

The 5th International Conference on Economics and Social Sciences Fostering recovery through metaverse business modelling June 16-17, 2022

Bucharest University of Economic Studies, Romania

Effect of Vaccination Campaigns on COVID-19 Awareness among Romanian Population: A Case Study

Luminita NICOLESCU¹, Alexandra-Mihaela BARBU^{2*}

DOI: 10.24789788367405072-032

Abstract

The area of social marketing to promote health awareness and prevention is attracting considerable interest due to the health crisis caused by the emergence of COVID-19. Over the past two years, the epidemic has proved to be a problem of economy, education, and inequality, as well. Due to the requirement to raise public awareness and persuade the audience of the dangers and the need to limit its spread, the current challenges posed by the pandemic have led to several strategic decisions in countries around the world. This work aims to assess the influence that official national and international information campaigns, part of the strategic plan, had on the initial attitude of the Romanian population toward receiving the COVID-19 vaccine. After seeing four vaccination campaigns conducted both in Romania and at an international level, respondents would have a better understanding of the topic at hand, namely the way these campaigns improved awareness of COVID-19. More research is being conducted on the influence of a wide range of psychological factors on increasing (or reducing) the willingness of participants to be vaccinated against COVID-19. The research is based on a literature review and an analysis of quantitative data collected from online surveys distributed between March and April 2022. The results showed that the participants were more willing to vaccinate if they received their information from official sources and tended to trust more the information transmitted through international campaigns. There was also a significant change in willingness to vaccinate once they found out that the vaccine was safe and effective.

Keywords: social marketing, vaccination campaign, COVID-19, Romania, health awareness.

JEL Classification: M31, M38, M39, I12.

¹ Bucharest University of Economic Studies, Bucharest, Romania, luminicolescu@yahoo.com.

² Bucharest University of Economic Studies, Bucharest, Romania, barbu.alexandra99@yahoo.com.

^{*} Corresponding author.

^{© 2022} L. Nicolescu, A.-M. Barbu, published by Sciendo. This work is licensed under the Creative Commons Attribution 4.0 License.

1. Introduction

Since time immemorial, long before the contemporary days, and in ancient times when they were known as plagues, the pandemics have been caused by the contracting of different bacterial or viral infections, with expansion across continents and multiple countries. Their appearance has caused trials of desolation and death through the centuries and to this day, with the current pandemic caused by the influenza virus SARS-CoV-2, the coronavirus that has caused the pandemic named COVID-19. A pandemic is classically defined as "an epidemic occurring on a scale that crosses international boundaries, usually affecting people on a worldwide scale" (Porta & International Epidemiological Association, 2008, p. 179).

Despite the well-developed theoretical plans, one can see the constant agitation caused by the unprecedented events in the general public. In addition to the already existing problems related to global warming, the refugee crisis, malnutrition, and the way they affect us all, there is also the health crisis caused by the appearance of the COVID-19 pandemic. Over the past two years, the pandemic has shown that it is not only a sanitary crisis, but also a problem of economic, educational, and inequality, among others.

The reason for such crises is a lack of knowledge and awareness of the problem. Therefore, we must take into account the concept of common good and think about ways to influence people's behaviour to achieve this.

Fortunately, there is an approach for such a scope: Social marketing. It helps to develop campaigns that can change or maintain behaviour for the benefit of a group or the society as a whole. It is, indeed, undeniable that the term social marketing has become a well-established component of the marketing lexicon at universities, government agencies, or NGOs.

The purpose of this study was to provide an assessment of the influence that official national and international information campaigns had on the initial attitude of the Romanian population toward receiving the COVID-19 vaccine. More research is being conducted on the influence of a wide range of psychological factors on increasing (or reducing) the willingness of participants to be vaccinated against COVID-19. This work offers one of the first investigations into the way the social marketing techniques used in the campaigns impact the behaviour of the Romanian population.

2. Problem Statement – Theoretical Considerations

2.1 Social Marketing as a Concept

The concept of social marketing was formalized in Kotler and Zaltman's 1971 article, which established the discipline of social marketing. In the article "Social marketing: an approach to planned social change", social marketing was formally defined as the "design, implementation, and control of programs calculated to influence the acceptability of social ideas and involving considerations of product

planning, pricing, communication, distribution, and marketing research" (Kotler, Zaltman, 1971, p. 5).

The consolidation led to the establishment of the obvious limits of the field. According to Andreasen, social marketing techniques could only be applied to the "analysis, planning, execution, and evaluation of programs designed to influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of society of which they are a part" (Andreasen, 1994). The above emphasis helped identify whether social marketing, as compared to conventional methods, was the best solution to a certain problem. In the 21st century, the field has adapted to the actual world issues connected to the environment, public health, human rights, or policy changing. Kotler and Lee observed the change, stating that the early social marketing approaches "were those focused on family planning, tobacco and HIV/AIDS". However, they now approach more modern topics such as the enhancing of financial well-being" (Kotler, Lee, 2019, n.p.).

In other words, social marketing keeps its essence through all the different definitions. It is society-oriented, usually aiming at the well-being of the target audience while seeking to influence via techniques that are also used in commercial marketing.

2.2 The Ethical Dimensions of Social Marketing

Social marketing aims to improve society. Since improvement implies the idea of good and positive development, it is intriguing to learn who and what decides if a change brought about by a campaign is beneficial or harmful. Unfortunately, determining what is ethical in social marketing is rarely straightforward. In most circumstances, there is not a clear distinction between good and wrong.

Although there are many sophisticated, but essential, ethical theories to examine when studying social marketing, the ones that are the easiest to analyse when it comes to understanding what "beneficial" might be, are the deontological and teleological approaches. Kant is credited with inventing the most well-known formulation of deontological ethics. Kant's moral model is premised on his belief that humans have the unique capacity to reason. The moral worth of an action, according to Kant, is decided by human will, which is the only thing in the universe that can be regarded good without limitation (Kant, 1993, p. 15). On the other hand, for the teleologists (or utilitarists) the only thing that counts is the character of the outcome, be it good or bad. The contradictions between the two theories lead to questions such as how can someone establish the appropriate goal, while keeping an ethical view of it.

However, whilst marketers struggle to develop solutions that help society, these efforts might have unintended, unethical implications. Stigmatization, victim blaming, coercion, and the use of financial incentives, to name a few ethical issues, are all more likely to occur among social marketers (Eagle, Dahl, 2015, p. 187). Such ethical issues may arise from the environment, approach, methodology, and outcomes of interventions, and they typically bring into question social marketing's "social fairness".

One of the specific areas of social marketing that pose ethical concerns are those relating to targeting. A fundamental strategy for marketers is to "select target markets they can best affect and satisfy" (Kotler, Lee, 2008, p. 10). When used in social marketing, this method may result in the exclusion of some groups of the intended audience since they are hard or costly to engage (Brenkert, 2002, p. 15).

In the end, what is good for one target audience may be bad for another. The benefits to society cannot simply be based on a universal code of ethics, because it does not exist. It is up to the social marketer and their own set of values what the campaign is intended to accomplish.

2.3 Social Marketing Tools

Social marketing tools are used develop and promote campaigns that will act like behaviour changers or behaviour keepers. Generally, marketers make use of the traditional marketing mix, a proper organizer tool that ensures a basic framework for a successful campaign. Kotler and Zaltman were aware that the 4Ps can also be applied to social causes. They argue that "to the marketer, the success of a campaign depends on the proper development of product, promotion, place and price considerations" (Kotler, Zaltman, 1971, p. 12).

However, apart from the four Ps of commercial marketing (product, place, price, and promotion), social marketing proposes the integration of another 4 Ps, relevant for the particularity of this field: publics, partnership, policy, and purse strings (Weinreich, 2010). First of all, the social product is important, as we state what and whose behaviour we are trying to change. Furthermore, the social place is a significant factor. It is vital to assess the place where behaviour will thrive (or not) and where it should be promoted to reach the targeted audience. Another of the Ps is the social price. It refers to the "costs" that someone must pay in order to change behaviour. The last of the four commercial Ps refers to social promotion. It is crucial to determine which channels of communication to use to reach the target audience and ensure long-term demand for the product/idea/behaviour that is being sold.

To conclude, effective communication will be the key to changing the public's perception of an issue from one of ignorance to one of emotional attachment, or from one of pessimism to one of optimism. The application of commercial marketing techniques to social problems is the emphasis of social marketing. The only way to do so effectively is to understand what your audience wants and needs and cater to them campaigns with engaging messages.

2.4 The COVID-19 Health Crisis and the Intention to Receive the Vaccine – An Overview

The coronavirus pandemic (COVID-19) overtook the world in two years, and became one of the world's most serious public health concerns. As of April 15, 2022, more than 11.4 billion doses were administered in 184 countries (Bloomberg, 2021). In Romania, 16.8 million doses were administered (Bloomberg, 2021). Regardless of the fact that most countries launched public vaccination in early 2021, acceptance

rates varied greatly depending on regional progress. It is also important to examine the impact of official national and international information campaigns on the Romanian population's initial attitudes toward taking the COVID-19 vaccination. More research should be done on the impact of a variety of psychological factors on individuals' willingness to be vaccinated against COVID-19.

2.5 The Four Campaigns - A Brief Presentation

1. The initial COVID-19 vaccination campaign, which began in Romania on 27 December (as in all of the EU countries) under the name of "RoVaccinare"

On December 27th 2020, The Romanian National Coordinating Committee for COVID-19 Vaccination (CNCAV) began the first phase of the most important public health campaign in Romania – the Official vaccination strategy against COVID-19 (the "Strategy"). Its goal was to get positive messages about the vaccination and the benefits it will bring to the general public as early as possible. It also defined the principles, vision, and method of action for the delivery of COVID-19 vaccinations in Romania.

2. The GAVI's Global Campaign "Vaccines work"

The GAVI's Global Campaign "Vaccines Work" campaign is based on cooperation with countries to support and maintain regular vaccination against COVID-19 and to restore regular vaccination. The campaign is developed by experienced journalists from all over the world, aiming to provide scientific explanations on the facts behind vaccines, COVID-19 and human health, verified by expert review teams.

3. "Împreună învingem pandemia! Ce conține vaccinul? – "Together we defeat the pandemic! What does the vaccine contain?"

The creative concept of the communication campaign is based on the question "What does the vaccine contain?" It comes up with an emotional approach, where vaccination is not just about statistics, but it is also seen as a way to get back to normal. In a video posted on his official social media page, the prime minister offers an answer to this question and invites members of the Government, as well as Romanians, to come up with their own answer.

4. UNICEF "I vaccinate for you"

According to their official website, the campaign illustrates some of the consequences of the pandemic on children's lives as a result of quarantines that kept them confined and isolated for months. Three spots address commonplace difficulties that children have noticed have altered, such as going to school, visiting grandparents, and playing in the streets with their friends.

3. Aims of the Research

The purpose of this study was to provide an updated assessment of the influence that official national and international information campaigns had on the initial attitude of the Romanian population toward receiving the COVID-19 vaccine. This research is one of the first to look into how social marketing tactics were employed

in campaigns to reach Romanians. The respondents would have a better understanding of the topic at hand, namely how these campaigns attempted to increase health awareness regarding the COVID-19 pandemic and the benefits of taking the vaccine, after seeing four vaccination campaigns that were conducted both in Romania and on an international level, and would respond to our questionnaire accordingly.

4. Research Methods

Data were collected following the survey method. A Google forms surveys was distributed via social media platforms such as Instagram, Facebook, and WhatsApp. The online questionnaire was selected because it allowed for swift, thorough, and elevated data gathering and analysis. Data from fully completed questionnaires was retrieved and statistical analysis was performed. A sample of 85 participants completed the survey between March 25th - April 11th 2022. No personally identifying information was acquired, and data were collected anonymously.

4.1 Research instrument

The questionnaire consists of 16 questions structured into four sections (see the Annex). The first section included five questions about sociodemographic characteristics (age, gender, level of education completed, and whether the respondents suffer from chronic disease or not). The second section measured the attitudes of the participants towards the COVID-19 vaccine (if they did not receive it, then why not) and their intentions of receiving the COVID-19 vaccine using one closed-ended question and two questions with a five-point Likert scale. The next section used five questions with a five-point Likert scale to determine the influence that official national and international COVID-19 information campaigns had on the initial attitude of the Romanian population towards the vaccine. The last section consists of three five-point Likert scale questions to measure the Romanians' opinions after watching the campaign.

The variables considered were measured as follows:

- 1. Factors of influence in vaccine hesitancy included six items including "I was/am not sure about long-term side effects of the vaccine." A five-point Likert scale was used to collect responses, ranging from strongly disagree (1) to strongly agree (5). A higher score suggests that the issue has a bigger impact on people's unwillingness to get vaccinated against COVID-19.
- 2. Sources of information were measured with four items that explored the respondent's level of trustworthiness in the information sources about the vaccination process that are widely available for the population, such as the vaccination campaigns of international organisations (UNESCO, the United Nations, and the World Health Organisation). The response format was a five-point Likert scale from very untrustworthy (1) to very trustworthy (5). A higher score denotes a higher level of confidence in the sources.

3. *Importance of getting vaccinated* had three items such as "Protecting family, friends and vulnerable members of your community". The response format was a five-point Likert scale from not at all important (1) to very important (5). A higher score suggests that this aspect is more important in making the decision to be vaccinated.

The relationship of the respondents with each vaccination campaign was considered by looking at the following aspects:

4. The level of familiarity was measured by one item which explored the level of familiarity and exposure to each campaign. The item was measured on a five-point Likert scale from not at all familiar (1) to very familiar (5). A higher score indicates a higher degree of popularity of that specific campaign.

Four variables were assessed for each campaign to identify which had a better or worse effect on the target audience and which remained with them the longest time. A five-point Likert scale was used to collect responses, ranging from strongly disagree (1) to strongly agree (5).

- 5. The accessibility of the message: The purpose of an accessible message is to convince the intended audience. The message should be tailored to the degree of knowledge and potential reaction of the audience ("The message was accessible and straightforward").
- 6. The positivity evoked by the message: The purpose of a positive message is to elicit a moderate to positive response from the audience ("The approach was believable and evoked positive, hopeful emotions").
- 7. Importance of the campaign motivators was measured by five items which explored the elements of persuasion that were used in the campaigns: if people can come back to the normal life preceding the pandemic, then this might be seen as a strong motivator. The items were measured on a five-point Likert scale, ranging from not at all motivating (1) to very motivating (5).
- 8. The change in the likelihood of getting the vaccine after having been exposed to the campaigns was assessed by five items to determine the impact of the campaigns on one's vaccination intentions. The items were examined on a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5).

5. Findings

This section presents the main results of the survey.

Demographic data

Table 1. Demographic characteristics of the sample

Category	Variable	Number of respondents	%(n)
	18-20 years old	5	5.88
	21-29 years old	46	54.12
Ago	30-39 years old	15	17.65
Age	40-49 years old	14	16.47
	50-59 years old	4	4.71
	60 years or older	1	1.18

Category	Variable Number of respondents		%(n)
	Male	42	49.41
Gender	Female	43	50.59
Genuer	Prefer not to answer	0	0.00
	Other	0	0.00
Level of education completed	High School	13	15.29
	Bachelor's Degree	37	43.53
	Master's Degree	16	18.82
	Ph.D. or Higher	19	22.35
Residence	Urban area	76	89.41
	Rural area	9	10.59
Suffering from chronic disease	Yes	16	18.82
	No	69	81.18

Source: Created by authors.

Of the 85 Romanian participants, 42 were men and 43 women. Most of our participants were between 21 and 29 years of age (n = 46), many had a university degree (n = 76, considering the Bachelor's, Master's, and Ph.D. or higher). At the time the study was conducted, 76 participants lived in urban areas, while only 9 lived in the rural areas. Additionally, a small number of respondents suffered from chronic disease, which means 16 out of a total of 85 respondents. Participants over the age of 50, those who lived in rural areas, and those who had a chronic disease were underrepresented in our sample compared to the overall survey respondents (see Table 1).

Initial attitude toward getting vaccinated against COVID-19

Table 2. Initial attitude toward getting vaccinated against COVID-19

Initial attitude toward getting vaccinated against COVID-19	n
I was determined to get vaccinated	44
I was not sure.	30
I was determined not to get vaccinated.	11

Source: Created by authors.

As it can be seen from Table 2, the initial acceptance of the COVID-19 vaccines was substantially high, in comparison to those that were determined not to get vaccinated or were not sure about their decision. In fact, 44 participants (37.5%) responded that they were determined to get vaccinated against COVID-19, whereas only 30 participants (25.5%) responded that they were not at all likely to get vaccination, and 11 participants (9.35%) were not sure about their decision.

1. Factors of influence in vaccine hesitancy

Table 3. Factors of influence in vaccine hesitancy

Tuble evil details of influence in vaccine negliancy		
Factors of influence in vaccine hesitancy	M	
I was/am not sure about long-term side effects of the vaccine.	3.04	
I was/am skeptical of the vaccines.	2.35	
I did/do not trust the government/medical authorities.	2.13	
None of the vaccine options available suit me.	2.12	
My medical condition exempts me from getting vaccinated.	1.82	
My religion does not allow me.	1.29	

Source: Created by authors.

As mentioned above, the majority of the participants intended to get vaccinated even before the promotional campaigns were launched. However, 30 respondents expressed their reluctance and other 11 stated their determination to not get vaccinated. Taking into account the mean value of their answer, the respondents were reluctant mainly due to the uncertainty of long-term side effects of the vaccine (M=3.04), which led to skepticism (M=2.35). The factors that least influenced the vaccine hesitancy were religion (M=1.29) and preexistent medical conditions (M=1.82) (see Tables 2 and 3).

2. Sources of information

Table 4. Sources of information on the vaccination against COVID-19

Sources of information about the vaccination process	M
The vaccination campaigns of international organisations (UNICEF, the United Nations, and the World Health Organisation).	3.91
Official information from the competent authorities (The Government, the National Committee for Special Emergency Situations, The National Coordinating Committee for COVID-19 Vaccination Activities, European Medicines Agency, etc.).	3.81
The vaccination campaigns of national organisations (the Romanian Government).	3.58
Medical professionals on social media.	3.53

Source: Created by authors.

The majority of the respondents have high trust in official campaigns, national or international, as can be seen from the high values of the mean for each item (3.91, 3.81, 3.58, and 3.53), (see Table 4). The vaccination campaigns of international organisations ranked first as trustworthy sources of information, with 31 respondents ranking them as trustworthy, while 35 ranked them as very trustworthy. The official information from the Romanian competent authorities is the second most preferred source of information, with 32 respondents marking it as trustworthy and 29 as very trustworthy. The third source ranked, again, quite high in the respondent's level of trust (28 ranked it as important, while 25 ranked it as very

important). On the last place, although with a high score, the information of medical professionals on social media does not seem to elicit as much trust (only 28 found it trustworthy, and 18 very trustworthy).

3. Importance of getting vaccinated

Table 5. Factors of importance for the vaccination against COVID-19

Importance of receiving the vaccines	M
Protecting family, friends and vulnerable members of your community.	4.40
Getting back to 'normal'.	3.93
Doing your part to end the pandemic.	3.85

Source: Created by authors.

As it can be seen, the importance of receiving the vaccines was positively and significantly correlated with innate human prosociality. The most important reason was to prevent harm to those who are less fit. Therefore, protecting family, friends and vulnerable members was the highest ranked (M=4.4), with 61 respondents considering it very important. Returning to the life before the pandemic was the second most important factor (M=3.93), while the moral responsibility of contributing to reach the end of the pandemic ranked last (M=3.85).

4. The level of familiarity with each vaccination campaign

Table 6. The level of familiarity with each vaccination campaign

Level of familiarity with each vaccination campaign	
RoVaccinare	4.22
Împreună învingem pandemia! Ce conține vaccinul? -Together we	3.46
defeat the pandemic! What does the vaccine contain?	
UNICEF's "I vaccinate for you" International Campaign	2.71
The GAVI's Global Campaign "Vaccines work"	2.11

Source: Created by authors.

The most popular vaccination campaigns were the national ones, given the fact that all respondents are Romanian. The first place is occupied by the RoVaccinare campaign (M=4.22). Its popularity might be brought by the fact that it is the first campaign of this kind to be carried out in Romania so far. What made it so revolutionary is that its message could be reached by the target audiences via multiple channels (social media, radio, television). The second most popular campaign was "Together we defeat the pandemic!" (M=3.46). It was a continuation of the former "RoVaccinare", but this time the approach was a more emotional one. It was also done in partnership with UNICEF, which might have made it so popular. The least popular campaigns were the international ones, an understandable fact,

given that they are in English and are not tailored specifically for the Romanian people, but at a larger scale.

5. The accessibility of the message

Table 7. The accessibility level of each message

The accessibility of each message	M
The GAVI's Global Campaign 'Vaccines work'	3.64
Împreună învingem pandemia! Ce conține vaccinul? -Together we defeat the pandemic! What does the vaccine contain?	3.61
UNICEF's 'I vaccinate for you' International Campaign	3.60
RoVaccinare	3.59

Source: Created by authors.

According to the respondents, the most accessible message was the one transmited by GAVI. (M=3.64). The GAVI's spot that they watched on the safety of vaccines offer indeed clear, simplified data as to why vaccines are viable and do not represent a danger for health. The second most accessible one, Impreuna invingem pandemia, is quite similar to what the GAVI's campaign tries to convey. Here, the benefits of the vaccines are also explained, but from a rather emotional point of view.

6. The positivity evoked by each message

Table 8. The positivity evoked by each message

Tuble of the positivity evoked by each message		
The positivity evoked by each message	M	
Împreună învingem pandemia! Ce conține vaccinul? -Together	3.53	
we defeat the pandemic! What does the vaccine contain?		
The GAVI's Global Campaign "Vaccines work"	3.51	
UNICEF's "I vaccinate for you" International Campaign	3.46	
RoVaccinare	3.40	

Source: Created by authors.

As it can be seen, the most positive message were considered to be the ones whose title inspire a sense of togetherness and are accompanied by positive affirmations. For example, the campaign which ranked first (Împreună învingem pandemia! Ce conține vaccinul? - Together we defeat the pandemic! What does the vaccine contain? - M=3.53) implies that only a population that unites towards the same goal will be able to reach its scope. Unfortunately, the last campaign to evoke positivity was RoVaccinare (M=3.4). This probably might be due to the fact that a simple word is not enough to convey a message if it is not put next to a verb or a pronoun so that we can see who is included or not.

7. The importance of the campaign motivators

Table 9. Importance of the campaign motivators

Importance of the campaign motivators	M
Coming back to the normal life preceding the pandemic.	3.98
The information is transmitted via healthcare officials.	3.84
The same vaccines will be given both in Romania and in the EU.	3.67
Empathy for people that cannot get the vaccine (due to chronic illnesses or not fitting in the age range).	3.64
Officials affirm they will get vaccinated.	3.09

Source: Created by authors.

Table 9 shows that the most effective incentive depicted by the campaign was "coming back to the life preceding the pandemic", with more than half of the respondents (n = 45) ranking it as "very important". They also considered as "important" or "very important" the fact that healthcare officials were the ones who transmitted the information. The fact that we receive the same vaccines as our fellow EU members represented another motivator that ranked high in the sample. Unfortunately, the mistrust of the Romanians in the Government and the general skepticism when it comes to the representatives of power in our country caused the motivator "officials affirm they will get vaccinated" to rank last.

8. The change in the likelihood of getting the vaccine after having been exposed to the campaigns

Table 10. The change in the likelihood of getting the vaccine after having been exposed to the campaigns

The change in the likelihood of getting the vaccine after having been exposed to the campaigns	M
I kept my previous opinion (to get vaccinated).	3.88
I changed my opinion toward getting vaccinated.	2.80
I did not follow the vaccination campaigns.	2.45
I kept my previous opinion (not to get vaccinated).	2.32
I changed my opinion toward not getting vaccinated.	2.06

Source: Created by authors.

Table 10 shows that most of the respondents who intended to get vaccinated before being exposed to the campaigns, remained constant with their option, with 32 respondents strongly agreeing, and 12 agreeing. It can be seen that there is a tendency to adopt a pro vaccination attitude after being informed, showing that campaigns have reached their purpose (M=2.8). 12 respondents have stated that they "strongly agreed", and other 8 "agreed" with the idea to get vaccinated. Unfortunately, there are respondents who kept their reluctance towards getting the vaccine, or even

changed their initial attitude and turned against it. This can be caused, once again, by the expressed distrust that Romanians toward the authorities and any information that is given by them.

6. Conclusions

The current study looked into the primary motivations underlying Romanians' COVID-19 vaccination practices after being exposed to both national and international vaccination campaigns and demonstrated the potential for shaping public communication campaigns by studying the emotional and social origins of vaccine behaviour. The perception that vaccination helped safeguard vulnerable members of the community and one's own health was found to be the most effective motivator in this study. Furthermore, the Romanian's decision to get immunized is influenced by their level of respect on health authorities or the information provided by government authorities.

The novelty in this study stems from being the first to assess the effects that a social marketing campaign could have on the population depending on multiple factors such as: the source of the information, the transmitter of the information and how this information can influence the behaviour of the target audience (in a negative or positive way). A high positive emotional response could also be witnessed when it came to the campaigns whose titles evoke a sense of community and are accompanied by positive affirmations. The lessons learned would be helpful for understanding what Romanians would be truly influenced by and tailor future national vaccinations campaigns accordingly.

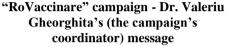
One limitation is that the study included individuals who were recruited from a small cohort and had a higher percentage of respondents who identified as living in an urban area, had a higher education than high school, and were less likely to have a pre-existing disease that would prevent them from getting vaccinated.

References

- [1] Andreasen, A.R. (1994). Social Marketing: Its Definition and Domain. *Journal of Public Policy & Marketing*, 13(1), http://www.jstor.org/stable/30000176.
- [2] Bloomberg. (2021). More Than 1.2 Million People Have Been Vaccinated: COVID-19 Tracker. Bloomberg.com. https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/.
- [3] Brenkert, G.G. (2002). Ethical Challenges of Social Marketing. *Journal of Public Policy & Marketing*, 21(1), 14-25. https://doi.org/10.1509/jppm.21.1.14.17601.
- [4] Eagle, L., Dahl, S. (2015). Marketing Ethics & Society. (p. 187). Sage Publications.
- [5] Kant, I. (1993). Grounding for the Metaphysics of Morals (J. W. Ellington, Trans.; 3rd ed.). Van Haren Publishing.
- [6] Kotler, P., Lee, N. (2008). Social Marketing: Influencing Behaviors for Good (3rd ed., p. 10). Sage Publications.
- [7] Kotler, P., Zaltman, G. (1971). Social Marketing: An Approach to Planned Social Change. *Journal of Marketing*, 35(3), 3. https://doi.org/10.2307/1249783.

- [8] Lee, N., Kotler, P. (2019). Social Marketing: Behaviour Change for Social Good (6th ed.). SAGE Publications.
- [9] Lewis, B., Lewis, J. (2014). Health Communication: A Media and Cultural Studies Approach. Macmillan International Higher Education.
- [10] Porta, M.S. & International Epidemiological Association (2008). A Dictionary of Epidemiology. Oxford University Press.
- [11] Weinreich, N. (2010). Hands-On Social Marketing: A Step-by-Step Guide to Designing Change for Good (2nd ed.). SAGE Publications.

Appendix: The four analysed vaccination campaigns





Source: https://www.youtube.com/watch?v=x1JjoS 1WMwE

The official GAVI platform



Source: https://www.gavi.org/vaccineswork/about

"Împreună învingem pandemia! Ce conține vaccinul?" -Together we defeat the pandemic! What does the vaccine contain?' Publicity spot – A grandmother's message



Source: https://www.youtube.com/watch?v=hW59-f68Bs

UNICEF'S Vaccination campaign against COVID-19



Source: https://www.youtube.com/watch?v=yHm67 uRK0q0