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Published in: Creating Through Mind and Emotions

DOI: 10.1201/9780429299070

Published: 01/01/2022

Document Version Final published version

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Link to publication

Please cite the original version:

Dahlbacka, J. (2022). Vaccine hesitancy in the Ostrobothnian Bible Belt? Vernacular authority at work. In M. S. Ming Kong, M. do Rosário Monteiro, & M. J. Pereira Neto (Eds.), *Creating Through Mind and Emotions* (pp. 495-502). (PHI (Book Series)). CRC Press. https://doi.org/10.1201/9780429299070

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Vaccine hesitancy in the Ostrobothnian Bible Belt? Vernacular authority at work

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ABSTRACT: The current article is based on an interview with three women living in the Northern parts of Swedish-speaking Ostrobothnia, Finland, who admit to being doubtful about and refusing immunizations. Thus, the article deals with the question of vaccine hesitancy in the so-called "Ostrobothnian Bible Belt." This area stands out as a pocket or a cluster where vaccine hesitancy is more prevalent than elsewhere in the country. Utilizing the concept of "vernacular authority," the article sets out to identify and analyze the women's motives not to vaccinate their children. In doing so, it uncovers various explanations, ranging from personal experiences of alleged, unfortunate secondary effects of vaccines to pragmatic arguments based on the women's feelings. As it takes into consideration these kinds of non-institutional traditions, the article lays bare the actual empowering forces by which these women orient themselves when it comes to vaccines. One question that runs throughout the investigation is whether or not the so-called "strong religion" that characterizes the area serves as one of these above-mentioned empowering forces. Is it, in other words, fair to speak of vaccine hesitancy specifically in the Ostrobothnian *Bible Belt*? At least when it comes to the three women interviewed here, such a link seems missing.

Keywords: Vaccine hesitancy, The Ostrobothnian Bible Belt, Vernacular authority, Non-institutional traditions

1 INTRODUCTION

In 2018, I conducted some semi-structured interviews with people in the northern parts of Swedish speaking Ostrobothnia in Finland. Among the interviews, there was one in which I had the opportunity to talk with three women simultaneously. This article is based on that same interview. I had made contacts with the women through a mutual acquaintance of ours, who happened to know that the informants were so-called "vaccine-hesitant." The term refers to anyone who is doubtful about vaccinations or who chooses to delay or refuse immunizations even when they are readily available (McKee & Bohannon, 2016, p. 104). Such a problem, in some ways, constitutes the very image of the relationship between tradition and innovation since vaccines can be seen as intruding on something natural and traditional. To some extent, the three women also expressed such a view, which will be exemplified further in the article.

During the past decade, from time to time, the northern parts of Swedish-speaking Ostrobothnia have appeared in the media whenever there has been a discussion about vaccines. The reason for its reappearance is that the area stands out as a pocket or a cluster where vaccine hesitancy is more prevalent than elsewhere in the country. Also, in popular parlance, the same area is widely known as a "Bible belt" or, more precisely, as "the Ostrobothnian Bible Belt" (Herberts, 2008, p. 162; Häger, 2017; Dahlbacka, 2017). This Conservative Protestantism – to use a concept that refers to a set of religious beliefs that differ significantly from the ones generally taken for granted in society or by mainline or liberal Protestantism (Greeley & Hout, 2006, p. 6; Berger 1970, p. 6) – dates back to the Protestant, Pietistic revival traditions of the 18th and 19th centuries.

In particular, some branches of the so-called Laestadian revival movement (a protestant, churchly revival movement dating back to the 19th century) are represented in the area. Laestadianism is generally known for its conservative values and strong social cohesion and for its adherence to the biblical device of "living in the world but not of the world." To some extent, this way of life has led to a view of the adherents of the movement as intentionally isolating themselves from the surrounding society (Snellman, 2011, p. 61, 85–86). Such a view corresponds well with more general descriptions of conservative religious groups. These descriptions often portray the groups as social communities that accept parts of modern society and reject or oppose others for religious reasons. Alternatively, using the words of the historian Johan Huizinga (1984, pp. 77–85), the groups try to live a "historical life ideal" in a modern world. This ambition sometimes culminates in them creating their own institutions as a way of preserving and protecting their religious tradition from the society they are surrounded by, despite also being part of it. One frequently mentioned example is the Laestadians' refusal of televisions. This measure could be labeled as a means of protecting their religious tradition against the dangers associated with the innovation of television.

Acknowledging the fact that several studies from other parts of the world identify religion as a prevalent motive behind vaccine hesitancy (McKee & Bohannon, 2016, p. 106; Dubé et al., 2014, pp. -6650–6651; Ruijs, 2012b; MacDonald, 2015, p. 4163), it would be fair to assume, or at least suspect, a possible connection between the conservative religiosity and the vaccine hesitancy that the Bible Belt displays. Whether such a link actually exists was one of the questions I hoped to find an answer to with my interview.

To be sure, my informants, for their part, denied any immediate connection between their religiosity and their vaccine hesitancy (except for one interesting detail, which appeared late in the interview and to which I will return). Besides, it is hardly possible to draw any general conclusions from an interview with three persons. However, the conversation was worthwhile as it uncovered other incentives to the informants' dissociation from vaccines. This is precisely the kind of local narratives and convictions concerning vaccine hesitancy that Kitta & Goldberg (2017), in their research, are asking for. Hence, in the present article, I will focus on the incentives or motives that appeared in my discussion with the three women, i.e., how they explained their dissociation from vaccines and justified their decision not to give them to their children. My aim is not to give an all-embracing explanation to the vaccine hesitancy in the area but rather to throw light on some existing accounts. I will approach the motives with the aid of the concept of "vernacular authority." Before I expand on this concept, I will outline the background concerning the vaccine hesitancy in the Ostrobothnian Bible Belt.

2 BACKGROUND: VACCINE HESITANCY IN THE NORTHERN PARTS OF SWEDISH-SPEAKING OSTROBOTHNIA

"Welcome to the Bible Belt" is one of many answers given to the question of why Ostrobothnia hosts many people rejecting vaccines. This specific answer appears in the commentary field to a blog post, in which vaccines, in general, are discussed ("Vi har glömt varför vi vaccinerar oss"). A similar line of argument can be found on another forum, where the "power of the Bible Belt" is made responsible for the resistance in Ostrobothnia ("Starkt motstånd mot hpv-vaccin I Jakobstadsregionen"). The references to the religiosity of the area indicate a perceived causality between religious conviction and vaccine hesitancy. According to common belief, vaccine hesitancy is partly due to the religiosity of the Bible Belt. To be sure, such references are not limited to the Internet. In an article in *Helsingin Sanomat* (Valtavaara, 2018) – the largest newspaper in Finland – a former member of one branch of Laestadianism is interviewed. According to her, the phenomenon of vaccine hesitancy has grown rapidly in recent years due to the – as she calls it –group pressure of the religious community.

These are merely three examples of the recurrent contributions to the debate on vaccines in Finland that takes place both on social and traditional media. As such, vaccine hesitancy is hardly a new phenomenon. Instead, it is as old as vaccination itself (Hannikainen,1914, p. 63; Wolfe, R. & Sharp, K. 2002, p. 430; Poland, G. et al., 2011, p. 97). It also exists worldwide, across all socioeconomic strata of the population, and without limitations to specific communities (Dubé et al., 2014, p. 6653.). At the same time, it is clear that epidemics often occur among groups or communities - so-called pockets or clusters - whose members oppose vaccines and interact socially, mostly with each other. In such clusters, the members become susceptible to infection and create a breeding ground for passing the infection on to others (Wombwell et al., 2015, p. 599; Ruijs et al., 2012a, pp. 362–363.). The fact of the matter is that such communities are sometimes religious or anthroposophical, such as the Orthodox Protestants in the Netherlands or the Amish settlements in North America.

Judging by appearances, vaccine hesitancy is by no means diminishing. On the contrary, the trend is the opposite (Wolfe, R. & Sharp, K. 2002, pp. 431– 432; McKee & Bohannon, 2016, p. 104). Admittedly, on an international scale, vaccine hesitancy is low in Finland, at least measured by the degree of vaccinated inhabitants (Launis, 2013, p. 2413; Puumalainen et al., 2015, p. 2222). The fact that Finnish nurses' wages are not affected by the number of vaccinations they carry out might partly explain Finns' relatively high confidence in vaccines. The latter is (or at least has been) the case, for instance, in Great Britain (Mänttäri, 2014).

Still, even in Finland, there have been signs of increasing critique of vaccination (Puumalainen et al., 2014, p. 2222; Sivelä et al., 2018), as the quotations above also show. The women I interviewed supported this view, namely that the hesitancy towards vaccines is by no means disappearing. According to them, there is a lot more information obtainable nowadays, and the youth find out and look this information up by themselves. Although close to 100 percent of the population is vaccinated on a national level, there are places where the coverage is not as high. The city of Pietarsaari, and its surroundings, have long been one of those places. For quite some time, only 83,5 percent of the children born in 2013 had received the MPRvaccine, compared to close to 95 percent, which is the corresponding figure for the whole country ("Rokotuskattavuus," 9.12.2019). In 2016, the pediatrician in Pietarsaari, Markus Granholm, estimated that there were school classes with less than 60 percent of the children having been vaccinated (Saarikoski, 17.7.2016). Even though these numbers have changed for the better, and the vaccine coverage has increased since the measles incident in 2019 (Elonsalo & Baum, 2019), it is still reasonable to describe the northern parts of Swedish speaking Ostrobothnia as a pocket or a cluster where the vaccine hesitancy is more prevalent than elsewhere in the country.

There are, of course, many different reasons why parents do not vaccinate their children. These reasons have been relatively well documented. For instance, a quite recent literature study that scrutinizes scientific studies that have mapped parents' motives for not vaccinating their children divides these motives into four categories. These categories are religious reasons, personal beliefs or philosophical reasons, safety concerns, and a desire for more information from healthcare providers (McKee & Bohannon, 2016, p. 104.). Naturally, time, place, and the group in question have their effect on these motives (Puumalainen et al., 2015, p. 2222.). Nevertheless, there is no doubt about the fact that religious conviction is an essential and often alleged reason (McKee & Bohannon, 2016, p. 106; Dubé et al., 2014, pp. 6650-6651; Ruijs, 2012b; MacDonald, 2015, p. 4163.). But then again, religious vaccine hesitancy has a long history. After the death of Edward Jenner - the "father of vaccination" - the commemoration of him became equivalent to the very picture of the Enlightenment. Since, in some circles, the Enlightenment was perceived as having had a disastrous effect on both society and church, vaccination subsequently was seen as a challenge to God, an example of "people confronting divine providence instead of submitting themselves to God's will" (Spruyt, 2016, p. 115.). Still today, this view survives among some of the Orthodox Protestants in the Netherlands (Ruijs, 2012b, p. 6). This fact, in its turn, indicates that the arguments against vaccination in some instances "have remained remarkably constant over the better part of two centuries" (Wolfe & Sharp, 2002, pp. 431-432.).

Indeed, the attitude towards vaccines in seemingly homogenous areas and communities is not necessarily uniform and clear-cut. For instance, in the Dutch Bible Belt, the vaccine hesitancy manifests itself clearly in only two out of five Protestant movements (Ruijs, W. et al., 2012a, p. 363; Ruijs, W. et al., 2011). What is more, the reasons behind vaccine hesitancy are not necessarily religious, even in religious communities (Kulig et al., 2002). On the other hand, religious causes are sometimes played down in favor of other, more passable, or politically correct objects, even though religious reasons are the ones causing the hesitancy (Spruyt, 2016, p. 125; Ahlvik-Harju, 2019, p. 336).

3 VERNACULAR AUTHORITY AS ONE ASPECT OF TRADITION

When approaching and analyzing the interview with the three women and the statements they made concerning their attitude towards vaccines, I make use of the concept of "vernacular authority" as discussed by Robert Glenn Howard (2013) in his article "Vernacular Authority: Critically Engaging Tradition." Howard's understanding of tradition is that of a "cultural map" or a "handy tool" that helps people orient themselves when confronted with the need to make a decision or when having to sort out difficulties in their daily lives. Tradition, in this sense, refers to "common knowledge handed on by their culture" or, put differently, "a handy tradition to which individuals can appeal while adjudicating between the possibilities offered them by everyday living." Tradition, in other words, is what people refer to when making decisions and when orienting themselves (Howard, 2013, pp. 78–79).

Howard distinguishes between two kinds or two aspects of tradition. The first one he calls "institutional" and the latter one "noninstitutional" or "vernacular." Both of these aspects can serve as tools or authorities when faced with having to make decisions. However, whereas institutional tradition relies on, or seeks validation in, formally instituted social formations like churches, newspapers or academic journals, "an appeal to vernacular authority is an appeal to trust in what is handed down outside of any formally instituted social formation" (2013, p. 81). When speaking of vaccines, the institutional tradition would most obviously be represented by the "Finnish institute for health and welfare" (2020) and its recommendations, as expressed in the national vaccination program.

Vernacular authority may be based on something that an individual experiences by himself or herself, but it may also be based on a more or less shared common sense or "informally aggregated communal wisdom" that has been handed down. Precisely this "handed-down" nature and this appeal to "the aggregate volition of other individuals across space and through time" is what characterizes vernacular authority (Howard, 2013, pp. 80–81).

Just as Howard points out, the authority of a tradition, i.e., the value or the impact of it, is not "limited to its verifiable continuities and consistencies over space and time," i.e., whether it is empirically verifiable or not. Even a discourse that relies on a non-institutional tradition (vernacular authority) can have a strong social impact and serve as an empowering force for those who perceive it (2013, p. 79). This is especially true when speaking of vaccines, as we will see.

The concept of vernacular authority emphasizes the importance of observing all kinds of traditions that are employed when deciding between possibilities and that are appealed to when justifying one's decisions. Even those traditions that might not be empirically verifiable. When applied to my interview, such an approach means identifying the traditions with which the three women justify their attitude towards vaccines and what they base their decision on. Consequently, my primary aim is to identify the traditions or motives, not evaluate, verify, or criticize them.

To categorize the traditions identifiable in the material, I furthermore take a cue from Finnish folklorist Kaarina Koski.1 In an unpublished presentation titled "Totuudet kuolemasta" (The truths about death) (2017), which I have at my disposal, Koski distinguishes between four ways of defining claims to truth – in her case, especially relating to the question of death. These categories are 1) personal experience, 2) authority, 3) empirical evidence, and 4) pragmatic arguments. To some degree, what she labels appeals to "authority" and "empirical evidence" seem to correspond with the concept of "institutional tradition" discussed by Howard. In contrast, personal experience and pragmatic arguments seem to lean more towards vernacular authority. Moreover, Koski's notion that a person can express and appeal to different - and mutually contradictory traditions is noteworthy since this can also be perceived in my interview concerning vaccine hesitancy.

4 VACCINE HESITANCY IN THE OSTROBOTHNIAN BIBLE BELT?

The three women I talked to wished to remain anonymous due to the sensitivity of the matter. They testified to the occasionally quite rancorous debate taking place not merely in newspapers and Internet forums but also within their own families. And they identified with being the so-called "black sheep" in their circle of friends and acquaintances, as one of the informants expressed her experience. They said they have learned to choose where to reveal their stance on vaccines and claimed they have no interest whatsoever to debate on the matter. Hence, no detailed personal information will be disclosed about these women.

What can be said about them is that they were born in the late 1960s, in the early 1970s, and the early 1980s, respectively. This shows that the question of vaccine hesitancy is not a phenomenon limited to a particular generation. At least at the time of my interview, the three women lived in the same village and belonged to the same local Laestadian prayer house congregation. All of them had children of their own, and a couple of them also had grandchildren. In other words, they had been brought face to face with the question of whether or not to vaccinate their children. They had all turned skeptical towards vaccines around 2010, in the wake of the so-called swine-flu and its vaccine, which caused some unexpected and severe secondary effects.

When asked, all three women stated that they do not believe that vaccines have any effect and that this applies to all kinds of vaccines. However, when I followed up on the question, it became clear that the opinion was not necessarily altogether unanimous. One woman expressed some hesitation when stating:

Even if they [the vaccines], contrary to expectation, were effective, the question is whether it is worth taking them, considering all the secondary effects.

Another admitted – referring to a web page about vaccines – that she believed vaccines do "something." She thought vaccines cause antibodies to arise, but she was skeptical about whether these antibodies work against the diseases in question.

What all women had in common was that one or more of their children suffered from various diseases or conditions, which they firmly believed had been caused by vaccinations. They mentioned, for instance, allergies and asthma but also other diseases. Towards the end of my interview, one of the women said:

Perhaps we who happen to have been 'awakened' have landed up in these 'vaccine shoes' because there is something with our children that has caused us to wake up. It's not like we just picked these things 'from the tree' – like: 'what is this?' Instead, we've actually encountered them at the kitchen table. It is facts that we have, and then we've moved on from there.

Hereafter, one of the other women stepped in, explaining that all of her children had had some sort of allergy or asthma. Except for the last one - the

^{1.} Koski should also be credited for being the one who tipped me about the concept of "vernacular authority".

only one being unvaccinated. Consequently, she stated that there is a consistency in why they believe as they do, which is why they agreed to be interviewed. Being interviewed allowed them to tell their story and explain themselves.

Referring to Koski's categories, the explanations that the women give words to can be said to be within the scope of personal experience. Throughout the interview, references to personal experiences such as those mentioned stand out as the most frequently recurring and the most decisive motives behind the decision not to take vaccines. As one of the women concluded:

With all that we've seen within our own family, it is perfectly enough to make this decision – i.e., that we refrain from taking [vaccines].

It is evident that for these women, these experiences also work as some kind of empirical evidence for their conviction. Not in the sense of "verifiable continuities and consistencies over space and time," but rather as "aggregated communal wisdom," to use the words by Howard (2013, p 79, 81). In other words, their hesitancy towards vaccines has come into existence as a result of personal experience. However, the testimonies of others with similar experiences have undoubtedly enhanced and strengthened their conviction: "I have many examples of a similar kind. And that is why you only get strengthened in your conviction," one of the women said. Howard speaks of "vernacular webs," by which he refers to (in his case) online locations that are linked by a shared value or interest and that adherents to a specific vernacular authority visit. This has a kind of self-fulfilling result because it "increases the perception of continuities and consistencies and thus increases vernacular authority" (ibid, p. 82). The situation is very similar in the case of vaccine hesitancy, where the women repeatedly make references to incidents where vaccinations, allegedly, have ended up badly. One by one, these incidents could perhaps be considered as one-offs, but counted together, they seem to garner authority from "the aggregate volition of other individuals across space and through time." They generate a shared authority for the validity of their stance, at least for the women with whom I talked.

In close connection to personal experience is what Koski calls "pragmatic arguments." According to Koski, pragmatic arguments imply a sense of truth based on values and goals with desirable consequences for the individual or the community to which the individual belongs. For example, she mentions convictions based on hope and longing, which might occur when people ponder whether there is life after death. Such pragmatic arguments were discernible when speaking of vaccines as well. The decision not to take vaccines was motivated with utterances such as: "common sense tells you that you should not take a vaccine," "it stands to reason," "it was self-evident that there ought not to be a vaccine syringe in a human body," or "I cannot understand how one could even think differently."

Most expressively, however, the references to hope and belief became visible when one of the informants ventured into pondering about whether a little child really needs vaccines:

Woman 1: "Let's say you get a baby. We all think they're adorable. They're so lovely! [...] But why do we feel that they are created so half-completed that, at the age of nine weeks, they need to get something external into their blood? [...] I mean, why would God have created us so half-completed that we need it only a couple of hours old as you said [...] Perhaps there, this is where faith..."

Woman 2: "That is what I said as well; this is the only time when faith enters into the picture." [...]

Woman 3: "One thinks that, God must have known what he was doing [...] and that he knows what is best for us."

The women's references to vernacular authorities, such as their own experience or pragmatic arguments, such as those I have accounted for above, go hand in hand with their critical stance towards institutional health care. They do not repudiate all health care as such but prefer alternative medicine when possible. Besides, and to give an example, they also chose to endure without aspirin, at least to some degree. However, when it comes to vaccines, the women give utterance to an evident distrust, but also – as I see it – to a feeling of disappointment or a sense of having been misled by the institutional authorities. For instance, they question why children receive vaccines without allowing the parents to read the patient information leaflet beforehand. And they suspect the nursing staff of knowing far more about the downsides of vaccines than what they intend to do.

Furthermore, the women call into question statistics that show to what degree vaccines have decreased diseases. And they imply that vaccines were introduced as a means, not primarily to get rid of diseases, but to save money when parents do not need to stay at home with sick children. Finally, they speak of the pharmaceutical industry in terms of a "foul game."

When considering the second category in Koski's typology, i.e., the one she calls "authority," it would appear as if the statements above indicate that the women I interviewed deprecate what Howard calls institutional authority. At least when it comes to vaccines. When inquiring about what they base their belief in, or from where they garner their

information, the women mentioned a website (vaccin.me), books, and video clips - for instance, a book by a medical doctor, Jackie Schwartz, called Vaccinationer - Fördelar och nackdelar (The Pros and Cons with Vaccines) - and different meetings about vaccines that they had attended. Interestingly enough, the majority of these sources are produced or maintained by people with positions in the medical field who assert that their claims are based on scientific studies. In other words, apart from personal experience, the only other authorities that the women appealed to were doctors or nurses. This shows how references to science are also used in the discourse on vaccines and how they are positioned against institutions and other (more established or acknowledged) references to scientific research.

At least according to the women with whom I discussed, the difference between these authorities appears to be that the doctors and nurses they refer to have seen and represent the "reality" as it is:

Woman 1: "I have seen a lot of video clips by doctors who have opted out [from their work as doctors or from advocating the vaccination industry], who are professors, who actually possess knowledge of their own, who tell the truth as it is." [...]

Woman 3: "Books and clips, about which one gets the sense that this is not something that someone is making up. Rather it is something that they have lived through and experienced." [...]

Woman 1: "That is what is so interesting, that the ones writing these things [on the webpage vaccine.me] are doctors, who come straight from the hospital reality."

This more authentic or genuine "reality" – which the women consider themselves to be a part of – is contrasted with those who "do not concern themselves with reality":

Woman 1: "Perhaps it is a bit rude to say, although it has some truth to it, but they often say that empty vessels make the greatest noise. It is often those who have not learned thoroughly or who do not want to concern themselves with reality – who do not want to concern themselves with facts – that shout loudest at those who do not take vaccines [...]. But we're the ones who have learned thoroughly, found things out, and gained a better insight."

Woman 3: "I would not want those in favor of vaccines to think that we have treated all of this lightly [...] that we don't care and that we're irresponsible when it comes to health and infections. Because frankly, I feel that it's quite the opposite. I have put myself into it to the extent that I have become exhausted, almost to the point where I stay awake at night reading and pondering [...]."

5 CONCLUSION

My interest in the vaccine-hesitancy appearing in the Northern parts of Swedish-speaking Ostrobothnia stemmed from an overall interest in the so-called Bible Belt and from the notion that globally, vaccine hesitancy, at least to some degree, is characteristic of areas of strong religion. The question that begged to be answered was whether or not there are religious explanations to the vaccine hesitancy. Is it, in other words, possible to literally speak of vaccine hesitancy in the Ostrobothnian Bible Belt (and not merely in Ostrobothnia)?

It goes without saying that the sample analyzed in this article is nowhere near sufficient enough for rendering it possible to speak of any representativeness. Besides, my findings hardly reveal any explicit support for a link between religion and vaccinehesitancy. The women, to be sure, on thinking it over, did admit to believing that God would not allow a child to be born insufficient, in the sense that it would need something "external" injected in its body right from the very beginning. They concluded that this might be an instance (or rather *the only* instance) when faith is brought to the fore. However, this one faith argument must primarily be regarded as supplementary to or endorsing their real reason, which seems to be a personal experience of secondary effects of vaccines on the one hand and distrust in the institutional health care on the other hand. This coexistence of motives supports Koski's assertion that a person can simultaneously express and appeal to different traditions.

In this article, I have focused on the explicit motives for vaccine hesitancy expressed by the three women. Thus, I have also avoided getting lost in speculations about possible indirect links between religion and vaccine hesitancy. For instance, when asked why they believe that this particular region hosts a comparatively large amount of vaccine-hesitant people, one of the women suggested that it might have something to do with the people there being enterprising and "go-ahead-minded." She meant that it required a certain amount of determination to abstain from vaccines. Her point alluded to our discussion beforehand, where I had told them about my research about the Bible Belt and its characteristics. Among those characteristics is a particular enterprising spirit, often said to be typical of Laestadians. Since the women recognized this enterprising spirit as something characteristic of Laestadians, one could perhaps trace some farfetched or indirect connection between vaccine hesitancy on the one hand and the enterprising spirit associated with Laestadianism on the other. However, that would not do justice to the women's explicit rejection of religion being their motivation.

Analyzing vaccine hesitancy through the lens of vernacular authority allowed me to consider and discuss every motive propounded by the women, not just the empirically verifiable ones. Even though the reasons that the women referred to were hardly exceptional, it is essential to consider also noninstitutional traditions such as personal experience and pragmatic arguments, as it lays bare the actual empowering forces by which people orient themselves.

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