně.cz, 2019c).

The labeling strategy generally combines various oppressive belief systems, such as sexism, classism, or xenophobia/racism. The target of the criticism of vaccination proponents are thus not only mothers but also Roma people (an often socially excluded ethnic minority in the Czech Republic), "stupid uneducated African women" (Aktuálně.cz, 2019a) or "Ukrainian workers" (Aktuálně.cz, 2019c), all of them typically compared with the alleged and surprising stupidity of "eco-mothers." "Hippie parents" or "eco-organic parents," in general, are typically criticized as well, but the gendering tendency blaming women–mothers above all is very strong in the analyzed data. These forms of labeling represent a specific form of argumentation fallacies, in particular attributing guilt by association, used by vaccination proponents to relate various vaccine-hesitant perspectives to specific lifestyles, values, and beliefs or to specific social identities.

Labels based on the dichotomy between intelligence (reason) and the lack of it are very popular among pro-vaccination discussants as well, condemning the nonvaccinating as members of society who are dangerous due to their intellectual limitations ("idiots") and their dependence on Internet information sources. This can be well demonstrated with the following quotes: "Pity you can't vaccinate against idiocy. Some people would need an elephant dose" (Blesk.cz, 2019b) or "Do you have sources other than the websites of crunchy granola idiots to confirm your statement?" (iDnes.cz, 2019b).

Generally, nonvaccinating parents are attacked through ad hominem argumentation fallacies, represented as not normal, an aberration from the norm, and different from "normal people" ("How does one ensure they do not get in contact with normal people?"; Aktuálně.cz, 2019a). To support their construction of vaccine-hesitant or antivaccination actors as "not normal," the discussants often hyperbolically refer to psychiatric terminology, mentioning "mental disorders" or "illnesses." These labels are then often accompanied by the typical stereotype of a person with a mental illness as someone endangering others ("dangerous psychopaths"; iDnes.cz, 2019c). The same logic follows when the authors of pro-vaccination comments label their opponents as "nutty existences" or as "fanatical" (iDnes.cz, 2019d).

The aberration from the norm is also connoted with the usage of the term "activists." This polarizing label with negative connotations is commonly used across public discussions on different issues in the Czech Republic. It refers to social actors with liberal stances and usually encompasses NGO employees or volunteers. In the case of vaccination, its usage reflects that several nonprofit organizations contribute to the public debate: "I can imagine various NGOs and 'hippie parents' yelling" (iDnes.cz, 2019e).

Members of the cosmopolitan, educated and liberal elite represent further typical targets of criticism. The criticism is often supported by the usage of terms such as the "Prague Café" or simply the

"Coffeehouse." These categories are frequently used in Czech public discourse to label cosmopolitan, educated, liberal elites living or working in large cities and Prague in particular. They are discursively constructed as a small group of people whose lifestyle, interests, and opinion differ significantly from the majority. Therefore, this label is also used by pro-vaccination discussants to distance themselves from those who do not vaccinate: "I do not need a 'scientific' study, a mere observation is sufficient to prove that it is the coffeehouse Left who refuses vaccination" (iDnes.cz, 2019f).

The last type of labeling we identified is similarly based on the exclusion of those who violate shared norms and stresses the moral aspect of such a violation much more. Through these moral lenses, vaccination proponents are considered either "parasites" (making use of the benefits ensured by those more responsible who vaccinate) or simply "selfish" because they do not contribute to herd immunity and endanger those who cannot be vaccinated for objective reasons:

> I would like to thank every clever-clever, selfish crunchy granola idiot, largely vaccinated against everything but willing to risk the lives of their children because of their selfishness and ignorance, as well as the lives of other children who cannot be vaccinated due to health reasons. (iDnes.cz, 2019b)

The following example illustrates a similar point: "So your children are going to parasitize the system in which most people are vaccinated" (iDnes.cz, 2019g).

Polarization Through the "Society Versus Individual" Dichotomy: Prioritizing the "Greater Good" and Calling for Repression and Sanctions

The first content-related strategy of the pro-vaccination discussants polarizes the debate by creating a conflict between two worlds: the world of vaccination proponents who prioritize the interest of the whole society versus the world of "antivaxxers" who selfishly focus on their personal interests. It is further developed alongside two dimensions. The first relates to the prioritization of societal interests over individual interests—as part of in vivo coding (see Strauss & Corbin, 1998), we use the emic term "greater good" to call this strategy the *greater good argument.* One of the antivaccination discussants described the argument that individuals must prioritize the interests of the whole society and take on the possible risks of vaccination to contribute to herd immunity as "a typical greater good argument" (Aktuálně.cz, 2019b) and refused it. The second represents a consequence of the prioritization of the greater good and mainly contains suggestions for repressive measures against those who do not prioritize this; we call this category *repression and sanctions.*

The greater good argument, as one of the content-related polarizing strategies, can be further divided into three types of arguments: (a) vaccination is worth the risk because "NOTHING IS 100% safe" (Aktuálně.cz, 2019d) and "the side effects of vaccination are negligible compared to the risk of not vaccinating" (Aktuálně.cz, 2019a); (b) vaccination prevents the return of deadly diseases and their grave consequences; and (c) a low vaccination rate is a problem, and people should feel solidarity with each other and act responsibly with regard to the whole society.

The greater-good argument thus typically stresses that "the role of medical science is not to save individuals, the role of the medical science is to lower the death rate" (iDnes.cz, 2019h), that "the goal is to protect society as a whole, not particular individuals" (iDnes.cz, 2019h), and that is why people should not overestimate the possible risks at the individual level.

This type of argumentation often borrows from history and reminds others of the situation before vaccination was invented, warning against returning to the past or recalling recent critical situations in developing countries. Although these apparently rational remarks are built on evidence and are commonly drawn from public health theories, they are still framed in a conflictual manner toward nonvaccinating Others and target emotions, hereby narrowing space for dialogue. In a more theoretical vein, the debates remain dominated by trench warfare as pro-vaccine discussants dismiss the arguments of the other side (and thus do not support dialogue) by giving absolute precedence to the common good over individual concerns and, at the same time, by not considering that the same interest in the common good can be shared by perspectives different than those of pro-vaccine adherents.

The reference to biomedical knowledge is not exclusively rational and is frequently emotionalized. Referring to the past, associated as it is with fear of death and severe health complications, generally functions as an argument suggesting that anyone hesitating to vaccinate wants to return to an age when both children and adults were dying or suffering severe damage as a consequence of devastating diseases. It compares the historical situation to the possibilities of today and, both directly and indirectly, blames the vaccine hesitant for not taking advantage of scientific development and contributing to "absolutely unnecessary death," "paralysis," and "inner organ" or "fetus" "damages." This type of argumentation can be demonstrated with the following comment: "Well, old cemeteries are full of those kids, in the post-war period, mortality declined (antibiotics) but not the occurrence of further damage as a consequence of the disease. Only vaccination reduced this. Almost to zero" (Aktuálně.cz, 2019a).

The emphasis on high mortality and other consequences of grave illnesses logically leads to comments blaming nonvaccinating individuals for being irresponsible toward society and to comments calling for solidarity. The comments typically remind of the importance of a high vaccination rate, which helps to prevent the spread of diseases. Some of the comments emphasize the dichotomy between private (individual) and public (society) by pointing out that not vaccinating against grave illnesses cannot be perceived as a matter of "selfish" individual freedom because by not vaccinating, the antivaxxers endanger others, specifically those who cannot be vaccinated: "Your private health is your private property indeed, but there also exists public health which is not your private property" (iDnes.cz, 2019g).

We have summarized above that there is a tight relationship between the *greater-good* argument and the category we named *repression and sanctions*. By constructing a dichotomy between societal interest (the greater good) and individual (selfish) interests, pro-vaccination discussants set the stage for a set of repressive measures against those who refuse to vaccinate and thus endanger the interest of the whole society. In their search for possible punishment of the nonvaccinating Other, vaccination proponents do not hesitate to call for restrictions related to personal freedoms and discuss the relationship between freedom and responsibility. Often, their conclusion is that democracy has its limits as many people act irresponsibly and do not base their decisions on proper knowledge. One of the discussants states that "universal suffrage

is a big mistake" because he can see "a lot of legally incapable people here" (iDnes.cz, 2019i). Another suggests that "only obligatory vaccination will save us" as "freedom is only for the responsible, not for the ignorant" (iDnes.cz, 2019i). The alleged misuse of the concept of freedom is stressed in appeal to motive argumentation schemes that problematize the focus on democratic liberties at the expense of health-related responsibility. The logical conclusion thus is that free choice should be banned in the case of vaccination in the name of the greater good: "It is, above all, necessary to ban free choice of the lay public, mothers above all, in every case. Otherwise even worse diseases from the past may appear" (Aktuálně.cz, 2019e).

The specifics of our Czech case, a post-socialist, post-transformation country, also enable us to see how the pro-vaccination discussants defend the totalitarian history in which vaccination was obligatory and state-coordinated, something they perceive as positive—especially when compared with democracy, in which people have a free choice. By doing so, they contribute to the discursive construction of blanket vaccination as hardly achievable in fully democratic systems based on liberal values:

> Today the trend is to get rid of everything introduced during the totalitarian regime. Unfortunately, we are not reasonable and cannot differentiate between what was good and what wasn't. The vaccination rate and childcare were always high. Not everything was bad. (Aktuálně.cz, 2019f)

Or, as another discussant stated, "It is all because those after-the-revolution idiots do not let their children get vaccinated. It used to be obligatory, and everything was easy" (Blesk.cz, 2019c).

Pro-vaccination discussants who do not call directly for freedom restrictions propose other ways of punishing the so-called antivaxxers. Some of them suggest obligatory education using deterrent examples as a way of convincing those who do not vaccinate ("I would force everyone who refuses vaccination to obligatorily watch YouTube videos with diseases against which they refuse to vaccinate"; Aktuálně.cz, 2019d). The majority of vaccination proponents would sanction the nonvaccinating economically; they would let them pay for the health care of their nonvaccinated children or fine them for not vaccinating. Some of the discussants would go even further and would, using ergo decedo forms of argumentation, remove the children from parents who do not have them vaccinated or totally isolate the nonvaccinating so that they cannot endanger others: "Bullshit. If you do not want to get vaccinated, then live in a pen" (iDnes.cz, 2019i) or "Send the parents who refuse to vaccinate to jail" (Blesk.cz, 2019d).

Polarization Through the "Reason Versus Irrationality" Dichotomy: Uncompromised Defense of Reason and "Irrationality as a Sign of the Times"

The above-described tendencies of pro-vaccination discussants to try to reduce the decision-making competencies of laypeople in the matter of vaccination are logically related to their conviction about the superiority of science and medical experts. The last dichotomy and content-related polarizing approach we have identified in the data thus constructs the pro-vaccination stance as one of reason, science, and expertise, whereas it associates the antivaccination position with the lack of it, with irrationality or faith (mainly in "alternative facts").

This dualism is reminiscent of the traditional Enlightenment conflict between reason and science, on the one hand, and emotions, nature, and natural wisdom, on the other. The discussants stress that vaccination represents "one of the biggest discoveries of medical science!" (Aktuálně.cz, 2019f), a crucial achievement on the way toward progress, and they suggest that those who do not recognize it are attempting to return to the Middle Ages or even prehistoric times. They clearly employ linear time logic, stressing that society is developing for the better, and we should not refuse the positive discoveries: "That vaccination is meaningful is a fact with which noisy people can't do anything. Or yes, we can return to the Middle Ages and enjoy it like they did, right?" (Aktuálně.cz, 2019a).

Vaccination proponents stress the important position of experts who understand the significance of vaccination (unlike laypeople) and thus have the right to decide for others about the obligation to vaccinate. These comments typically emphasize the importance of education and the societal division of roles based on expertise, and they try to discipline those who stand against vaccination by referring to their lack of education in the field: "THE EXPERTS=THE DOCTORS HAVE THE INFORMATION. I suppose you do not repair a car engine yourself or do not surgically remove your appendix" (Aktuálně.cz, 2019a).

Some comments associate the antivaccination stance with faith—not necessarily in the religious sense ("Do you also stave off appendicitis with a cold compress, a prayer to the Virgin Mary and the lighting of a prayer candle?"; Aktuálně.cz, 2019a). The dichotomy between science and faith stresses the irrational inclination of nonvaccinating toward various myths and "alternative facts." Those who decide not to vaccinate are labeled as "fanatics" who "often refuse anything non-natural" (iDnes.cz, 2019d), and the pro-vaccination comments suggest that it is meaningless to discuss the topic with them: "It makes no sense to discuss with the believers. I don't think it's the eco-mothers; it's rather those trusting alternative facts" (Aktuálně.cz, 2019a).

The alleged trust in alternative facts (or the denial of truth) on the side of the antivaccination actors represents a specific subcategory in the dichotomy between science and faith. Comments in this category typically employ criticism of fake news and disinformation; associate "antivaxxers" with those who believe in conspiracy theories, such as "chemtrails" (iDnes.cz, 2019b); and claim that the refusal to vaccinate is a tendency typical of so-called post-truth societies, with their relativized approach to the truth—a sign of the times:

> Refusing vaccination shares the same cause as the election of Trump or Zeman or of Brexit—the current revolt of irrationality against rationality. [The Czech president Miloš Zeman mentioned in the comment is associated with populist politics by some of his critics]. (Aktuálně.cz, 2019a)

The distinction between science and nonscientific faith contributes, although implicitly, to both the construction and reproduction of another faith, the faith in science on the side of pro-vaccination discussants. By describing and interpreting the manifestly expressed arguments of pro-vaccine discussants, we have only limited possibility to understand their motivations. However, although not necessarily articulated and manifestly celebrated, their above-mentioned faith in science could somewhat invisibly contribute to polarizing the debate. This could happen by a simple nonproblematization of science, by the fact that pro-

vaccine actors do not question what is allegedly questioned by the vaccine-hesitant or strictly antivaccine perspectives. In other words, emotionalization operates not only through claims being made but also through claims that remain unexpressed and that are taken for granted.

Discussion and Conclusions

By thematically focusing on pro-vaccine argumentation on discussion forums, this article contributes to the debate on the deliberative potential of online communication and elaborates the existing debates on the "emotional public sphere" (Lunt & Stenner, 2005, p. 59; Richards, 2018, p. 301) in which emotions represent an integrated part of communicative rationality (Crossley, 1998). By examining the theme of vaccination, we analyze the process in the emotionalized public sphere outside the previously explored realms of political communication and popular culture, yet at the same time focusing on a theme of high importance in public debates.

More specifically, we focused our analytical attention toward the hitherto less explored pro-vaccine argumentation. We conclude (in response to RQ2) that, similar to the antivaccination argumentation, the defense of vaccination in discussion forums is highly emotional as it is inextricably tied to sensitive matters of health, human life, and childhood. We further concur that emotional aspects of communication do not substitute but rather extend hidden rationality. Emotions are not surrogates for rationality but tools of defense and expressions of taken-for-granted rationality. Thus, the idea of objective, neutral, and rational expert knowledge is viewed as proven, taken for granted, and unquestionable by pro-vaccination discussants.

Furthermore, in response to RQ1, we conclude that the communication strategies underlying the support for vaccination highly contribute to polarization of the debate and are based on Othering and the emotionally driven distinction of the proponents of vaccination from nonvaccinating or antivaccinating Others. More specifically, pro-vaccine argumentation is partly based on xenophobic, ethnically, racially, and gender-based (sexist) verbal attacks, pointing to the allegedly nonnormal and even parasitic position of those who oppose vaccination. This outcome reflects the debate concerning the discursive flexibility of the term "antivaxxer," elaborated by Capurro and colleagues (2018). Compared with the North American context, we observed a stronger gendered stereotyping of hesitating and antivaccinating Others, perceived as representing one homogenic group. Pro-vaccination argumentation strategies stress the irrationality and lay nature of hesitant positions, represented as selfish individuals working against expert knowledge, the Enlightenment belief in progress, and against the interests of society as a whole (RQ3). To summarize, the rational arguments are emotionalized in a conflictual manner, contributing to a further polarization rather than productive deliberation over the topic (RQ2).

These empirical observations have several theoretical implications (RQ4). We conclude that the deliberative potential of online spaces needs to be evaluated not only based on the traditional dichotomy between rational arguments and emotions or with regard to the heterogeneity of the perspectives in the forum. Even in heterogeneous online spaces whose users employ rational arguments, the potential for a productive exchange and cultivation of opinions and positions (Ruiz et al., 2011) may be low due to the prevalence of communication strategies comprising negative emotions and supporting polarization. In line

with the emotional or affective turn in social sciences (Hoggett & Thompson, 2012; Wahl-Jorgensen, 2019), we do not favor detached rationality in online discussions and reflect on the potential of productive emotions (Richards, 2010, 2018) in political communication. However, our data reveal that this potential is used rather exceptionally by the online pro-vaccination discussants and is juxtaposed with primarily trench warfare dynamics (Karlsen et al., 2017), leading to a further polarization of irreconcilable positions among discussants and a fortification of their own trenches. In the context of the emotionalized public sphere, trench warfare logic favors the emergence of negative, hostile, defamatory, and distrustful emotions, all of which contribute to the creation of nonvaccinating actors as Others associated with negative characteristics (such as irrationality or selfishness).

Our observations have implications for further research on emotionalized public health debates, including the contemporary discussions concerning COVID-19 vaccination. Similar to the local measles epidemic, the global COVID-19 pandemic represents a highly emotionalized threat associated with high degrees of fear. Emotions thus inevitably determine communication in the mainstream media landscape and discussion forums. More substantial analytical attention on these communication spaces could enrich the primary focus on disinformation and misinformation, dominating the COVID-19 pandemic-related research agenda.

Finally, our analysis necessarily faces several limitations and cannot be considered as a fait accompli in our understanding of pro-vaccination debates. Focusing on the communication strategies in the comment sections of three specific online platforms, we primarily provide an account of everyday pro-vaccine debates outside of the context of institutional and social movement initiatives. The results of this specific study cannot therefore be generalized as any sort of pro-vaccine argumentation. Moreover, we argue that more research focusing on the dynamics between different pro-vaccine and non-pro-vaccine, including vaccine-hesitancy and antivaccine, argumentation is needed to understand the patterns underlying the hesitant and antivaccination positions. Inspired by notions about the interactive potential of online communication (Gonçalves, 2018) and based on the assumption that hesitant and antivaccination positions are not established independently but also in the interaction and reaction to the pro-vaccination positions, more research about the dynamics between more or less radical pro-vaccine positions on the one hand, and hesitant positions on the other hand, is needed. Finally, further research inspired by the media studies tradition could analyze the relation between news article content and that of the discussion section to explore the dynamics of the information and discussion environments.

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