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"Difficult Targets" and Remote Focused Interviews: A Methodological Assessment of Anti-vaxxers*

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Abstract

This proposal wishes to discuss the main results of a qualitative investigation focalized on the theme of vaccine hesitancy, tackled on the basis of a large number of *"remotely"* conducted *focused interviews*. This work's primary objective is that of carrying out a methodological evaluation through which the strengths and weaknesses of the investigation tools employed may be clarified, in consideration of both the reference participants, as well as the *online* transposition of interactions which are traditionally actualized in person.

The focused interviews represent the empirical base from which multiple and significant methodological observations became achievable. The online context in which they took place had a positive impact on the established ambience, it broadened its geographical reach, and fruitfully affected the fidelity of the collected information. As a preview of some of the surfaced insights, some of the advantages include: many of the participants reached expressed their opinion on the vaccination campaign in a particularly spontaneous, uninhibited and truthful manner; they dwelled on the conduct adopted during the pandemic, as well as on attitudes and emotional states attributable to dimensions like contagion, civic responsibility towards those close to them, the social consequences of refusing the vaccine, their relationship with the traditional science of medicine and the establishment by and large. Equally complex is the spectrum of disadvantages, among which are the lack of consent

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by some subjects to audio-video recording of the interview, the pronounced reluctance to discuss personal problems on part of those participants less accustomed to the use of digital devices, or those who appeared to be visibly uncomfortable before a screen.

Keywords: remote focused interviews, anti-vaxxers, decisional mechanisms, mixed methods research, longitudinal research.

1. Two years of research on the vaccine-hesitant: means and ends

The phenomenon of *vaccine hesitancy* has taken up considerable room in national and international empirical literature[1] and lends itself to analysis from different perspectives (communicative-organizational, psycho-social, valuative, medical-healthcare etc.). Cognizant of the complexity and delicacy of the "reasons" behind vaccine related choices, a plurality of scholars has tried to shed light on numerous *latent factors* which guide the decisional process[2], including: consolidated styles and procedures as regards prevention and medical treatment; trust in institutions and degree to which social restrictions are observed; degree of information and competence on the topic/level of cognitive sophistication, etc. A tendentious *mistrust* - a, hypothetically, *deep-seated* trait predating the onset of the pandemic - vis-a-vis public institutions as broadly intended and, in particular, governmental organs/representatives - and healthcare authorities and pharmaceutical companies likewise - appears as an effective key for the interpretation of the multiple expressions of vaccine hesitancy (including the more radical *Anti-vaxxers* drawing on denial or conspiracies). This is also true for other characterizing aspects that emerged, sometimes in combination: a tendentious skepticism regarding the production process of the Covid vaccine and/or its efficacy: the tendency to minimize the reach of the virus (spread, dangerousness); strong concerns regarding the vaccine's unexpected side effects; a critical, if not hostile, stance on the limitations aimed at containment of the virus, which were perceived as instruments for the violation of freedoms and personal rights.

Faced with a multifaceted phenomenon that could not be readily interpreted, the team adopted a *mixed method investigation approach* (Amaturo &

[1] See Freeman et al., 2020; Lin et al., 2020; Cascini et al. 2021; Troiano & Nardi, 2021; Acar-Burkay & Cristian, 2022; Genovese et al., 2022; Zarbo et al., 2022.
[2] See Larson et al., 2014; MacDonald, 2015; Hausman, 2019; Dubé et al., 2021; El-Far Cardo, 2021; Lockyer, 2021; Lee & You, 2022; Savoia et al., 2022.

Punziano, 2016; Mauceri, 2018, 2019), and set up a *longitudinal research design*, thus valuing both the contribution of a wealth of research instruments for producing results, and the temporal dimension at the same time (Chambon et al., 2022; Rabin, 2023; Latkin et al., 2022; Fridman et al., 2021), as a valuable opportunity to observe the evolution (or hold) of social practices and attitudes. The use of *remote focused interviews* was a crucial node in the undertaken research procedure, and it will be the object of an assessment on both a substantive and methodological level.

Before exploring the heart of this contribution, a brief mention the broader research project in which the focused interviews are located seems gainful. Starting in April 2020, a group of scholars from the Department of Communications and Social Research of "La Sapienza" University in Rome, launched an open web survey to observe the effects of the lockdown on the daily lives and social relations of Italians (Lombardo & Mauceri, eds, 2020). The online questionnaire allowed for the investigation of numerous dimensions, including *Apprehension* and *Perception of Risk*; *Lifestyles* and *Family Relations*; *Smart Working* and *Distance Learning*; *Trust in institutions* and the *Assessment of measures aimed at containing the spread of the virus*; the *Use of technology* and *Vision of the future*. The cases reached by the survey, in 4 weeks of data collection, were a weighty 13,473. The online survey was shared through various channels, from the social media accounts/websites of important institutional entities (including the Ministry of Health) and the national network of upper-secondary schools, to specific virtual communities discussing the pandemic. One year later, at the height of Italy's vaccination campaign, a second round of the web survey (aimed at the 6,000 cases available for further contact, via email, for research purposes), meant the opportunity of not only revisiting apprehension, daily life, social relations, school, work, spare time, vision of the future in a temporal key, but of setting a new objective as well: that of investigating the *cognitive background* and the *collective practices attributable to the vaccination campaign*, focusing on the social mechanisms connected with the rise of certain feelings, beliefs and widespread behaviors. 2,787 cases completed the second survey; of these, 104 were unvaccinated in the strict sense of the term, in addition to a further 130 cases classified as *vaccinated*, but only on account of being influenced, if not coerced, by certain social pressures (said social type was denominated *forcefully led to the Covid vaccine*). The total number of cases of interest, therefore, stands at 234 units; it was these that the research team observed, both for the purposes of ad hoc analyses in the matrix as well as the launch, which will be later discussed, of the qualitative research round. In particular, starting with the 104 unvaccinated subjects (also unwilling to get the vaccine in future), the analysis of this stance allowed for the discernment of two main positions corresponding to the following types: 1. the *deniers* (44 units), who don't believe in the severity

of Covid-19 (sometimes even denying its existence) and/or have contracted the virus with symptoms so mild so as to become convinced that it is always equivalent to a common flu, and/or, finally, don't believe in the efficacy of current vaccines (Bertin et al., 2020; Pivetti et al. 2021; Bierwiaczonek et al. 2022); 2. the *diffident-fearful* (60 units), who fear the effects of the vaccine on their health and/or see it as incompatible with their preexisting pathologies and allergies.

As mentioned, the survey results connected with the dimension of Covid vaccines - to be interpreted, clarified, specified - were the starting point for further qualitative studies, calibrated on the figure of the vaccine-hesitant, realized by way of the remote focused interview technique (Merton, Fiske & Kendall, 1956; Bichi, 2002; Ciucci, 2012; Della Porta, 2010). The set-up of the interview responded to the aim of collecting, through a flexible style of conducting, information on *Direct and indirect experiences of Covid-19 infection; View of Covid-19 and Sources of information; Trust in science and scientists; Consolidated practices relating to vaccines and the medical- healthcare sphere in general; Assessment of the government's social and sanitary measures; Opinions on vaccinated individuals and their relationship with the latter,* etc. Herein, a particular focus of reflection comprises the dimensions *Reasons for refusing the vaccine* and *Consequences of refusing the vaccine.*

For the purposes of launching the third round of research, a data collection and selection plan was built, one that would once again focus on - to guarantee the adopted longitudinal perspective and the quality of the collected information (by first of all working continuously with willing, motivated and honest subjects) - those people first involved in the investigation, and already interviewed twice by way of the survey instrument, and who declared themselves willing to proceed in the collaboration. The original hypothesis provided for the realization of 96 interviews (32 for each one of the three identified types of interviewees), within a well-balanced differentiation of the units to be interviewed on the basis of two strategic criteria with high discrimination potential when it comes to the quantitative data analysis: the *level of education*[3] (significantly associated with *socio-cultural capital* and with *trust in expert knowledge*) and *age group*[4]. The adopted strategy was that of a "blanket" call on the 234 cases classified as vaccine-hesitant in the larger sense (knowing that notable mortality would set in); they received a third invitation via email to participate in the investigation by way of a *video interview* on the *Meet platform.*

[3] Dichotomized in advance in the "up to diploma" and "degree and above".

[4] The data from the double survey have highlighted, in terms of attitudes to vaccines, relevant differences between *generations*, less significant ones with respect to *territorial distribution* and *gender*. Age was thus structured: "up to 34 years old", "35-54 years old", "55 and above".

Only 13 subjects, part of a two-year research project, were willing to be interviewed. These 13 contacts seem to be thus distributed: 3 *diffident-fearful*; 4 *deniers*; 6 *forcefully led to the Covid vaccine*. However, faced with evident reluctance from the original sample to effectively renew the collaboration for a third time, from the invaluable network of contacts given to the team by the 13 vaccine-hesitant subjects willing to be interviewed, 38 further cases were procured. Collection definitively ended 5 months after it had started; to avoid excessively dilating the data collection timeframe, it appeared reasonable to close up with the 51 actualized interviews (of the 96 in the original hypothesis). Despite the objective difficulty in finding subjects willing to sit for an interview, the authors can mention that the collected empirical material, vehicle for the proper achievement of research objectives, is fruit of the solid relationships formed between the interviewers and interviewees, and thereby manifests as particularly rich and high-quality. The 51 interviewed cases are thus located as per the three reference types: 25 *diffident-fearful*; 8 *deniers*; 18 *forcefully led to the Covid vaccine*.

This paper, focused on the aforementioned issues, has the following objectives: a. to convey and interpret the main research results on the *reasons for refusing the vaccine* and the *consequences of this decision*, giving the report the function of simultaneously reflecting on the level of *depth-density of the produced evidences* (par. 2-3); b. to compare, thematic dimensions being equal, the results of the web survey (second round/vaccine issue) with those reached by way of the focused interviews (specifying if any aspects of the investigated problems have been enhanced, clarified or further developed in light of the focused interviews and what those aspects are, as well as highlighting forms of continuity/discontinuity; analogies and differences between the two data collection phases - par. 4); c. to give a methodological assessment of the use of remote focused interviews by valuing the following measures: style of conducting interviews and interviewer/interviewee dyad; function of the focused interview with respect to the survey's "blind spots" (e.g.: *sensitive and personal data* that may have surfaced during the interviews, which the survey did not provide for); comparing the potential and limits of the execution of remote versus in-person interviews (par. 5).

2. Reasons for vaccine hesitancy between rationality and instinct

The issue of the reasons behind behavior is a very broad field of study as well as a foundational mainstay of sociology. In the obvious interest of brevity, references to the vast array of existing literature cannot but be targeted and concise. Firstly, one must consider the specificity of a particular study object such as vaccine hesitancy, which extends over a diverse constellation of

opinions, feelings and attitudes that often make up a complex and multidimensional system of factors (MacDonald, 2015; Pellizzoni & Biancheri, 2021; Ferrara et al., 2023). In fact, the choice of whether or not to take the vaccine implies an ensemble of forces characterized by high levels of latency, and the attempt to explain it thus becomes more necessary as it appears increasingly impossible to resist its cumulative pull. This because, in a way, following a Pareto memory argumentative structure, such a choice could be encompassed in the list of *non-logical actions*, which by no means denotes them as essentially illogical, rather, it means there is no logical union between means and end (Pareto, 1916). In other words, there doesn't seem to be any correspondence between the presumable intention of avoiding Covid-19 infection and the decision to refuse the respective vaccine.

Clearly, all of this makes sense if, and only if, vaccination is compatible with the subject's clinical situation and history. For this reason, it seems appropriate not to dwell too long on the reasons that bring current or past pathologies into play, as well as diagnosed allergies and/or sensitivities which factually impede untroubled acceptance of the vaccine and reduce, or cancel, the importance of the aforementioned hiatus between means and ends. However, excluding these cases, the need remains to fill the logic void between the two terms through argumentation devices which Pareto calls *derivations* (*ibid.*). This entails, basically, constituting a system of explicative rationalizations in support of vaccine hesitancy, through which individuals take up a coherent position that can be verbalized and communicated. This then is the phenomena domain this paper is setting out to analyze, reviewing the primary reasons which led the interviewees to make a difficult choice not only in terms of risks to their health, but of interpersonal relations as well. In fact, as will be further discussed in the following paragraph, the unvaccinated were subjected to formidable social pressure (Asch, 1956), which can engender implicit or explicit mechanisms of ghettoization which have a profound impact on personal life experiences.

Borrowing one of Boudon's expressions, we could say that we all act on the basis of what, in his perspective, constitutes *good reasons* (Boudon, 1989). Notwithstanding the fact that these engender ideologies, beliefs, moral codes or scientific notions, the most important aspect comprises retracing the underlying reasoning schemes and recurring elements. In this perspective, it seems gainful to point out the existence of certain rhetorical mechanisms functional to reducing the logical gap between not contracting the virus and refusing the vaccine. One such strategy comes out of the tendency, and a fairly widespread one at that, of exasperating the dangers it poses to one's health. In this case, choosing to refuse the vaccine becomes fully legitimate to the extent to which its possible side effects could be much more hazardous than the

consequences of infection. This conviction is primarily supported by the idea that the development of the vaccines was not object of all the proper procedures and controls. Firstly, the interviewees believe the trial period was too short, and this increases circumspection not just in terms of efficacy, but also and above all on how safe the vaccines are. In particular, there seems to be a lot of suspicion around vaccines produced with messenger RNA (mRNA) technology, perceived as different from the "traditional" ones, which the sample by and large received in childhood. Very concisely, the combination of the innovative nature of vaccines and the reduction of the time frame for their approval and subsequent distribution seems to have had a significant impact on the choice to comply with or reject the vaccination campaign. Below, a few illustrative excerpts from our interviews:

> yes, the mRNA vaccine is the one that caught on, it's a completely experimental vaccine. It's a vaccine that could not be tested properly, a vaccine whose potential consequences are not known [cluster: gender, age, title, Anti-vaxxer distrustful/fearful: male, age 64, degree].
>
> messenger RNA, so we're talking […] about therapies that were defined as vaccines only by, let's say, changing the definition of vaccine [Anti-vaxxer distrustful/fearful: female, age 50, degree].
>
> If a vaccine generally takes a few years, it seems odd to me that they were able to compress the time frame in this manner while having a 100% guarantee on the vaccine's efficiency and efficacy [Anti-vaxxer distrustful/fearful: male, age 41, degree].
>
> Five to seven years [to complete testing] […]. I would say yes, if procedures had truly been followed, I would have told myself that perhaps the risk wasn't excessive, perhaps it would have been worth getting it [Anti-vaxxer distrustful/fearful: female, age 25, degree].

It must be noted how the argumentation centers around the concepts of uncertainty, risk, hazard, side effects and so on. Therefore, what drives these people to refuse the vaccine is an underlying dread relating to the fear of having unintended consequences after taking the drug, an attitude perfectly in line with the characteristics of those placed in the diffident/fearful cluster (par. 1). Not by chance, the reasons reported thus far are mostly their prerogative.

Moving on, there is a second order of reasons connected with the activity of pharmaceutical companies. In more detail, the mistrust of vaccines is owed to the alleged behavior of so-called "Big Pharma" companies, guilty of following their economic interests at all costs, even placing the population's health at risk by way of a "gold" rush which sacrifices the proper development of vaccines to the altar of profit. In this perspective, each one of them acted with the intent of being the first to market with the vaccine, forsaking adequate

trials. Evidently, this reason is not too different from the previous one, as it indirectly implies the dangerousness of Covid-19 vaccines. Conversely, what emerges as a difference is the type of Anti-vaxxers who resort to this argument, that is those more frequently associated with an anti-systemic view of socio-political reality, or even with expressly conspiratorial stances. It is therefore not surprising to come upon the presence of the denier type, as can be noted in the following statements:

> vaccines as intended a few decades ago, which were based on principles of science and statistics, I had those administered and probably would get some of them again. Now I don't trust them any longer because this isn't science anymore, this is commerce [Anti-vaxxer denialist: male, age 60, high school graduation].
>
> If the State produced the vaccines, we'd all get them, very few would be against... if the State produced them! However, the truth is the State can't produce them because it has no funds, when the profits then go […] to Big Pharma [Anti-vaxxer denialist: male, age 51, high school graduation].
>
> I'm also sure that pharmaceuticals have benefitted a lot from this, of course […]. I think the world revolves around, and this is my own conspiracy theory, if you will, the economy of pharmaceuticals and weapons [Anti-vaxxer distrustful/fearful: female, age 63, degree].
>
> I think there's a huge business behind vaccines, as is the case for Covid: is it better to treat the few who get sick, or the many millions of people who don't want to get sick and need a jab every three months? Well, I mean, no-brainer! [Anti-vaxxer distrustful/fearful: female, age 50, degree].

In addition, there is a second strategy aimed at rendering refusal of the vaccine intelligible and rationally sound. Opposite and complementary to the previous one, it doesn't center around increasing the sense of danger connected with vaccines, but around reducing the threat posed by the virus and the consequences it has on the organism. Foreseeably, this attitude is particularly noticeable among those who perceive themselves as strong and healthy, usually younger/sporty people who believe they can contract the illness with no significant repercussions:

> I've always thought of myself as young […]; knowing myself, knowing my body, and taking care of myself, I would've been able to endure the illness [Anti-vaxxer distrustful/fearful: female, age 24, degree].
>
> It's not that I felt invulnerable, but I believed that if I contracted [the virus] I would overcome it, like I would have recovered from any other kind of flu [Anti-vaxxer distrustful/fearful: female, age 37, high school graduation].

> I never got [the vaccine] precisely because first of all I didn't think I needed it [Anti-vaxxer distrustful/fearful: female, age 53, degree].
>
> Being forty - as you said - and being in relatively good health, considering all my test and bloodwork in good standing and with - I don't want to say constant, but some physical activity and sport which keeps me in good shape, I didn't think [vaccination] was necessary [Anti-vaxxer distrustful/fearful: male, age 41, degree].

Having illustrated the primary reasons supporting the choice of refusing the vaccine, it is opportune to conclude by noting that, although analytically separable, these often tend to coexist in the statements of separate individuals, creating a complex and organic structure. In other words, the stated reasons feed into each other by way of an entanglement that becomes coherent to the extent to which it rationally connects thoughts, feelings and ideas capable of condensing into a *Weltanschauung* that, in some ways, is still unchartered.

3. Consequences of refusing the vaccine, the predictable and the unexpected

The picture regarding the consequences following refusal of the vaccine is particularly heterogenous. Some of the consequences are of an objective nature, but surely the way they were experienced is in part an assessment that cannot be removed from the subjective perception thereof, as per those directly involved. The evaluation of the overall picture shows a 'gap' between ex-ante and ex-post considerations reminiscent of the weberian *types of action* (Weber, 1922), according to which even seemingly irrational actions are not so, on account of the sense of specific intention that must be understood from the point of view of the actor (Sonzogni, 2006). The gap between fear, perplexity and conviction that underlie the refusal of the vaccine, and the effective upshots recorded, are well-represented by the *heterogony of ends* (Wundt, 1886), by the practical diversion between pursuit and effective consequences of such pursuit of ends (Bonolis, 2013). All of this has made space for varied and multidimensional opinions. In light of this, for interpretative purposes, the wealth of empirical material can be classified in consideration of, on the one hand, the types of consequences endured (practical, moral, emotional, etc.), on the other, of the aspects of life which they impacted (work, social, relational).

Starting with the diffident-fearful type, many of the subjects reported difficulties at work as a result of their choice: *it was impactful, workwise [Anti-vaxxer distrustful/fearful: female, age 50, degree]*; *I had to suspend myself from work [Anti-vaxxer distrustful/fearful: female, age 63, degree]*; *having had the vaccine, I still had to face*

a number of consequences. Firstly, I got suspended [Anti-vaxxer distrustful/fearful: female, age 63, degree]. The problems primarily concerned practical aspects, connected to the need to provide for oneself: *months of suspension with no pay [Anti-vaxxer distrustful/fearful: female, age 63, degree]*, so much so that some had to readapt: *I looked for other jobs... Underpaid jobs [Anti-vaxxer distrustful/fearful: female, age 24, degree]*. The emotional aspects were also upset: *I wasn't respected... Instead, I unfortunately became somewhat of a target because of my ideas [Anti-vaxxer distrustful/fearful: female, age 63, degree]*. Not least, the ethical-moral dimension was greatly affected for some of the participants, for example in terms of their children's education: *if I agreed to bend to this work-based blackmail... What would I be teaching my daughter? To succumb to the first instance of moral blackmail? It's about the fact that she needs to see mommy being coherent because, otherwise, what is this little girl to believe!? [Anti-vaxxer distrustful/fearful: female, age 40, degree]*. Faced with such difficulties, for some what happened was a reason to react, to make important assessments and decisions: *not having the vaccine, I had to face a number of consequences... In truth, the pandemic was a big watershed in my life with respect to important choices [Anti-vaxxer distrustful/fearful: female, age 32, degree]*.

In terms of social consequences, many of the experienced effects concerned Green Passes and, in these cases, the affected aspects were mostly of a practical kind. In fact, not holding one meant the impossibility of living life with pre-pandemic regularity. Conversely, in some cases alternative ways of experiencing the bans were noted, which all underline the need to attain economic sustenance: *businesses still had to survive, so oftentimes they wouldn't even check… I couldn't even go into shops... Had no Green Pass? Sometimes I went in anyway. They didn't even ask for it [Anti-vaxxer distrustful/fearful: female, age 46, high school graduation]*.

The desire to keep living one's life with regularity drove some to readjust: *I took it as an exercise in flexibility, I didn't give up my social life, I just changed it [Anti-vaxxer distrustful/fearful: female, age 50, degree]*. This attitude certainly denotes a propositional inclination on the emotional level. However there was no shortage of emotional reactions of a negative sign; some, in fact, have stated: *horrible, it was a horrible experience having to endure that imprisonment that we all found so useless... It was a disgusting situation [Anti-vaxxer distrustful/fearful: female, age 63, degree]*.

Furthermore, the considerations on the relational consequences for the interviewees were retraced. In this regard, one could highlight two tracks in terms of the collected cases: in-group and out-group. As for the latter, the range of relationships between the affected subjects and the related friends and relatives who didn't share their opinion, appears very varied. It goes from extremely conflictual situations: *all of my kids support it... I was told all manner of things!... I had a boyfriend and now I don't anymore [Anti-vaxxer distrustful/fearful: female,*

age 65, high school graduation]; we're all friends at first but then, the unvaccinated, all plague spreaders [Anti-vaxxer distrustful/fearful: female, age 25, degree]. To then reach relationships that were left unchanged, or which are characterized by tolerance: *luckily, in the environment I'm in, none of my friends have marginalized me for this… We've both always accepted each other's choice [Anti-vaxxer distrustful/fearful: female, age 37, high school graduation]*. Finally, cases where a sort of relational self-censorship was chosen, by avoiding or reducing opportunity for possible contact and conflict: *I isolated myself a bit, I isolated myself because I didn't want to discuss these things [Anti-vaxxer distrustful/fearful: male, age 70, degree]*.

Then, there is the in-group relationship aspect, between those who shared the vaccine hesitancy opinion which, in some cases, brought people with the same convictions closer: *I met lots of young people in my same situation, with my same ideas... It truly was a nice opportunity for socialization [Anti-vaxxer distrustful/fearful: female, age 25, degree]*.

Moving on to the denier type, although some reflection on the practical effects of their choices is discernable, attention is mostly placed on those of an emotional and moral nature and sometimes, an ideological one. Although some of the interviewees have mentioned consequences at work, with some even making momentous decisions (*I quit my job – Anti-vaxxer denialist: male, 60, degree*), what surfaces most prominently is tied to the social and relational aspects.

At the center of the claims on social consequences was the Green Pass and the way in which the interviewees experienced it. It can be clearly inferred that, despite the effects taking their toll, denier interviewees are characterized, regardless, of standing by their convictions over time, convictions which, on several occasions, were repeated over the course of the interviews: *the barista... said "you can always come for coffee". Regardless, I wouldn't go [Anti-vaxxer denialist: male, age 43, degree]; I adjusted my life so as not to have to use it [Anti-vaxxer denialist: male, age 60, degree]*.

As a mirror effect to the above, the vehemence of their positions underlines marked opinions regarding 'Others', which primarily refer to institutional figures (government bodies, subjects in charge of healthcare, etc.): *well, healthcare is a government body... Most doctors are perjurers, minions, I'm free now, I have neither master nor State, neither government nor job and I do what I please [Anti-vaxxer denialist: male, age 60, degree]*. Evidently, these aspects are connected with the issue of (mis)trust: *if I got sick I'd rather die at home than be treated in hospital. I don't believe in the national healthcare system anymore; a doctor who followed ministerial procedures is a doctor that can't be trusted [Anti-vaxxer denialist: male, age 60, degree]*.

The issue of relational consequences was discussed profusely throughout the interviews, probably because in this sphere the subjects involved experienced situations that hit closer to home. The landscape of the situations described is a varied one; some simply reduced or avoided meetings (*they just*

kept clear... But they never criticized our choice – Anti-vaxxer denialist: male, age 43, degree), others cut ties (*as soon as I said I was unvaccinated, they pushed me away – Anti-vaxxer denialist: male, age 43, degree; they rejected me – Anti-vaxxer denialist: male, age 60, degree*). There was no lack of extreme situations, either, in which they felt discriminated against (*definitely hate, they definitely hated me – Anti-vaxxer denialist: male, age 51, high school graduation*), to the point where repercussions lingered in the long-term as well (*I still feel that emotion to this day – Anti-vaxxer denialist: male, age 51, high school graduation*).

Finally, reviewing the social consequences reported by those forcefully led to getting the vaccine, some of the interviewees shone a light on the scarce social interaction during lockdown, a situation that was extended for some: *social contacts decreased even more [Vaccinated by forced choice: female, age 41, degree]*.

Here too, the relational consequences differed; some came across tolerant people respectful of their differences, others met with obstructive individuals: *the more intelligent ones would say: "everyone's free to do as they please, the know-it-alls, they told me:... "if you get Covid and die, you deserve it" " [Vaccinated by forced choice: female, age 47, high school graduation]; but I was treated like the fool, like the one who doesn't get it, the one who doesn't think of others or do the right thing, but thinks of themselves only [Vaccinated by forced choice: male, age 27, degree]*.

For this type of hesitancy, a separate reflection is needed for the reasons that led to getting the vaccine, despite the declared lack of conviction. In this regard, it is interesting to comprehend whether the underlying reasons were of a practical type, or if they were instead linked to some form of pressure (psychological, moral, etc.) which led them to modify their decision. From the interviewees' words there is a clear preponderance of factors connected with practical needs, like being able to work or getting a Green Pass. Notwithstanding their decision, it is evident that the convictions they held before their decision have not changed, and there is a strong sense of constriction: *the first day I got there, and I started crying. Because I didn't want to do it [Vaccinated by forced choice: female, age 47, high school graduation]; but I was aware that there was lots of social pressure around it... So that definitely also played a part [Vaccinated by forced choice: male, age 24, degree]*.

The picture presented through the interviewees' words is full of interesting prompts, and its complex structure is also due to the fact that the assessment that led to the position of vaccine hesitancy, and the resulting consequences ultimately combined with a number of other conditioning factors. In particular, reference can be made to structural factors - connected with a period of change and instability - that can activate our emotional system which, by and large, when on alert or under threat, tends to make diffidence more marked. In situations like that of the pandemic forms of cognitive unbalance arise, and in

moments of fear, people's form of sensitivity towards potential threats to their lives are activated with greater zeal (negativity bias).

In this regard, the suspicion shown by the interviewees vis-a-vis the vaccine is an example of the aforementioned mechanism, the fear of adverse effects. In situations like this when faced with a risk, in a maximally rational utilitarian logic, the reaction should be the result of a rational calculation obtained from weighing the possibility that something might happen against the cost of that same event. However, this calculation isn't always made on a rational basis, because in the process of evaluation, the elements that intervene and affect the cost-benefit ratio are, oftentimes, of an irrational, emotional character.

Finally, among the structural aspects, the issue of (mis)trust must be mentioned, an issue which frequently characterized hesitant subjects long before the outbreak of the pandemic, and is directed towards a plurality of social and institutional actors (healthcare figureheads, government bodies, etc.).

Moreover, among the conditioning factors are life experiences and one's perception of them, which can be considered contingent factors, just like one's relationship with mass-media communications (Liu & Liu, 2021; Cossard et al., 2020), how items of news are spread and the channels through which they are consumed, also, misinformation and disinformation (Loomba et al., 2021); the relationships formed between private social agents (friends, relatives, etc.) and between the latter and public actors (government, healthcare, etc.), in different aspects of life (work, family, social, etc.).

From the complexity and multidimensionality of the empirical evidence derives a field of analysis in which the effectively encountered consequences manifest within predictability and unexpectedness.

Fundamentally, people look for conditions of coherence and stability, and persisting uncertainty - in the mid to long-term - can induce a state of cognitive dissonance (Aronson & Tavris, 2020). In such moments, the need to find a way to coexist with uncertainty and to accept change, lead to mental processes of a more complex nature. In a *Rational Choice Theory* perspective, the principle of *limited rationality* (Simon, 1955) of human beings affects both time and mental energy. In these situations it is no easy task to construct systematic processes and make mindful decisions. Undoubtedly, one is oriented towards finding a *comfort zone*. In this regard, referring to the well-known *comfort, stretch and panic* model by Rohnke (1989), developed on the basis of the Yerkes-Dodson law (1908), it becomes possible to understand these processes which activate to recreate a balance, and readjust to the transpired changes. One could suppose that, extreme situations like that of the pandemic will, for the sake of reacquiring some sort of balance, force us to seek activation keys for the *lengthening zone*, even outside the *stretch zone*.

4. Panel web surveys and focused interviews compared. Integration perspectives for the characterization of hesitancy behavior profiles

On a technical-methodological front, the integration of the standardized survey and remote focused interviews reflects the interlinking of phases which, in the perspectives of *multiple triangulation* (Denzin, 2009) or at *different levels of analysis* (Tashakkori & Teddlie, 1998), helped to compensate - by way of qualitative interviews - for the survey's blind spots, while highlighting the unexplored dimensions of vaccine-hesitant behavior, and contributing to the enrichment of the results obtained as to the landscape of values and motivations discovered.

In consideration of the information reviewed in the previous paragraphs, it must be specified that, in terms of the two cited dimensions of study (reasons for and consequences of taking the vaccine), the comparability of the results obtained through the two investigation steps (panel web survey: rounds 1 and 2/remote focused interview) was only possible in the area regarding the reasons for refusing the vaccine; the other dimension of study is instead exclusively attributable to the explicative/descriptive framework which was pieced together through the execution of remote focused interview. More precisely, study dimensions being equal (reasons for taking or refusing the vaccine), the data collection phases - as considered jointly - contributed to underscoring the main characteristics and specificities of the vaccine-hesitant behavior types. As shown in Table 1, when compared, the values expressed by the vaccine-hesitant individuals reached through the panel survey were confirmed, by and large, in the discursive productions of the focused interview participants. Specifically, some tendencies (attributable to constellations of opinions, attitudes and behaviors) established through the web survey, were also confirmed by the qualitative interviews; moreover, the definition of certain character traits, typical of vaccine-hesitant behavior, was enriched by and integrated with the valuable details the interviewees gave during the narration of their experiences (par. 2 and 3). In other cases still, albeit residual, the results of the interviews have called into question some of the "linchpins" attributable to value-based connection and actions performed.

Moving on to the data, denier rationale profiles seem to be informed by a coherent system of answers concerning: the non-existence of Covid (held firmly even in the face of infection); the inefficacy of vaccines, also in terms of their dubious chemical composition; the association between believing in conspiracy theories -or, in any case, a tendency to underestimate the effects of Covid 19 - and high levels of mistrust regarding the information channeled by medical and healthcare institutions.

As for the diffident-fearful, the deviation as per the results obtained from the two investigation steps manifests in terms of the intensity of the fear of infection (specific question covered in the panel web survey). In particular, during the narration of experiences, a reduction in the fear of infection was noted (a result which stood out in the panel web survey), on account of the strong predisposition to preventive behavior (personal protection equipment, regularly washing one's hands, etc.); more pronounced was the fear of infecting close loved ones with serious psycho-physical vulnerabilities. The doubts on the resilience of healthcare institutions, alongside the negative assessment of vaccine efficacy and its side effects on health - detected by means of the focused interviews - confirm the data recorded in the panel web survey.

Table 1. Reasons for hesitancy: comparing the panel web survey andf ocused interview results (+/=/≠).*

Type of vaccine-hesitant	*Panel web survey results: main trends*[5]	*Interview results: main trends*
Diffident-fearful	*Strong concerns for self* for *T1 / T2* in case of infection	(≠) Moderate concern in case of infection, due to high predisposition to preventive behavior; what stands out more is the concern of infecting loved ones with serious psycho-physical vulnerabilities.
	Low levels of trust in information provided by medical/healthcare sources for T1 / T2	(=)
		(+) Negative assessment of vaccine efficacy based on indirect experience (relatives, friends and acquaintances with serious post-vaccine repercussions).
		(+) Family socialization to vaccines - Covid or other - of negative sign. Intergenerational transference of mistrust of vaccine liquids.
		(+) Strong concern for the effects of the vaccine on others, in particular: relatives and friends with psycho-physical vulnerabilities.
Deniers	*Low concern for self for T1 / T2 in case of infection*	(+) Perception of invulnerability to Covid 19 infection.

Continue to the next page.

[5] Based on the collected data connected to the study dimension "reasons for refusing the vaccine", in consideration of the three relevant types of vaccine-hesitant subjects, systematic comparisons were made as to the following synthetic indices: *a)* level of concern as to Covid 19, regarding both self and loved ones; *b)* behavior practices connected with adopting measures to prevent infection; *c)* trust in sources of information provided by medical/healthcare institutions.

	Low level of trust in information provided by government / institutional / medical / healthcare sources for T1 / T2	(=)
	Low propensity to actualize preventive behavior for T1 / T2	(+) Prevention cannot only consist of face masks and similar protection equipment; the healthcare system needs to be reinforced; the organizational solution of adopting restrictive and containment measures for everyone seems unjustifiable: the object of institutions should be limited to the exclusive protection of the weaker segments of the population.
		(+) Likening of the Covid 19 illness to a seasonal flu.
		(+) Negating the efficacy of the vaccine; conspiracy-based reasons with respect to the chemical composition of the vaccine liquid: the vaccine liquid is just a saline solution; it's a "poison" that causes serious side effects.
Forcefully led to the Covid vaccine	*Strong concern for self for T1 / T2 in case of infection*	(+) Strong concern for the effects of the vaccine on one's health (as well as infection).
	Strong concern for others for T1 / T2 in case of infection	(=)
	High propensity to actualize preventive behaviors for T1 / T2	(=)
		(+) Acceptance of the vaccine was an obligated choice to safeguard their workplace and their family's socio-economic position.
	High level of trust in information provided by medical/healthcare sources for T1 / T2	(≠) Trust in science by and large, and trust in medical/healthcare information on vaccines in particular is moderate, if not low.

* (+) *the focused interview integrates or further investigates the survey results;* (=) *the results of the two investigation steps are equivalent;* (≠) *the results of the two investigations steps show some incoherencies.*

Moving on to vaccine-hesitant subjects forcefully led to accepting the Covid vaccine, who complied with the vaccination campaign on account of their professional obligations, the results recorded during the two investigation steps converge in terms of strong concerns as to the consequences of infection and the effects of the vaccine on one's own health, as well as that of loved ones. However, parallel to this line of convergence is another, clearly opposite one, which highlights an evident deviation as per the results of the different investigation tools in terms of trust in medical and healthcare institutions.

Unlike the data collected on the sample segment of vaccine-hesitant subjects forced to take the vaccine (130 cases), at the heart of the interviewees' discursive productions - reached during the qualitative investigation phase - trust in science by and large, and trust in medical and healthcare information regarding the vaccine specifically present as moderate, if not low. The attitude

of low/moderate trust in information on vaccines coincides with a deep feeling of skepticism, mixed with disapproval, vis-a-vis the vaccine testing procedures and the chemical composition of the liquid, especially in terms of medium-long term impact on the health of self and others.

Ultimately, the overall reading of the survey and interview results help to enrich and consolidate the theoretical-interpretative picture of vaccine-hesitant behavior, allowing for a deeper understanding of forms of social perception, the aspects of rationale and the attitudes and opinions connected with the decision of taking or refusing the vaccine within a dynamic of social coercion.

5. A methodological assessment of remote focused interviews

Before assessing the virtues and limits of the use of remotely conducted focused interviews in the research presented herein, we must specify the peculiar characteristics of this non-standardized form of interview in its canonic version. In the present sense, what is meant by focused interview[6] is an individual discursive interview, limited to a specific situation or decision shared by all the participants, finalized to uncovering the social mechanisms and processes that drive it.

It therefore is a non-standardized instrument of information collection which, in restricting attention to an experience that the selected participants have in common, allows access to the personal definition of a given situation with precision, delving into the instigating mechanisms and the repercussions, as well as the forms of social perception, opinions, feelings and values that orbit the subjects' life experiences.

As regards the research presented herein, the recourse to focused interviews helped to explore - with maximum openness - the landscape of

[6] Focused interviews, first proposed by Merton and Kendall in 1948 (tr. it., 2012), originated within the scope of a study on mass media propaganda, based on research entrusted to Lazarsfeld in 1941. The latter invited Merton to attend, as an observer, a work session in which the reactions of a group of people listening to a radio program were examined, within the purview of a study commissioned by the government agency *Office of Facts and Figures*. At the end of the mission Lazarsfeld asked Merton to conduct a second group interview to show him how, according to him, such an interview should be conducted; the first "focus group interview" was thus carried out. Sometime later, with the entrance of the United States in the Second World War, Merton interviewed groups of soldiers to study their reaction to training and to so-called "moral" films, thus perfecting the details and procedures of "focused interviews", both individual and group (Merton, Fiske and Kendall, 1956) and clearly outlining elements of discontinuity (Merton, 1987).

reasons, repercussions, the symbolic, emotional and value-based systems characteristically connected with reluctance to accept the Covid vaccine shared by all the subjects contacted for an interview. The particular Anti-vaxxer reluctance to tell a stranger their specific normative details and their unusual experiences ultimately meant that of the 234 subjects classified as vaccine-hesitant - despite showing great engagement in the undertaken research, and taking part in the two preceding information collection rounds - only 13 consented to be interview with respect to the specific focus chosen for investigation, forcing the team to acquire the remaining cases through a widespread sampling procedure which meant the loss, as far as these were concerned, of the longitudinal character the original project had planned.

However, the main advantage of the remote focused interviews - carried out on the Google Meet platform - was definitely the mitigation of the intrusiveness connected to the chosen area of study. Remote interviewing, in fact, kept the participants from any direct, face-to-face contact with the interviewer, increasing the willingness to narrate - in a spontaneous way and with no particular inhibition - even the more socially undesirable beliefs. The density of the results reported in previous paragraphs attests precisely to the off-handedness with which even the most private aspects were discussed with no significant reticence. Most likely, interviews carried out in-person, besides further reducing the number of subjects available for an interview, would have contributed to significantly trigger and incentivize the strategies of mimicry and concealment of those traits which, since the launch of the vaccination campaign, Anti-vaxxers often found themselves suppressing, in their day-to-day lives, so as not to incur in forms of disapproval, discrimination or social exclusion.

In this direction, the fact that the interview was preceded by an email exchange - aimed at presenting this new research phase and at providing the necessary guarantees of anonymity and confidentiality of the gathered information - also helped to reassure interviewees about the relevance of this specific form of investigation, the prestige of the research directors and the scientific, non-informative nature of the investigation as well as, and not least, the possibility of safeguarding their privacy. In the interest of the investigation's scientific credibility and the guarantees of anonymity, it seems gainful to specify that in no case were interviews conducted with no video, thus allowing the interviewer to benefit from all the non-verbal aspects of the interaction, aimed at signaling the level of engagement in the interview or, conversely, drops in attention, hesitation as to the information given, perplexity in terms of the questions posed and all those clues regarding the atmosphere of the interview that only visual contact can supply.

Despite being designed with a trace structure of open-ended questions which would allow further investigation of all the most relevant aspects connected with vaccine hesitancy, the interview atmosphere which generally developed - partly by virtue of the intercession of digital technology, alongside the fact that the interviewers participated in all the design phases of the study - favored a non-directive style of conduction, one in which the interviewees' spontaneous narration helped to restrict surveyors' interjections, giving the interviewees broad freedom of expression.

The remote execution of interviews also fostered sharing of online informative materials, websites and blogs with interviewers, which the participants had referenced in the process of forming their resistance with respect to the choice of taking the vaccine.

Even with such indubitable advantages, remote interviews were not exempt from limitations, mostly ones tied to connectivity problems which happened throughout some of the interviews.

Connection instability, in fact, in these cases caused abrupt and sometimes recurring interruptions of the interview, with consequent difficulties in reestablishing the train of thought on part of both interlocutors, and problems recalling what was being said before the signal was lost. The imperfect stability of web connections during some of the interviews also caused intermittent audio, begetting pesky requests to repeat what had already been said, to the detriment of the conversation's fluidity, and contributing to tire the interviewees out excessively. These problems also made the operation of transcribing the interviews more complex on account of unintelligible portions, right up to the extreme case of an interview that for the above reason became wholly unusable.

Finally, it must be specified that compared to a face-to-face in-person interview, digital intermediation rendered the interviewer's role more challenging, due to the smaller number of relational resources conducive to understanding the least invasive way and most opportune moment to interrupt the narrative flow for the purpose of introducing opportune follow-up questions, or avoiding unnecessary tangents.

Aside from said limitations, remote focused interviews helped to capture, in-depth, all those aspects connected with the vaccination campaign and the symbolic and emotional universe of those hesitant to the Covid vaccine who, in previous research phases - executed with the help of a structured questionnaire - had been left almost completely untouched. Besides the fact that the questions relating to the vaccine included in the questionnaire submitted in the spring of 2021 were limited in number, it must be recalled that complex decisional processes, such as that of choosing to refuse the Covid vaccine - which require the evaluation of aspects that transversally pertain to one's

relationship with science, the establishment and the media - cannot possibly be reduced to standard forms; processes that respond to the emotional domain (consider states like trust or apprehension) or which are oriented to analytically reconstructing the divulgation of complex theses, like conspiracy theories.
In conclusion, remote execution of interviews, notwithstanding the reported limitations, was an invaluable resource to break down defensive barriers, favor maximum openness and spontaneity in the narration, as well as to valorize the potential of digital technology with respect to the sharing of informative content.

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