

Representing agency and action in the #storiesfromvaccination governmental campaign in Romania. A multimodal approach

punctum.gr

BY: **Camelia Cmeciu**

ABSTRACT

Vaccination continues to be one of the most debated topics worldwide, especially during the COVID-19 pandemic and in countries like Romania, where the COVID-19 vaccination rate is very low. Studies showed that in public pro-vaccination campaigns, despite the tendencies towards using evidence-based content strategies focusing on factual information delivered by experts, emotional content through personal stories also triggers a positive engagement in fostering vaccine confidence. In April 2021, the Romanian Government launched a new Facebook campaign entitled #storiesfromvaccination/ #povestidelavaccinare. Drawing from two concepts (point of view and multimodality) relevant to narrative online health messages, the study has a threefold aim: (1) to investigate the online engagement of the narrative perspectives in the #storiesfromvaccination campaign; (2) to provide a comparative analysis of the multimodal cohesion in the Facebook #storiesfromvaccination multimodal texts posted by various message sources; (3) to identify the various representations of agency and action in the interplay of the three metafunctions (experiential, interpersonal and textual) in the personal stories from vaccination.

ARTICLE INFO:

Volume: **08**Issue: **02**Winter **2022**ISSN: **2459-2943**DOI: **10.18680/hss.2022.0016**Pages: **61-81**Lic.: **CC BY-NC-ND 4.0**

KEYWORDS:

COVID-19 vaccination**Romania****Multimodality****Point of view****Thematic patterns****Human/vaccine agency
language**

“knowledge is never ‘point-of-viewless.’”
(Bruner 1991: 3)

Introduction

To change people’s attitudes and behavior regarding a health issue is the ultimate goal of every communication campaign. The attitudinal, normative, and behavioral shifts (Murphy et al. 2015: 2117) intended by health authorities and practitioners depend on the effectiveness of communication strategies. This is even more challenging when COVID-19 immunization is seen as a solution to stop a global pandemic. Research suggests two main ways of learning and knowledge related to health communication (Hinyard and Kreuter 2007; Dahlstrom 2014): the *paradigmatic pathway* focusing on scientific evidence and the *narrative pathway* emphasizing personal experiences. But the choice for a specific way of processing the information is closely related to, at least two aspects. On the one hand, the postmodern medical paradigm has triggered doubts about science and authority legitimacy (Kata 2012), thus increasing vaccine hesitancy. On the other hand, socio-political factors in a specific region may play a significant role in the citizens’ reluctance toward experts. This is the case in Eastern Europe, one of the regions with the lowest levels of trust in science (Wellcome Global Monitor 2020), where the rise of populism may have influenced the citizens’ distrust of specialists (Mihelj et al. 2022). Having one of the highest distrust rates in national authorities (Haerperfer et al. 2022), Romania, along with Bulgaria had the lowest vaccination uptake in the first months after the COVID-19 vaccination campaign started (Walkowiak et al. 2021).

In the context of the COVID-19 vaccination, the Romanian Ministry of Health began an online information campaign on vaccination in December 2020, while the six health ministers tried various content strategies to convince Romanians to get the jab. The first strategy focused on what mass media labeled “the militarization of the communication in a pandemic” (Popescu 2021), Valeriu Gheorghiuță, a physician lieutenant colonel at a well-known military hospital in Romania, was appointed as the head of the communication campaign. During Vlad Voiculescu’s mandate (USR-PLUS¹), a shift could be observed, and narrative-based strategies were implemented. Thus, in April 2021, the Romanian Government launched a new Facebook campaign entitled #storiesfromvaccination/ #povestidelavaccinare, awarded the first prize for the best user-generated content at the national social media competition Webstock.

Starting from two concepts (point of view and multimodality) related to narrative online health messages (Machin and Mayr 2012; Chen et al. 2015; Nan et al. 2015; Chen et al. 2016; Nan, Futerfas, and Ma 2017), the study aims:

¹ USR-PLUS is a liberal alliance formed in 2019. Two parties united to form this alliance: Save Romania Union (USR) and the Freedom, Unity and Solidarity Party (PLUS).

- (1) to investigate the online engagement of narrative perspectives;
- (2) to provide a comparative analysis of the multimodal cohesion in the Facebook #storiesfromvaccination multimodal texts posted by various message sources;
- (3) to identify the various representations of agency and action in the interplay of the three metafunctions (experiential, interpersonal and textual) in the personal stories from vaccination used in the #storiesfromvaccination governmental pro-vaccination campaign in Romania.

1. The roles of narratives in health communication

Narrative effectiveness in health messages has been a topic greatly studied in the literature. Research suggests that unlike statistical information, narrative information as a communication strategy brings forth higher level of comprehension of the world (Dahlstrom and Ho 2012), of understanding and interest in health messages (Dahlstrom 2014), triggers identification with the characters in the story (Nan et al. 2015) and self-referencing by reminding people of their own experiences (Chen et al. 2016), includes “mental imagery of story events and emotional engagement” through transportation (Green 2021: 89), diminishes message resistance by lessening counter-argumentation (Hinyard and Kreuter 2007), or generates empathy, dramatic chronology using culturally resonant language (Larkey and Hecht 2010).

But despite these advantages of narrative communication, researchers make a plea for a hybrid usage of narrative and statistical evidence type in health messages (Hinyard and Kreuter 2007; Betsch et al. 2011; Dahlstrom 2014; Nan et al. 2015; Loft et al. 2020; Pedersen et al. 2020) to increase an attitudinal and behavioral change. In the same line, World Health Organization (2021) advised on a blended approach to tailoring the content strategy on COVID-19 vaccination to improve the effectiveness and acceptability of these messages with the target audiences. Whereas an evidence-based approach is suitable for the communication of potential risks, personal stories about vaccination are better suited to address fear about vaccine safety and they “can be part of an authentic, personal approach to communicating via social media” (WHO 2021). However, the reluctance towards vaccination is closely related to the postmodern medical paradigm where health experts are contested and non-experts seem to have a powerful voice especially on social media platforms, wanting to share their stories of vaccination online. In this line, health communication professionals should align their content strategy with this urge for personal experience shared online. Citing previous research, Dahlstrom (2014) suggests that narratives are more engaging and easier to understand than conventional logical-scientific communication. For example, the analysis of the strategic communication of HPV vaccination online campaign in Denmark highlighted the

effectiveness of personal stories in creating higher engagement rates and positive dialogues on Facebook (Loft et al. 2020).

Defined as “a representation of connected events and characters that has an identifiable structure, [being] bounded in space and time, and [containing] implicit or explicit messages about the topic being addressed” (Kreuter et al. 2007: 222), narratives in health communication have been studied considering the point of view (POV) concept (Chen et al. 2015; Nan et al. 2015; Chen et al. 2016). Stories are delivered by different sources who turn into narrators developing various perspectives on a phenomenon. Differentiating between a 1st-person point of view (POV) narrative, on the one hand, and a 2nd-person POV and 3rd-person POV narratives, on the other hand, researchers consider that a 1st-person singular viewpoint encourages “an internal, vicarious experience” whereas a 3rd-person POV promotes “an onlooker’s perspective” (Chen et al. 2015: 978). The effectiveness of the POV narratives has been tested in various experiments on health messages (about colon cancer – Chen et al. 2015; caffeine overdose – Chen et al. 2016, or HPV vaccination – Nan et al 2015; Nan et al. 2017 etc.). The results highlight a polarization between the effects of narrator perspectives upon experiment participants: either 1st person POV was perceived as more effective upon identification and self-referencing, or POV did not affect the two mediators at all, but had an influence upon the severity perceptions, 1st person narrative messages leading to greater risk awareness.

Unlike previous studies using experiments, the effectiveness of the narrative perspectives in #storiesfromvaccination Facebook campaign will be tested considering the online engagement triggered by each type of the narrative messages. Therefore, a first research question is the following:

RQ1: Which narrative perspective triggered more engagement in the #stories-fromvaccination Facebook campaign?

2. Theoretical framework: Multimodality and point of view

Multimodality highlights that (1) meaning is formed of various semiotic resources (writing, speech, image, layout etc.) that have distinct potentialities and are constantly reconfigured, (2) meaning implies the production of multimodal wholes formed of semiotics modes as “stratified configuration of semiotic resources together with the materialities that those resources engage” (Kress 2010; Jewitt, Bezemer and O’Halloran 2016; Bateman 2017: 167). Therefore, it is essential to observe how language alongside with “images, photographs, diagrams or graphics (...) work to create meaning” (Machin and Mayr 2012: 9).

Theo van Leeuwen (2005: 230) provides a detailed insight into the multimodal cohesion between an image and a text and he proposes two main links. On the one hand, the *elaboration relation* that includes specification (the image and the text illustrating each other) and explanation (the image and the text paraphrasing each other). And on the

other hand, the *extension relation* that embeds similarity (the image and text content being similar), contrast (the image and text content being contrastive) and complement (the image and text adding more information to each other).

Drawing on the systemic functional linguistics (Halliday 1984; Halliday and Matthiessen 2004), multimodality adapted the SFL metafunctions (textual, interpersonal, ideational) to the SF-MDA text and image system (experiential, interpersonal and textual) (Jewitt, Bezemer and O'Halloran 2016). Transitivity is embedded in these semi-otic resource metafunctions referring to "who does what to whom, and how" (Machin and Mayr 2012: 104). Thus, transitivity implies agency and action. Machin and Mayr (2012: 105) state that analyzing agency and action refers to three aspects of meaning: (a) participants (people, things, or abstract things) – include the 'doers' of the process and the 'done-toes'; (b) processes – represented by verbs and verbal groups or by vectors suggesting the relationships between participants; (c) circumstances (how and when something has happened). As observed, agency is enacted not only at the level of humans, but it is an attribute of abstract things or concepts as well. This aspect was also highlighted in the research on health communication. Chen et al. (2015: 977) studied the linguistic agency in cancer communication and discovered that language assigning agency to humans than to disease increased the susceptibility convictions. Therefore, in this article I will make the distinction between human agency language and vaccine agency language relating the latter to van Leeuwen (2008)'s category of exclusion within the participant roles (see the codebook in section 3).

Whether we talk about characters (narrative theory) or participants (multimodal approach), both should be related to the concept of point of view or perspective. As mentioned in section 2, three points of view (POV) were studied in the literature on health communication, relating POV to the first, second, or third person. But in this article, I will draw on Friedman (1955)'s typology of points of view because it provides a more comprehensive insight into the role of the participant as a narrator. Therefore, I will adapt four main POVs from Friedman's typology to the analysis of the multimodal #storiesfromvaccination posts: *I as protagonist* – the narrator tells his/ her own story in the first person (Friedman 1955: 1175) – *I as witness* – being a character within the story, the witness-narrator tells about others making his/ her thoughts, feelings, and perceptions available to the reader (Friedman 1955: 1174) – *editorial omniscience* – the narrator is intrusive, knows everything about the characters and makes generalizations about some phenomena – and *neutral omniscience* – the narrator is not intrusive, the authors speaks in the third voice, the mental states and the settings are narrated as if they had already occurred (Friedman 1955: 1173).

Drawing on various operationalizations on multimodality (van Leeuwen 2005; van Leeuwen 2008; Machin and Mayr 2012; Jewitt, Bezemer and O'Halloran 2016) and on the point of view concept (Friedman 1955), the following research questions will be addressed:

RQ2: How does multimodal cohesion differ in the #storiesfromvaccination multimodal posts narrated from various perspectives?

RQ3: What thematic patterns are present in the multimodal representations of agency and action narrated from different perspectives?

3. Methodology

CrowdTangle, a public insights tool from Meta, was employed to extract all the #storiesfromvaccination Facebook posts from the public ROVaccinare (ROVaccination) Facebook account. The time span covered the beginning of the #storiesfromvaccination campaign (April 5, 2021) and the end of the first since the start of the COVID-19 vaccination campaign in Romania (December 19, 2021). ROVaccination started a challenge for those who got vaccinated to post their photo in the PROvaccinare/ PROvaccination group and to write about the reasons they decided to get the COVID-19 vaccine using the #storiesfromvaccination hashtag. Some of the users' stories were used as posts on the ROVaccination Facebook page, they were put in inverted commas in order to attribute the content to those persons who posted in the PROvaccination group.

The first stage of the research consisted in coding all #storiesfromvaccination Facebook posts according to the points of view and in assessing the posts according to their engagement rate that represents the percentage of users engaging in the content (likes, shares, comments) (Pedersen et al. 2020). Following Bonsón and Ratkai (2013), the popularity (likes), commitment (comment) and virality (shares) of the posts containing stories were assessed.

Drawing on the literature on points of view (Friedman 1955; Chen et al. 2016), four points of view (POVs) were considered:

- 'I as protagonist' – the multimodal Facebook posts including the personal stories told, in the first person, by those persons who got vaccinated.
- 'I as witness' – the multimodal Facebook posts embedding the stories (first person) narrated by those persons who accompanied other persons who took the jab. For example, a mother telling the story of her boy who got vaccinated.
- 'Editorial omniscience' – this POV was assigned to the organization (CNCAV²) running the #storiesfromvaccination Facebook campaign and it refers to those multimodal Facebook posts where the organization presents details about the vaccination management process (from events to aspects related the interaction with commenters).

² The Romanian Government formed the National Committee for Coordination of anti-COVID-19 Vaccination Activities (CNCAV). It was formed of representatives from various ministries among which the Ministry of Health and the Ministry of Internal Affairs

- ‘Neutral omniscience’ – the multimodal Facebook posts including organizational stories (third person) about people who got vaccinated.

The second stage of the research consisted in the selection of a random sample (25%) for each type of POV. Therefore, the final sample was formed of 79 multimodal Facebook posts (image and text). The multimodal Facebook posts were imported into the QDA Miner 6.0.3-Wordstat 7.1.19., a mixed methods software, the coding of the data being manually conducted.

The starting point for the multimodal analysis was the systemic functional multimodal discourse analysis – SF-MDA text and image system (Jewitt, Bezemer and O’Halloran 2016) that relies on Halliday’s functional grammar (1984). The codebook was developed following the various operationalizations on multimodality (van Leeuwen 2005; van Leeuwen 2008; Machin and Mayr 2012; Jewitt, Bezemer and O’Halloran 2016; Dhanesh, Duthler and Li 2022). The following categories were taken into account as codes:

Experiential metafunction

- Text: (a) participant roles (*exclusion* – agency is assigned to diseases, vaccination; *genericization vs specification* – individuals are represented as a class or as identifiable persons; *collectivization vs individualization* – individuals are represented as groups or not; *nomination vs functionalization* – individuals are represented as unique persons or they are represented through their functions/ activities performed; *identification* – individuals are represented through kingship relations or physical characteristics (van Leeuwen 2008); *us vs. them division* (polarization between vaccine supporters and opponents); (b) processes (*material, mental, verbal, behavioral, relational, existential*).

- Image: (a) narrative representation (*narrative theme* – main action, goal, characters presented; *no narrative theme*); (b) setting (*natural versus staged setting*); (c) participant roles (*exclusion, individualization, collectivization, generic, specific, agents, patients*); (d) processes (*material, mental, behavioral, relational, existential*).

Interpersonal metafunction

- Text: (a) call to action; (b) exchange of information (*subjective vs objective*).
- Image: (a) angle (*high, low, eye angle*); (b) shot (*close up, medium, long*); (c) address (*direct, indirect*).

Textual metafunction

- Text: (a) types of sentences (*active vs passive*).
- Image: (a) information value (*center vs margin; upper vs lower; left vs right*).

The codebook for multimodal cohesion followed van Leeuwen’s two relations (2005): elaboration relation including the categories of specification and explanation and the extension relation focusing on similarity, contrast, and complement.

Since semiotic resources metafunction categories are intertwined in a multimodal Facebook post, the third stage of this analysis focused on a cluster/ co-occurrence analysis which allows grouping objects/ topics based on their similarity, thus offering the researcher the possibility to identify the thematic patterns in the data set (Péladeau 2021). Concordance analysis was the fourth stage of the research. Using WordStat7.1.22, concordance (aka Key-Word-In-Context, KWIC) was performed for the most prominent clusters for each narrative perspective. Words and phrases were considered for the concordance analysis in order to identify the syntagmatic patterns (Ngai et al. 2022) and the thematic focus of the texts (Baker and McEnery 2015). Therefore, the purpose of this analysis will be to provide an insight into the thematic patterns combining the metafunction categories within each of the four narratives.

4. Findings

4.1. Points of view and engagement

The content analysis showed a prevalence of 'I as protagonist' narrative (n=164 posts), followed by 'I as witness' POV (n=64 posts), 'editorial omniscience' point of view (n=60 posts) and 'neutral omniscient' narrative (n=20 posts). For the first research question on the degree of engagement rate (ER) of each narrative, it was found (see Table 1) that editorial omniscient narrations triggered the highest engagement rate (2.43%) and total of interactions (m=2344.75), being the narratives with the highest commitment and virality. It was followed by neutral omniscient narrations and 'I as witness' point of view. An interesting aspect is that although omniscient narrations had the highest mean values for engagement rate, they triggered a polarized attitude having the highest mean values for anger and laughter reactions whereas the love reactions were more associated with the 'I as witness' narration and the sad reaction with the 'I as protagonist' narration.

Table 1. Descriptive analysis - mean values (M) and standard deviation (SD) for interactions and engagement rate by point of view

Point of view	Total Interactions M(SD)	Likes M(SD)	Comments M(SD)	Shares M(SD)	Love M(SD)	Wow M(SD)	Haha M(SD)	Sad M(SD)	Angry M(SD)	Care M(SD)	Engagement rate (ER) M(SD)
I as protagonist	1761.91 (2682.32)	1238.38 (1570.23)	218.59 (407.75)	120.68 (520.13)	84.09 (133.50)	2.77 (6.35)	27.34 (65.52)	43.08 (219.66)	7.56 (13.53)	19.39 (54.13)	1.74 (.016)
I as witness	1969.70 (1883.68)	1409.96 (1244.43)	196.70 (280.67)	84.88 (148.54)	191.33 (229.93)	2.86 (5.27)	23.39 (50.47)	18.37 (73.20)	13.58 (33.19)	28.60 (44.21)	2.08 (.014)
Editorial omniscience	2344.75 (4591.95)	1231.38 (1712.50)	369.37 (859.99)	544.11 (1913.33)	42.70 (58.89)	18.77 (53.90)	72.12 (138.35)	23.44 (87.00)	35.02 (155.74)	7.62 (14.52)	2.43 (.028)
Neutral omniscience	2203.33 (1969.56)	1459.11 (1111.03)	308.62 (525.39)	130.74 (166.10)	160.11 (200.94)	4.51 (7.57)	102.40 (250.97)	7.59 (15.92)	16.25 (26.48)	13.96 (14.85)	2.03 (.014)

Although the ‘I as protagonist’ narratives did not have the highest mean values for interaction and engagement rate, three narratives of this type are in the top five Facebook posts with the highest engagement rate alongside with ‘editorial omniscient’ narratives. Thus, two editorial omniscient narrations reporting on the efficacy of previous vaccines had the highest engagement rate (a story about a vaccine from 1910 achieved an ER of 17% and a story about a vaccine from 1853 achieved an ER of 13%). The three ‘I as protagonist’ narratives with the highest engagement rate focused on the story told by a doctor from Intensive Care Unit (15% ER), on a story told by a layperson after having taken the vaccine (11% ER), and on a story told by a child who got the jab (8% ER).

4.2. Multimodal cohesion across narratives

The frequency analysis (Figure 1) showed that the extension relation of complement prevails across three points of view (‘I as protagonist’, n=34, ‘I as witness’, n=11, and ‘neutral omniscience’, n=5), the images and the texts adding more information about each other. Therefore, this conjunctive relation of complement (Schubert 2021) could serve as a persuasive technique to determine the online user to read the text to find out more details about the persons/ things depicted in the photos. For example, the visual representation of the persons who got vaccinated foregrounds only a material process where the person is portrayed as a patient and the nurse depicted as an agent who performs the act of vaccinating. But the text brings more insight into the story of the person who got the jab, foregrounding aspects related to name, age, occupation, or his/ her thoughts about the COVID-19 vaccine benefits (Table 2).

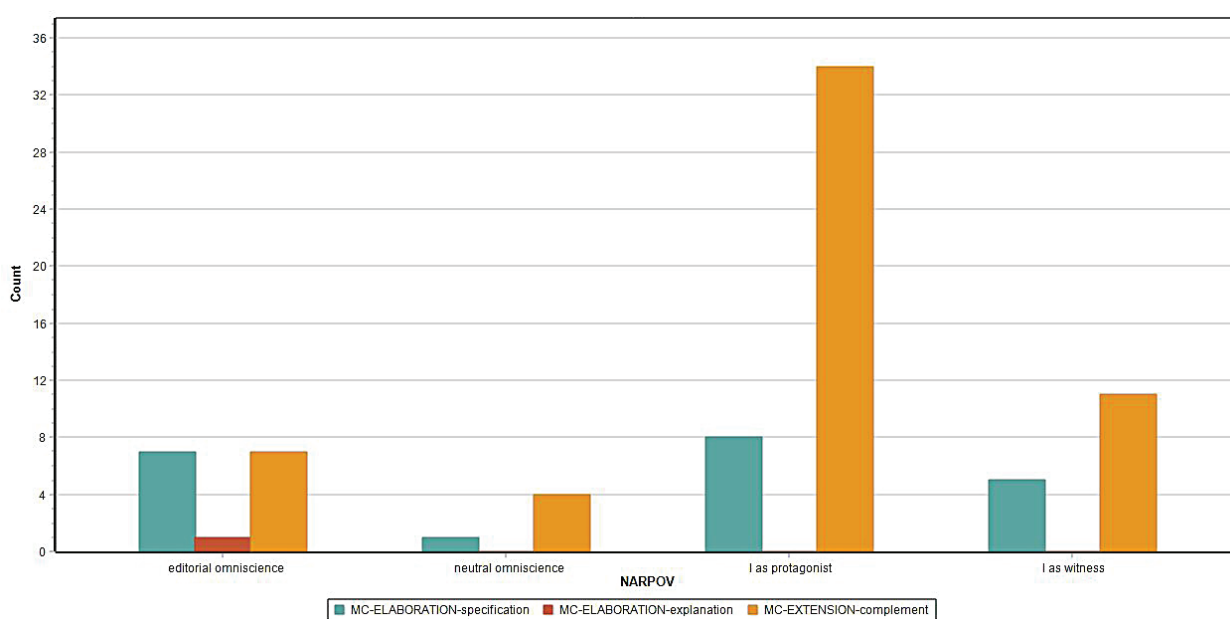


Figure 1. Frequency analysis of multimodal cohesion (MC) across the four points of view.

The editorial omniscient narrative embeds a mix of multimodal cohesion categories (complement, n=7 and specification, n=7). The photos of people getting the jab during a vaccination caravan and of doctors at the vaccination centers are images that provide specification of the management of these centers, illustrating, for example, the number of people getting the jab at the caravan through the usage of a high angle shot (Table 2).

Table 2. Multimodal cohesion across POVs
in #storiesfromvaccination Facebook campaign (examples, our translation)

Multimodal cohesion (category)	Point of view	Visual images	Words in Facebook posts
Complement	I as protagonist	young boy being vaccinated by a nurse	"My name is Cristi, I am 13 years old and today I got the vaccine even if I am afraid of needles".
Complement	I as witness	young boy being vaccinated by a nurse, his mother standing by his side	"My autistic son was vaccinated with the 2 nd dose on March 13, 2021. (...) He was very brave."
Specification	Editorial omniscience	a high-angle image from the vaccination caravan at Obor Market, in Bucharest	"Obor+Pfizer+Johnson&Johnson = Love (...) 312 persons got the Johnson&Johnson vaccine and 86 persons got the Pfizer vaccine. You could get vaccinated at Obor, on Saturday and Sunday, from 8.00 to 20.00".
Complement	Neutral omniscience	British producer, Charlie Ottley, holding the vaccine certificate issued at the caravan at the Bran Castle	"Charlie Edward Ottley was responsible and got vaccinated. Looking forward to meet him at the Bran Castle in the following 100 years. Charlie Ottley is a British journalist, former BBC producer and he lives in Romania now."

4.3. Thematic patterns

4.3.1. *The 'I as protagonist' & 'I as witness' narratives*

The co-occurrence analysis outlined the dominance of two clusters within both 'I' points of view:

- At a verbal level, the textual metafunction was rendered through active sentences and it combined with a subjective exchange of information (interpersonal metafunction), and nomination and individualization as participant roles and behavioral and mental processes as parts of the experiential metafunction.



Figure 2. Facebook photo, May 11, 2021 - #storiesfromvaccination campaign (the persons' faces were covered by the author) (<https://www.facebook.com/ROVaccinare>)

- At a visual level, the co-occurrence included material processes combined with a narrative theme which was rendered through the left-right information value and participants roles highlighted through inclusion emphasizing the individualization role and patients. This cluster also included direct address and eyelevel angle as parts of the interpersonal metafunction.

As observed, material processes are present at the level of visual representation. Being processes of doing, they imply an actor performing an action and a goal or the participant at whom the process is directed (Machin and Mayr 2012). The action of vaccination is visually represented but the sequence of stages is differently portrayed. The visual identity of the actors is foregrounded through the usage of two types of actors. The narrator as a patient addressing directly the viewer is being vaccinated by another actor, the nurse, who becomes the doer of the action (see figure 2). Therefore, the visual representation within the 'I as protagonist' and 'I as witness' narrative embeds a lack of the narrator's agency and a control of the action on the part of the expert (the nurse).

At a textual level, the co-occurrence analysis outlines an opposite situation. The active sentences (e.g., "We were at the center, and we passed with flying colors") render the narrator's control of the action. Unlike the co-occurrence of the visual metafunctions, at a verbal level, behavioral processes dominate. Embedding the "the material and the mental into a continuum" (Halliday and Matthiessen 2004: 255), behavioral processes also refer to actions, but conscious beings are supposed to experience these activities (Machin and Mayr 2012: 109). The conscious beings who are actually the narrators could be identified through their names and/or age ("My name is Cristi, I am 13 years old and today I got the jab" – 'I as protagonist' narrative; "He is David, he is 14 years old, and he suffers from autism. (...) He wanted to get the jab even from the emergency state" – 'I as witness' narrative). Therefore, the textual individualization and nomination complement the visual identity of each narrator as protagonist or narrator as witness.

The difference between the two 'I' narrative perspectives could be observed at the level of thematic patterns:

- Four major themes were present in the 'I as protagonist' narrative (Table 3): personal experience from vaccination, vaccine benefits, trust in science, delegitimation of vaccine opponents.

Table 3. Themes and keywords in the 'I as protagonist' narrative in #storiesfromvaccination campaign (our translation)

Themes	Related keywords (words or phrases, frequency - crosstab results)	Context of keywords retrieved via concordance
Personal experience from vaccination	first dose (26), side-effects (16), fever (14), disease (13), Pfizer (12), booster dose (11), absolutely nothing (8), ICU (5), oxygen saturation (4)	<ul style="list-style-type: none"> • Personal reporting on the number of doses taken, on the (lack of) side-effects ("At the first dose, me and my wife got some fever for two days. I will keep you posted after we take the booster. Update: absolutely nothing.") • Personal reporting (laypersons and medical experts) on the severity of the COVID-19 infection ("In November I went through COVID and I stayed in bed two weeks.")
COVID-19 vaccine benefits	normal (20), want to (18), dear ones (17), safety (16), pandemic over (10), be responsible (5)	<ul style="list-style-type: none"> • Reporting on individual benefits of vaccination ("I love sports and I got the jab because (...) I want to go to school, to take part in competitions, to meet my friends again.") • Reporting on collective benefits of vaccination ("I wish from the bottom of my heart for the pandemic to be over"; "let us be united for our safety and that of our loved ones").
Trust in experts	science (18), doctor/physician (12), instructions (10), weapon (6), efficient weapon (5), sources (4)	<ul style="list-style-type: none"> • Acknowledging the importance of science in the decision-making process of getting the jab ("Because we are responsible, because I trust science, because we are sure that vaccination is the only way of surviving this cruel virus") • Legitimizing doctors as experts ("I chose Pfizer at my doctor's advice and taking into account the allergist's recommendations") • Using metaphorical representation to legitimize vaccination ("Vaccination is now the only weapon against the pandemic (...)")
Delegitimation of vaccine opponents	No/not (212), should (19), astrazeneca (16), never (13), antibodies (12), respect (10), unvaccinated (5), Astra Zevzeca (5), lack of respect (4)	<ul style="list-style-type: none"> • Criticizing the vaccine opponents' (online) behavior ("(...) I have never understood the way of thinking of those who give laugh reactions at serious posts. I will never understand those who lack empathy and show lack of respect towards his/ her acquaintances"). • Using sarcasm to debunk fake news ("Astra Zevzeca rullz! People from the Mogosoiaia Centre do their job. (...) We are waiting for the 5G signal! (...)") • Expressing gratitude towards the medical experts ("Out of respect for these people who fight every day for our lives")

- Three major themes were present in the ‘I as witness’ narrative (Table 4): witnesses to personal experience to vaccination, vaccine benefits, involvement of authorities.

Table 4. Themes and keywords in the ‘I as witness’ narrative in #storiesfromvaccination campaign (our translation)

Themes	Related keywords (words or phrases, frequency-crosstab results)	Context of keywords retrieved via concordance
Witnesses to personal experiences from vaccination	my child (21), first dose (21), proud (20), mother (10), pain (8), neighbors (5), fever (5), daughter (5), autism (5), son (2)	<ul style="list-style-type: none"> • Witnesses’ (Parents’) proudly reporting on other persons’ (children’s) getting the jab or on the first symptoms after vaccination (“He is David, he is 14 years old, he suffers from autism. (...) David wanted to get vaccinated since the emergency state (...) I am very proud of my child.”)
COVID-19 vaccine benefits	to be (10) not to (8), want normality (5)	<ul style="list-style-type: none"> • Reporting on individual benefits (“She is Iulia. She is 12 years old. (...) She wants to travel again in the country of the cherry blossom and of the manga comics.”) • Reporting on collective benefits (“We want normality. We do not want to be afraid of getting infected again.”)
Involvement of authorities	Vaccination centre (16), lady doctor (14), answered me (14), good evening (10), questions (5), empathetic (4)	<ul style="list-style-type: none"> • Dialogic communication with the representatives from the centre of vaccination (“Good evening, at the vaccination centre, there is a doctor who will be seeing your little girl and he/ she will give you advice!”) • Expressing gratitude towards experts (“(...) doctors and nurses from the vaccination centre were very empathetic and helped him (my child) to go through this experience”).

Being a health campaign on vaccination promotion, it was obvious to find a positive evaluation of vaccination in both narrative perspectives in most of the posts. As observed in the two tables, the thematic patterns have common themes, such as personal experiences from vaccination and vaccine benefits but there are also different themes. For example, the trust in science and delegitimation of vaccine opponents’ themes are present in the ‘I as protagonist’ narrative whereas dialogic communication with authority is present in the ‘I as witness’ narrative.

The legitimizing of vaccination was mainly performed through personal experiences told either by laypersons (35 posts) or by medical experts (5 posts) or role models (3 posts) in the ‘I as protagonist’ narratives. The same personal experience was present

in the second type of 'I' narrative but this time, the stories about 'my child', 'mother', 'daughter', 'son', or 'neighbor' were told by witnesses. Since 'my child' was the most frequent phrase (n=21), we could infer that parents were the most active narrators about their children's experiences from vaccination.

Words such as 'first dose', 'side-effects' or 'fever' were the most salient phrases in the 'I as protagonist' narrative, highlighting one important communication strategy in health campaigns, namely the acknowledgment of people's fears and risks (Guidry et al. 2017; Petersen et al. 2021). The blending of recounting the personal experiences of various information sources is in line with previous research indicating that effective vaccination communication messages could be provided by both experts and laypersons (Motta et al. 2021).

The presence of possible risks alongside with individual and/or collective benefits of COVID-19 vaccination in both 'I' narratives is consistent with previous research (Petersen et al. 2021) showing that a balance between these two elements may trigger more people's confidence in authorities in the long run.

The presence of the 'trust in science' theme in the 'I as protagonist' narratives is in line with prior (inter)national studies which have found that vaccine supporters express their trust in scientists (Pența and Băban 2014; Faasse et al. 2016; Cmeciu and Coman 2021). As mentioned above, laypersons were mostly used as message sources (in 81% of the Facebook posts) in the 'I as protagonist' narrative and the parents' stories about their children's getting the jab were mostly frequent in the 'I as witness' narratives (in 69% of the Facebook posts). This finding reflects the postmodern medical paradigm (Kata 2021) where the common people seem to claim authority when promoting vaccine communication (Breeze 2021).

Delegitimation of vaccine opponents is one theme specific to the 'I as protagonist' narrative and which fits within this postmodern medical paradigm. Words such as 'no', 'not', 'never', 'unvaccinated', or 'lack of respect' highlight the negative-laden position of Romanian pro-vaccination sources towards the vaccine opponents. Mental processes of disliking vaccine opponents were employed to verbally depict the antagonist relation between the two groups. Sarcasm was used by vaccine supporters to mock the opponents' convictions that the Astra Zeneca vaccine was not good (play upon words – Astra Zevzec/ Astra Addle-brain instead of Astra Zeneca) and that the COVID-19 vaccine contains a 5G tracking microchip. The presence of this indirect criticism towards the vaccine opponents emphasizes an epistemic superiority that is associated with vaccine supporters (Toth 2020).

Involvement of authorities is a theme present in the 'I as witness' narratives. Openness in dialogic communication between authorities and parents is emphasized through a frequent usage of greeting formulas ('good evening') and an expert from the vaccination centre as a conversation protagonist ('lady doctor'). On the other hand, emotional support for the children who got vaccinated is highlighted through the usage of the word 'empathetic'.

4.3.2. *The ‘neutral omniscient’ narrative*

This perspective implies a shift in the position of the narrator. Whereas the ‘I as witness’ narrative focuses on narrators who are family members or acquaintances of the protagonists who took the jab, the ‘neutral omniscience’ narrative reveals the organization as a narrator telling the stories of either laypersons, experts (nurses from Intensive Care Units) or of role models (war veteran or Charlie Ottley, the British producer and director).

The dominant co-occurrence at a verbal and visual level is the combination between relational and behavioral processes and nomination and individualization as participant roles. Setting an example was the main theme that emerged in this narrative perspective (Table 5). The retrospective action had a two-fold nature: actions in the past for which the role models were known and the action of having got the jab.

Table 5. Theme and keywords in the ‘neutral omniscient’ narrative in #storiesfromvaccination campaign (our translation)

Themes	Related keywords (words or phrases, frequency-crosstab results)	Context of keywords retrieved via concordance
Setting an example through role models	Is (18), got (10), vaccinated (7), had (10), wanted (6)	<ul style="list-style-type: none"> Reporting on participants’ retrospective actions (“An example of morality at 101 years old (...) Ion Procopie is the most respected, loved and well-known was veteran from the Tazlau Valley and he got vaccinated against COVID-19”).

4.3.3. *The ‘editorial omniscience’ narrative*

The co-occurrence analysis showed the following clusters at the visual and verbal level within this type of narrative:

- At a textual level, the active sentences at a textual metafunction combined with collectivization and exclusion as participant roles. The experiential metafunction enacted through behavioral and relational processes also co-occurred with call-to-action as part of the interpersonal metafunction.
- At a visual level, the dominant cluster was formed of two parts: on the one hand, collective agents as participant roles combined with behavioral processes and on the other hand, exclusion was combined with relational processes.

As observed, the editorial omniscient narrative brings a shift in the type of agency present in the Facebook posts. Whereas nomination and individualization as participant roles were present in the two ‘I’ narrative perspectives and in the neutral omniscience perspective, the editorial omniscient narrator focuses more on an exclusion role and on collectivization as an inclusive role.

Three main themes were identified (Table 6): vaccination efficacy, COVID-19 vaccination management process and fight against the infodemic. The two Facebook posts where the vaccine agency language prevailed triggered a high engagement rate (17% and 13% engagement rate achievement). The topic on the efficacy of vaccination in general embedded relational processes serving to characterize and identify (Halliday and Matthiessen 2004: 210) the benefits of immunization in society (“Vaccines save lives”; “Vaccination is the only way to protect against COVID-19”). This form of agency assignment to vaccines was also present in the second theme and it coincides with what van Leeuwen (2008) identifies as an exclusion role and provides to the organization as narrator the possibility of making generalizations about vaccination and of construing a metaphorical representation of specific vaccines (“Obor+Pfizer+Johnson&Johnson = Love”). Collectivization was employed to enhance either the efficacy of vaccination caravan through the usage of a numerical quantifier to delimit the class-membership of

Table 6. Themes and keywords in the ‘editorial omniscient’ narrative in #storiesfromvaccination campaign (our translation)

Themes	Related keywords (words or phrases, frequency-crosstab results)	Context of keywords retrieved via concordance
Vaccination efficacy	vaccination (136), against COVID-19 (53) reduces the risk (33) help(ed/ ing) mankind (22) saves lives (22) across pandemics (22) vaccines had (22) protection against (20)	<ul style="list-style-type: none"> • Reporting on vaccination efficacy across centuries (“Vaccines save lives! A vaccination certificate from 111 years ago. Vaccines have been helping mankind to go through pandemics since ages. Vaccination is the only way to protect against COVID-19”.)
COVID-19 vaccination management process	Johnson (38), Pfizer (14), Obor (12) wait for you (14), Timisoara (10), caravan (4)	<ul style="list-style-type: none"> • Reporting on various vaccination locations (Obor, Timisoara) and the types of vaccines available (“Obor+Pfizer+Johnson&Johnson = Love. 398 persons got vaccinated at the Caravan from Obor”). • (“We are here for you! We are waiting for you to get vaccinated!”)
Fight against the infodemic	get informed (20), official sources (20), fiction (15), information (12), false (6)	<ul style="list-style-type: none"> • Informing the public about SARS-CoV-2 variants (“Omicron – truth or fiction? (...)”) • Calling for action against fake news (“We have information that might destroy the conspiracy theories about vaccination (...)”; “Get informed only from official sources!”; “Signal the false information!”)

those who got vaccinated (“398 persons got vaccinated at the Caravan from Obor”) or the availability of healthcare professionals from the vaccination centers as a group.

Fight against the infodemic was a theme specific to the editorial omniscient narrative and call to action as part of the interpersonal metafunction prevailed in this narrative. Phrases such as ‘get informed’, ‘official sources’, ‘fiction’, or ‘false’ indicated that the organization as a narrator had an active position in the debunking the fake news.

5. Conclusions

Multimodal narratives as a persuasive strategy have been researched for their effectiveness in health communication campaigns (Hinyard and Kreuter 2007; Betsch et al. 2011; Dahlstrom 2014; Nan et al. 2015; Loft et al. 2020; Pedersen et al. 2020). At the same time, point of view has been an aspect related to narratives that has raised researchers’ interest (Chen et al. 2015; Nan et al. 2015; Chen et al. 2016). The analyses in the present study outlined that the narratives in the #storiesfromvaccination Facebook campaign predominantly embed a multimodal cohesion focused on an extension relation, the image and the text complementing each other. The photos mainly served to visually identify the participants in the stories depicted in the Facebook posts, but the written words carried more internal cohesion providing a comprehensive and detailed portrayal of the protagonists. This finding is in line with previous research on multimodal cohesion in advertising (Schubert 2021), showing that visuals depend on words for their clear interconnectedness. A discrepancy in the representation of participants in terms of agency and action could be observed. Whereas the visual representation depicted the narrator as a patient upon whom the action (material process of vaccinating) of an external actor (healthcare professional from the vaccination centre) is performed, the verbal representation showed the narrator as an agent (‘I as protagonist’ point of view) or as a co-agent (‘I as witness’ point of view) carrying out behavioral processes, thus showing agents capable of actions and of expressing their feelings.

Another important aspect that may have practical implications for healthcare professionals refers to the engagement triggered by the four types of narratives. The analysis of the whole data showed that editorial omniscient narratives were the most engaging posts. Therefore, stories told by organization as an authorial narrator triggered the greatest commitment and virality. Within these posts, the organization provided expert insights into vaccination by assigning agency to vaccines that were represented through relational processes. But three ‘I as protagonist’ narratives ranked among the top five posts with the highest engagement rate, the personal experiences from vaccination serving as persuasive strategies for other online users. Therefore, a hybrid usage of third- and first-person point of view narratives would be recommended to engage online users in an online campaign on health issues.

The analysis of the thematic patterns also revealed an indirect polarization between vaccination supporters and opponents. Although no stories told by opponents were employed in the Facebook campaign, the narrators made references to the opposing group through the usage of sarcasm trying to debunk the fake news or they urged online users to actively participate in getting the information from official and expert sources.

This study has some limitations as well. The data set was formed of the public Facebook posts uploaded on the ROVaccination public page. As mentioned above, some of the posts were taken over from the PROVaccination group where the #storiesfromvaccination challenge was initiated and posted on the official ROVaccination page. Although the users' personal stories were put in inverted commas in the ROVaccination posts, it is clear that a selection of these stories was made by the Romanian authority. Therefore, further research could focus on interviews with the communication practitioners in charge of the #storiesfromvaccination campaign to determine how the selection of the online users' personal stories was made. Although the research provided insights into only one online campaign, these findings could serve as starting points for comparative analyses of online campaigns on health issues from different countries. Moreover, only narratives as persuasive strategies were considered. But further research on agency and action could be carried out in other types of persuasive strategies.

References

- Bateman, John A. 2017. Triangulating transmediality: a multimodal semiotic framework relating media, modes, and genres. *Discourse, Context & Media* 20: 160–174.
- Baker, Paul and Tony McEnery (eds.) 2015. *Corpora and Discourse Studies: Integrating Discourse and Corpora*. Basingstoke: Palgrave Macmillan.
- Betsch, C., C. Ulshöfer, F. Renkewitz and T. Betsch 2011. The influence of narrative v. statistical information on perceiving vaccination risks. *Medical Decision Making* 31 (5): 742-753.
- Bonsón, Enrique and Melinda Ratkai 2013. A set of metrics to assess stakeholder engagement and social legitimacy on a corporate Facebook page. *Online Information Review* 37 (5): 787-803.
- Breeze, Ruth 2021. Claiming credibility in online comments: Popular debate surrounding the COVID-19 vaccine. *Publications* 9 (3): 34, [https://doi.org/ 10.3390/publications9030034](https://doi.org/10.3390/publications9030034)
- Bruner, Jerome 1991. The narrative construction of reality. *Critical Inquiry* 18 (1): 1-21.
- Chen, M., M.S. McGlone and R. A. Bell 2015. Persuasive effects of linguistic agency assignments and point of view in narrative health messages about colon cancer. *Journal of Health Communication* 20 (8): 977-988.

- Chen, M., R.A. Bell and L.D. Taylor 2016. Narrator point of view and persuasion in health narratives: The role of protagonist-reader similarity, identification, and self-referencing. *Journal of Health Communication* 21 (8): 908-918.
- Cmeciu, Camelia and Ioana Coman 2021. Governmental and public thematic patterns on vaccination during a measles outbreak: the Romanian perspective. *Global Health Promotion* 28 (3): 23-31.
- Dahlstrom, Michael F. 2014. Using narratives and storytelling to communicate science with nonexpert audiences. *Proceedings of the National Academy of Sciences* 111 (Supplement 4): 13614-13620.
- Dahlstrom, Michael F. and Shirley S. Ho 2012. Ethical considerations of using narrative to communicate science. *Science Communication* 34 (5): 592-617.
- Dhanesh, G., G. Duthler and K. Li 2022. Social media engagement with organization-generated content: Role of visuals in enhancing public engagement with organizations on Facebook and Instagram. *Public Relations Review* 48 (2): 102174, <https://doi.org/10.1016/j.pubrev.2022.102174>
- Faasse, K., C.J. Chatman and L.R. Martin 2016. A comparison of language use in pro- and anti-vaccination comments in response to a high-profile Facebook post. *Vaccine* 34 (47): 5808-5814.
- Friedman, Norman 1955. Point of view in fiction: The development of a critical concept. *PLMA/ Modern Language Association* 70 (5): 1160-1184.
- Green, Melanie C. 2021. Transportation into Narrative Worlds. In: Lauren B. Frank and Paul Falzone (eds.) *Entertainment-Education. Behind Scenes. Case Studies for Theory and Practice*. Cham: Palgrave, 87-101.
- Guidry, J.P.D., Y. Jin, C.A. Orr, M. Messner and S. Meganck 2017. Ebola on Instagram and Twitter: How health organizations address the health crisis in their social media engagement. *Public Relations Review* 43 (3): 477-486.
- Haerpfer, C., R. Inglehart, A. Moreno et al. (eds.) 2022. *World Values Survey: Round Seven - Country-Pooled Datafile Version 4.0*. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. <https://doi.org/10.14281/18241.18>.
- Halliday, Michael A.K. 1984. *An introduction to functional grammar*. 2nd edition. London: Hodder Arnold.
- Halliday, Michael A.K. and Christian Matthiessen 2004. *An Introduction to Functional Grammar*. 3rd edition. London: Hodder Arnold.
- Hinyard, Leslie J. and Matthew W. Kreuter 2007. Using narrative communication as a tool for health behavior change: A conceptual, theoretical, and empirical overview. *Health Education and Behavior* 34 (5): 777-792.
- Kata, Anna 2012. Anti-vaccine activists, Web 2.0, and the postmodern paradigm – An overview of tactics and tropes used online by the anti-vaccination movement. *Vaccine* 30 (25): 3778-3789.

- Kreuter, M.W., M. C. Green, J.N. Cappella et al. 2007. Narrative communication in cancer prevention and control: a framework to guide research and application. *Annals of Behavioral Medicine* 33 (3): 221-235.
- Jewitt, C., J. Bezemer and K. O'Halloran 2016. *Introducing Multimodality*. New York: Routledge.
- Kress, Gunther 2010. *Multimodality. A Social Semiotic Approach to Contemporary Communication*. New York: Routledge.
- Larkey Linda K. and Michael Hecht 2010. A model of effects of narrative as culture-centric health promotion. *Journal of Health Communication* 15 (2): 114-135.
- Loft L.H., E.A. Pedersen, S.U. Jacobsen, B. Søborg and J. Bigaard 2020. Using Facebook to increase coverage of HPV vaccination among Danish girls: An assessment of a Danish social media campaign. *Vaccine* 26, 38 (31): 4901-4908.
- Machin, David and Andrea Mayr 2012. *How to Do Critical Discourse Analysis: A Multimodal Introduction*. London: SAGE.
- Mihelj, S., K. Kondor and V. Štětka 2022. Establishing trust in experts during a crisis: Expert trustworthiness and media use during the COVID-19 pandemic. *Science Communication* 44 (3): 292-319.
- Motta M., S. Sylvester, T. Callaghan et al. 2021. Encouraging COVID-19 vaccine uptake through effective health communication. *Frontiers in Political Science* 3. <https://doi.org/10.3389/fpos.2021.630133>.
- Murphy S.T., L.B. Frank, J.S. Chatterjee JS, et al. 2015. Comparing the relative efficacy of narrative vs nonnarrative health messages in reducing health disparities using a randomized trial. *American Journal of Public Health* 105 (10): 2117-2123.
- Nan X., M.F. Dahlstrom, A. Richards and S. Rangarajan 2015. Influence of evidence type and narrative type on HPV risk perception and intention to obtain the HPV vaccine. *Health Communication* 30 (3):301-308.
- Nan X., M. Futerfas and Z. Ma 2017. Role of narrative perspective and modality in the persuasiveness of public service advertisements promoting HPV vaccination. *Health Communication* 32(3): 320-328.
- Ngai, Cindy S.B., L. Yao, and R. G. Singh 2022. A comparative analysis of the U.S. and China's mainstream news media framing of coping strategies and emotions in the reporting of COVID-19 outbreak on social media. *Discourse & Communication* 16 (5): 572-597.
- Pedersen E.A., L.H. Loft, S.U. Jacobsen et al. 2020. Strategic health communication on social media: Insights from a Danish social media campaign to address HPV vaccination hesitancy. *Vaccine* 26, 38 (31): 4909-4915
- Péladeau, Normand 2021. Cluster Analysis for Mixed Methods Research. In: Anthony J. Onwuegbuzie and R. Burke Johnson (eds.) *The Routledge reviewer's guide to mixed methods analysis*. New York: Routledge, 57-68.

- Petersen M.B., A. Bor, F. Jørgensen et al. 2021. Transparent communication about negative features of COVID-19 vaccines decreases acceptance but increases trust. *Proceedings of the National Academy of Sciences of the United States of America* 118(29): e2024597118. <https://doi.org/10.1073/pnas.2024597118>.
- Pența, Marcela A. and Adriana Băban 2014. Dangerous agent or saviour? HPV vaccine representations on online discussion forums in Romania. *International Journal of Behavioral Medicine* 21(1): 20-28.
- Popescu, Andrei L. 2021. "Militarizarea" comunicării în pandemie. De ce vobeste statul român ca un plutonier cu cetățenii săi? / "Militarization" of communication during the pandemics. Why does the Romanian state talk like a sergeant with its citizens? Available at: <https://panorama.ro/obsesie/militarizare-comunicare-pandemie-cetateni/> (accessed 10 August 2022).
- Schubert, Christoph 2021. Multimodal cohesion in persuasive discourse: A case study of televised campaign advertisements in the 2020 US presidential election. *Discourse, Context & Media* 43: 100537, <https://doi.org/10.1016/j.dcm.2021.100537>
- Toth, Cosmin 2020. Repertoires of vaccination refusal in Romania. *Vaccines* 8(4): 757, <https://doi.org/10.3390/vaccines8040757>
- van Leeuwen, Theo 2005. *Introducing Social Semiotics*. London, New York: Routledge.
- van Leeuwen, Theo 2008. *Discourse and Practice. New Tools for Critical Discourse Analysis*. Oxford: Oxford University Press.
- Walkowiak M.P., J.B. Walkowiak and D. Walkowiak 2021. COVID-19 passport as a factor determining the success of national vaccination campaigns: Does it work? The case of Lithuania vs. Poland. *Vaccines* 9(12): 1498.
- Wellcome Global Monitor 2020. How Covid-19 affected people's lives and views about science. Available at: <https://wellcome.org/reports/wellcome-global-monitor-covid-19/2020> (accessed 26 July 2022).
- World Health Organization 2021. COVID-19 vaccines: safety surveillance manual, second edition. Geneva: WHO. Available at: <https://apps.who.int/iris/handle/10665/345178> (accessed 20 January 2022).

AUTHOR

Camelia Cmeciu Professor of Public Relations, Faculty of Journalism and Communication Studies, University of Bucharest, Romania.

