COVID-19 PANDEMIC SOURCE REPRESENTATION IN A SAMPLE OF ROMANIAN ADULTS: A BRIEF REPORT

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Abstract

Across two studies, we explored the COVID-19 pandemic source representation. Our first cross-sectional approach included a sample of adults aged 20 to 67 (Study 1: N=824, 66% females; Study 2: N=237, 77.6 % females), three weeks following restrictive social measures imposed by the Romanian government (i..e social distancing, self-isolation, closing schools). We used an open-end question to explore people's beliefs about who or what caused the pandemic, at two different times (i.e., three weeks after the imposition of lockdown measures due to the COVID-19 pandemic – Study 1, and five weeks – Study 2), and we categorized each answer using a qualitative approach. Our main findings revealed that, in both studies, most people believed that the COVID-19 pandemic was determined by people's irresponsibility or lack of hygiene. Results are discussed within the conspiracy belief frameworks, emphasizing their importance in explaining people's social and psychological responses to the COVID-19 pandemic.
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Keywords: COVID-19, pandemic source, conspiracy beliefs, social response

1. INTRODUCTION

The COVID-19 crisis can be considered a worldwide disaster, with more than nineteen million confirmed cases (at the time of writing) and over 700.000 deaths. Millions of people have already lost their jobs, have been sent to isolation, and countries closed their borders while the novel coronavirus made humankind feel more vulnerable than ever. However, at the current moment, information surrounding the COVID-19 pandemic source is scarce. Numerous conspiracy theories fuel fake news spreading dizzyingly on websites or in traditional media, generating an "infodemic," which is as dangerous as the disease (WHO, 2020). Scientific reports showed that the novel SARS-CoV-2 coronavirus emerged in Wuhan, China and that no evidence was found to suggest that the virus was laboratory-made or otherwise engineered (Andersen, Rambaut, Lipkin, & Holmes,

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2020). The animal source of COVID-19 has not yet been confirmed, but the original host is considered bats. There is currently no specific treatment for the novel coronavirus, though several drugs are being tested across the globe.

Recent preliminary work suggested that beliefs about the COVID-19 source might significantly contribute to people's compliance with lockdown measures (e.g., Imhoff & Lamberty, 2020). Weaker support of containment-related behavior is thought to be related to conspiracy beliefs (i.e., the COVID-19 is a bioweapon). Such source representations may impact present and future outcomes in people's general attitudes and behavior in a health-related crisis, such as the present one. However, we were not interested in conspiracy beliefs per se, but in the general representation of the coronavirus in a representative sample of Romanian, three weeks and five weeks, respectively, after the government imposed restrictive social measures (e.g., isolation). At the end of March, 52% of the 950 Romanians answered the question *Whom do you think is responsible for the novel coronavirus?* (through a telephone survey) believed that the COVID-19 was created in a laboratory (Pora, 2020). More than forty percent believed that the government was to blame for the pandemic spread across the country, along with Romanians who returned from other European countries back to their homeland, carrying the virus.

Conspiracy theories and fake news surrounding the novel coronavirus, which are constantly growing worldwide (Ahmed, Vidal-Alaball, Downing, & López Seguí, 2020; Easton, 2020; Erku et al., 2020; Tapia, 2020) did not bypass Romanians. Social media platforms, blogs, and various so-called informational sites are constantly fed with fake news about the origin and evolution of COVID-19, even if the local authorities frequently resort to legal measures aimed to eradicate them. From the beginning of the lockdown in Romania, several sites have been closed since they distributed false news about COVID-19. Research has already shown that during stressful times and societal crises, such as the current pandemic, conspiracy beliefs rise due to people's fear and uncertainty (van Prooijen & Douglas, 2017). Georgiou, Delfabbro, and Balzan (2020) showed, for example, that conspiracy beliefs surrounding the COVID-19 pandemic are associated with more negative attitudes towards the governmental measures (i.e., lockdown, social distancing, wearing a mask in public spaces). Therefore, such beliefs' harmful consequences must direct our efforts into social and legal measures to prevent them.

2. OBJECTIVE AND HYPOTHESES

2.1. OBJECTIVE

In the current paper, we were interested in finding participants' source representation for the COVID-19 pandemic, offering them the possibility of a spontaneous answer to the question assessing the COVID-19 health crisis's

perceived source. The study was conducted following the ethical standards implied by the 2013 Helsinki Declaration. A consent form presented the study's primary objective related to the general perception of the COVID-19 pandemic. All participants were informed of their right to withdraw from the study any time they wanted, and that all the data they provided would be kept confidential.

2.2. HYPOTHESES

Given the constantly growing conspiracy theories and fake news surrounding the novel coronavirus, in line with previous researchers (Ahmed, Vidal-Alaball, Downing, & López Seguí, 2020; Easton, 2020; Erku et al., 2020; Tapia, 2020) we assumed that the pandemic source representation surrounding COVID-19 in Romania would highlight such beliefs.

STUDY 1

3. METHOD

At the beginning of April 2020, we designed a web-based survey three weeks after the imposition of lockdown measures. **Our sample** consisted of 824 adults, aged 20 to 67 (*M*= 35.53, *SD*=9.44), 66% females. Most participants had a Bachelor's degree (50.5%), while 19.7 % graduated from college, and 29.9 % had a Master's degree. Two independent researchers analyzed the data for both studies. Each answer was coded into a category. A total of 978 answers were placed into 11 categories. Cohen's kappa (κ =.708; 95% CI, *p*<.001) indicated moderate inter-rater reliability between the two coders (McHugh, 2012). Along with demographical-related questions, we addressed the following open-end question: *Who or what do you think caused the current COVID-19 pandemic?* There was no textual limitation of the answers given. The participants were reminded that there were no right or wrong answers, their sincerity being the essential aspect of their contribution.

4. RESULTS

Most participants (around 30%) considered people's irresponsibility and poor hygiene as the pandemic's primary source. Answers such as "People made the virus spread because we still don't know how to wash our hands properly, nor to protect the ones around us" or "people are not responsible towards their peers, no matter the country, the city, the income or other factors: we made this happen!" were among the most frequent. Out of the total sample, 20% of participants considered the Chinese government and researchers responsible for the COVID-19 pandemic. They further detailed their answer, suggesting that the virus was created in a laboratory,

or that Chinese officials fabricated the pandemic, for political interests – both alternatives being premeditated. The fourth significant category was formed by people who simply answered, "I do not know" (around 13%). Table 1 offers a detailed perspective on all eleven categories created by the two experimenters.

4.1. TABLES AND FIGURES

5. Table 1. The COVID-19 pandemic source representation – Study 1

Category	N	%
China (*i.e., government and Chinese researchers*)	190	19.45
World politics (*i.e., state governments and powerful world leaders*)	169	17.29
People (*i.e., poor hygiene, irresponsibility*)	314	32.10
Animals	33	3.37
Animal consumption (*i.e., animal markets*)	20	2.04
Globalization	7	0.71
Nature	86	8.79
Russia	1	0.10
Pollution	15	1.54
God	16	1.63
I don't know	127	12.98

STUDY 2

5. METHOD

Two weeks following our first survey, therefore, a month following lockdown restrictions, we designed a second one, following an identical procedure. **Participants** were 237 adults, aged 18 to 68 (*M*=28.63, *SD*=11.41, 77.6 % females). They had either a bachelor's degree (14.8%) or a master's degree (85.2%). None of them participated in our first survey. As in our previous study, we addressed an identical task (Who or what do you think caused the current COVID-19 pandemic?). As in Study 1, there was no textual limitation for participants' answers.

6. RESULTS

Similar to our previous results, most people (over 52%) considered people's irresponsibility and lack of proper hygiene as the primary source of the current health crisis, followed by the Chinese government (15%) and global politics and world

leaders (12%). **Table 2** offers a detailed perspective of the pandemic source representation in our second sample.

Table 2. The COVID-19 pandemic source representation – Study 2

Category	N	%
China (*i.e., government and Chinese researchers*)	36	15.2
World politics (*i.e., state governments and powerful world leaders*)	28	11.8
People (*i.e., poor hygiene, irresponsibility*)	125	52.7
Animals	11	4.6
Animal consumption (*i.e., animal markets*)	7	3.0
Globalization	1	0.4
Nature	22	9.3
Russia	1	.04
Pollution	4	1.7
God	2	0.8

We further performed Chi-square tests in order to explore the associations between demographical variables and source representation. Results showed no significant links (all p-s>.005).

6. CONCLUSIONS

The current research's main objectives were to explore the general perception of the current COVID-19 pandemic among a sample of Romanian adults. Our results were partially similar to previous data related to the pandemic's source perception among Romanians, specifically – the idea that governments are involved in the COVID-19 creation and spread. Most participants in both our samples (N=1061) considered people's irresponsibility and lack of proper hygiene as the main source of the pandemic, suggesting a perceived moral responsibility for humankind in general and not a specific group of powerful people (i.e., world leaders). However, a considerable percentage blamed Chinese governments and researchers, followed by state politics and leadership. Therefore, our data may seem to confirm the spread of conspiracy theories, which the WHO warned to become an "infodemic."

One of our research strengths lies in the fact that findings related to the source of the pandemic in our first sample were confirmed by a second one, with similar percentages related to the number of participants. Along with an increase in our results' ecological validity, it is important to note their consistency, two weeks after the initial testing. In stressful times such as these, two weeks may be considered as a reasonable amount of time for mindset transformations, due to permanent changes

and updates in pandemic statistics (both nationally and globally), but primarily due to the abundance of information centered on COVID-19. The substantial similarity between our samples in terms of source representations strengthens our data validity.

A series of limits for the current research must be addressed. First, all measures were self-reported, and social desirability may have interfered with the veracity of participants' answers. Second, our convenient samples were not balanced in terms of gender or education. Future research may want to explore the present ideas using larger, more representative samples of adults. However, the present research contributes to a better understanding of people's perception of the pandemic. However, people's social and psychological responses to the COVID-19 health crisis are crucial during challenging times, such as the current ones. Our preliminary results may be considered a valuable starting point for effective intervention strategies.

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