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CONSPIRACY NARRATIVES ABOUT THE COVID-19 PANDEMIC AND THE ORIGINS OF THE SARS-COV-2 VIRUS

A CONTRIBUTION TO POLISH-CZECH COMPARATIVE RESEARCH

ABSTRACT This article presents the results of a comparative research study on belief in COVID-19-related conspiracy theories among social science students in Poland and the Czech Republic. The study investigates the relationship between susceptibility to disinformation and factors such as religiosity, trust in science, and the evaluation of institutional responses to the pandemic. Using a quantitative approach (CAPI survey), the authors identify notable differences between the two national groups, with Polish students showing a greater inclination toward conspiracy narratives. The article also explores correlations between such beliefs and negative assessments of the EU's actions. The findings highlight the role of cultural context and psychological predispositions in shaping attitudes toward health-related misinformation, underlining the need for further research into the social and political consequences of the infodemic. The study contributes to

political science by linking disinformation susceptibility with systemic trust and civic attitudes in Central Europe.

Keywords: COVID-19 pandemic, infodemic, conspiracy theories, vaccinations, Czechia, Poland, health policy

> The fight against the plague must therefore raise questions about the meaning of our culture, particularly regarding its fundamental assumption about individual autonomy and personal choices.
> G. Bastard. 2024. *Dziennik z dni zarazy*, p. 11.

INTRODUCTION

The threat posed by viruses with the potential for rapid spread to epidemic proportions is not a new phenomenon. In recent history, the 1918 Spanish flu epidemic at the end of World War I is frequently cited as an example of such a threat. In more recent years, the 2002 outbreak caused by a zoonotic virus leading to Severe Acute Respiratory Syndrome (SARS), which spread from China to Taiwan, Vietnam, Japan, Singapore, and even Canada, serves as another reminder. A decade later, a similar threat emerged in several Arab countries, this time caused by another zoonotic virus leading to respiratory failure – MERS-CoV.[1] However, it should be noted that all these threats occurred outside the territory of the European Union and did not result in a global pandemic. Therefore, EU Member States lacked experience in managing such crises. The general population also lacked this experience, which led to confusion and difficulties in adaptation, particularly in the early months of the pandemic. This, in turn, became one of the factors contributing to mistrust of governmental actions on the one hand, and susceptibility to disinformation, including conspiracy theories, on the other.[2] The high degree of political polarization within society also fostered both distrust in authorities and vulnerability to manipulation through conspiracy theories.[3] The above topic

[1] S. Golinowska, M. Zabdyr-Jamroz, "Zarządzanie kryzysem zdrowotnym w pierwszym półroczu pandemii COVID-19. Analiza porównawcza na podstawie opinii ekspertów z wybranych krajów," *Zdrowie Publiczne i Zarządzanie*, vol. 18, no. 1 (2020), pp. 1-31.

[2] Z. Czachór, T. Marcinkowski, J. Sikorski, "Polityka zdrowotna Unii Europejskiej w obliczu działań klasyfikowanych jako walka informacyjna. Casus pandemii COVID-19," in K.A. Nawrot, K. Prandecki (eds), *Skutki i zagrożenia cywilizacji informacyjnej*. Warszawa 2023, pp. 159-179; K. Pałka-Suchojad, "Disinformation Virus. Fake News in the Pandemic Era," *Athenaeum. Polish Political Science Studies*, vol. 68, no. 4 (2020), pp. 32-41.

[3] G. Marino, L. Iannelli, "Seven Years of Studying the Associations between Political Polarization and Problematic Information. A Literature Review," *Frontiers in Sociology*, vol 8 (2023), p. 13.

constitutes a significant research problem within the fields of political science and security studies.

The pandemic exposed the weaknesses and lack of preparedness in addressing large-scale health threats among EU Member States. It also highlighted the European Union's limitations in the areas of public health and crisis management. However, it is important to emphasize that the responsibility for public health lies with the Member States, which possess full competencies in this field, despite the increasing Europeanization of this policy area as noted by many researchers.[4] The EU's role in public health remains largely complementary, aimed at addressing shared health challenges as outlined in Article 168 of the Treaty on the Functioning of the European Union (TFEU). Notably, the Treaty explicitly mentions pandemic control and the monitoring of cross-border health threats. Thus, despite its relatively limited competencies in public health, appropriate and feasible actions were taken at the European level from the onset of the pandemic.[5] Nevertheless, efforts at both national and European levels failed to prevent the health crisis or significantly mitigate its social and economic consequences, particularly during the first year of the pandemic. This had a profound impact on citizens' sense of security and their evaluation of the actions taken by both governmental and EU institutions.

The COVID-19 pandemic, the most significant health crisis of the 21st century to date, has triggered not only global medical and social challenges but also informational ones, particularly in the realm of interpersonal communication. The need to find answers regarding the origin of the virus, combined with the human mind's tendency to simplify complex realities, led to situations where explanations often transcended the bounds of rationality. This phenomenon, likely accompanying humanity since its inception, has, at the beginning of this century, been termed an 'infodemic,'[6] referring to an overabundance of information about the pandemic, where falsehoods too frequently gain social acceptance and influence behaviour. Unfortunately, such misinformation can sometimes have tragic consequences.[7]

In a 2020 article titled "COVID-19-Related Infodemic and Its Impact on Public Health: A Global Social Media Analysis," an international team of researchers led by Md Saiful Islam identified three categories of narratives based on the analysis of flawed informational materials and messages related to the pandemic: rumours, stigmatisation and discrimination, and conspiracy theories. The latter were defined as *statements, claims,*

[4] E. Brooks, M. Guy, "EU Health Law and Policy. Shaping a Future Research Agenda," *Health Economics, Policy and Law*, vol. 16, no. 1 (2021), pp. 1-7.

[5] T. Marcinkowski, "Polityka antykryzysowa Unii Europejskiej w obliczu pandemii SARS CoV-2 w obszarze zdrowia publicznego w 2020 roku. W poszukiwaniu rozwiązań funkcjonalnych," *Rocznik Integracji Europejskiej* no. 15 (2021), pp. 181-194.

[6] J. Sikorski, "Infodemia," in W. Fehler (ed.), *Leksykon bezpieczeństwa informacyjnego*, Siedlce 2023, pp. 158-160.

[7] T. Marcinkowski, J. Sikorski, "The European Union's Policy towards the COVID-19 Crisis in 2020 and the Russian Contribution to Infodemic," in N. Moch, W. Wereda, J. Stańczyk (eds), *Information, Security and Society in the COVID-19 Pandemic*, Abingdon–New York 2023, pp. 147-172; J. Sikorski, "Social Implications of Infodemic Concurrent with COVID-19," *Polish Political Science Yearbook*, vol. 52, no. 4 (2023), pp. 79-89.

and discussions of various theories related to the origin of SARS-CoV-2 and its malicious goals.[8] Some of these theories emerged spontaneously as a response to social fears. However, they were also deliberately propagated to deepen those fears and foster social disintegration. Consequently, they have also become a tool of information warfare, in which, for years, the Russian Federation has played a leading role in our part of the world.[9]

The widespread popularity of conspiracy theories during the COVID-19 pandemic, due to the negative consequences associated with belief in such narratives, prompted various organizations, including international ones, to take actions aimed at exposing and limiting their spread. As part of these efforts, the European Commission published a guide titled *Identifying Conspiracy Theories* in 2020. In this guide, conspiracy theories were defined as a belief that powerful and hostile secret organisations are manipulating events behind the scenes. The guide also outlined six fundamental characteristics of conspiracy theories: they refer to an alleged secret plot; involve groups of conspirators; present 'evidence' in support of the theory; assert that events are deliberately orchestrated and that the orchestrators conceal this fact; connect seemingly unrelated facts into a supposedly 'logical' whole; portray the world in strictly binary terms – either wholly good or entirely evil, with no middle ground; and identify the victims of the conspiracy.[10]

As we discussed in our initial article presenting the results of our Czech-Polish research on conspiracy theories related to the war in Ukraine,[11] in addition to political mechanisms and advanced media technologies, a key factor in the effectiveness of manipulation is human susceptibility to it. This susceptibility is expressed through a readiness to be manipulated, a lack of firm personal beliefs, and at least several psychological mechanisms, such as: the large-cause effect,[12] loss of control,[13] a sense of ambivalence,[14] the third-person effect,[15] and both social and moral projection.[16,17]

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[8] Md.S. Islam et al., "COVID-19-Related Infodemic and Its Impact on Public Health. A Global Social Media Analysis," *The American Journal of Tropical Medicine and Hygiene*, vol. 103, no. 4 (2020), pp. 1621-1629.

[9] K. Savranska, *Problematyka walki informacyjnej w relacjach Rosji z wybranymi państwami europejskimi. Perspektywa medioznawcza*, Gdańsk 2020, pp. 87-91.

[10] European Commission, "What Are Conspiracy Theories? Why Do They Flourish?," at https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/fighting-disinformation/identifying-conspiracy-theories_pl, 6 July 2021.

[11] See T. Marcinkowski, J. Sikorski, L. Vomlela, "The Sense of Security in the Face of the War in Ukraine. Comparative Study of Poland and the Czech Republic," *Eastern Journal of European Studies*, vol. 15, no. SI (2024), pp. 292-316.

[12] Attributing dramatic events to grand, often irrational causes, frequently of a conspiratorial nature.

[13] This leads to the search for simple explanations for complex phenomena, which reinforces a sense of uncertainty.

[14] An unpleasant feeling of ambiguity, which conspiracy thinking compensates for.

[15] Both effects reinforce the belief that others are more susceptible to persuasion, as well as the tendency to attribute one's own undesirable traits to others.

[16] Belief in conspiracy theories is also associated with the projection of one's own moral attitudes and willingness to conspire onto others.

[17] See M. Golka, *Bariery w komunikowaniu i społeczeństwo (dez)informacyjne*, Warszawa 2008; M. Grzesiak-Feldman, *Psychologia myślenia spiskowego*, Warszawa 2016.

In Poland, research on the prevalence of conspiracy narratives regarding the COVID-19 pandemic was already being conducted in 2020 by prominent experts in the field, Franciszek Czech and Paweł Ścigaj. The researchers arrived at several noteworthy conclusions: there is a growing tendency in Poland to believe in conspiracy theories;[18] significant variation exists among supporters of different political parties in terms of their acceptance of conspiracy narratives;[19] contrary to earlier findings, the lowest levels of susceptibility to conspiracy beliefs were observed among older Poles; and individuals who use social media more frequently are more likely to adopt conspiratorial interpretations of events than those who use such sources of information less often.[20]

The issues related to the COVID-19 pandemic, the response of the European Union authorities, as well as those of the Czech Republic and Poland, along with the infodemic and the conspiracy theories spreading within it, became the subject of the social research analysed below.

This article contributes to the study of new ideas in political science by highlighting the significance of citizens' attitudes – including those that may appear irrational, such as belief in conspiracy theories – for the dynamics of political processes. The research focuses on a comparative analysis of social science students from Poland and the Czech Republic, offering an innovative approach within the context of Central Europe, where quantitative comparative studies remain relatively underexplored. In doing so, the paper demonstrates the importance of integrating theory and practice in examining citizens' concerns and beliefs from a novel research perspective.

The article addresses three research questions: (1) What differences can be observed in attitudes toward selected conspiracy theories among students from Poland and the Czech Republic? (2) How does the level of religiosity influence the tendency to accept these theories in both groups? (3) Can systemic similarities, according to the most similar systems design (MSSD) approach, help explain the observed differences beyond demographic factors?

METHOD OF RESEARCH

Although it seems that the COVID-19 pandemic is behind us, we have had to learn to live with the virus that caused it, as its activity periodically intensifies in subsequent cycles and variants. Undoubtedly, this was a generational experience that had a significant impact on the sense of security and trust in public authorities. This article presents the partial

[18] Between 2014 and 2020, the number of people with a low tendency toward conspiratorial thinking decreased by half (from 25% to 12%), while the number of individuals with a strong inclination toward this trait increased from 37% to 45%.

[19] The highest number of individuals with a strong inclination toward conspiracy theories is found among supporters of the Confederation party (68%), while the lowest is among supporters of the Civic Coalition (35%).

[20] F. Czech, P. Ścigaj, *Popularność narracji spiskowych w Polsce czasu pandemii COVID-19. Raport z reprezentatywnych badań sondażowych*, Kraków 2020, at http://www.ism.uj.edu.pl/wp-content/uploads/2020/07/covid-narracje-spiskowe.pdf, 3 July 2025.

results of survey research on the subject. The research was conducted using a computer-assisted personal interviewing method (CAPI)[21] between 25th November and 23rd December 2023 in Poland, and between 29th November and 12th December 2023 in the Czech Republic. The respondents answering the questions were students from various (social sciences), yet related fields of study at the Jacob of Paradies University in Gorzów Wielkopolski (Poland) and the Silesian University in Opava (Czech Republic).[22] In both cases, we have comparable universities located outside major academic centres. In Poland, the survey was distributed to all student groups at the Faculty of Administration and National Security, as well as the Faculty of Economics.[23] Ultimately, 315 responses were collected. In the Czech Republic, 74 questionnaires were received.[24]

The students were selected for the study not only due to the feasibility of conducting such research but also because the authors had the opportunity to compare similar groups in both countries. The universities from which the study participants were recruited are comparable in character and are located in peripheral regions of their respective countries, in cities of similar size and status. The focus on this group was intentional, as young people, including students, are one of the primary target groups for various disinformation campaigns. Due to their age and high level of online activity, they may be more susceptible to such influences. Additionally, it is important to note that the respondents are in the midst of an educational process aimed at developing critical thinking and information verification skills. Thus, studying this group provides an indirect assessment of the effectiveness of education in strengthening students' resilience to conspiracy theories.

In both countries, women were the predominant respondents. In Poland, women made up 60%, men 39%, and less than 1% identified as non-binary. In the Czech Republic, women accounted for 71%, while men made up 29%. The respondents were of similar age, which is understandable given that they were all students. Most respondents were under 25 years old (61% in Poland and 59% in the Czech Republic). The next group consisted of those over 30 years of age (27% in the Czech Republic and 26% in Poland), followed by those aged 26-30 (13% in the Czech Republic and 12% in Poland).[25]

In designing the study, it was assumed that analysing differences in attitudes toward conspiracy theories among students from two neighbouring countries could reveal the influence of cultural and social factors, despite structural similarities between the two

[21] R. Bäcker et al., *Metodologia badań politologicznych*, Warszawa 2016; A. Dawidczyk, J. Jurczak, *Metodologia bezpieczeństwa w przykładach i zastosowaniach. Podręcznik akademicki*, Warszawa 2022.

[22] I. Kapsa, N. Lubik-Reczek, J. Ušiak, "War in Ukraine from the Perspective of Polish and Slovak University Students", *Athenaeum. Polish Political Science Studies*, vol. 75, no. 3 (2022), pp. 270-287.

[23] The students represented the following fields of study: National Security (23%), Administration (22%), Criminology (13%), Finance and Accounting (15%), Management (9%), and Logistics (8%).

[24] The students represented the following fields of study: Public Administration (79%), English Philology in vocational studies (12%), and other fields (9%).

[25] T. Marcinkowski, J. Sikorski, L. Vomlela, "The Sense of Security in the Face of the War in Ukraine...," pp. 293-294.

groups. The study did not adopt a hypothesis-testing approach within a hypothetico-deductive model; instead, the primary aim was to descriptively capture the nature and variation of attitudes.

The article presents the results of a study based on descriptive statistics, with a focus on capturing the variation in attitudes across the examined groups. The analysis aimed to explore potential correlations between belief in conspiracy theories (using one representative survey item) and variables such as religiosity, evaluations of the European Union's actions during the pandemic, and opinions on mandatory vaccination. A chi-square test of independence was conducted. This statistical test is used to determine whether there is a statistically significant association between two categorical variables, that is, variables that classify data into distinct groups, such as 'religious/non-religious,' 'supporters/opponents of vaccination,' 'positive/negative evaluations of the EU during the pandemic,' or 'believes/does not believe in conspiracy theories.'

Based on these assumptions, the following research questions were formulated:

RQ1: What differences in attitudes toward selected conspiracy theories can be observed between students from Poland and the Czech Republic?

RQ2: How does the level of religiosity affect the tendency to endorse such theories in both groups?

RQ3: Can systemic similarities, within the framework of the most similar systems design (MSSD), account for the observed differences beyond demographic factors?

The selection of the cities – Gorzów Wielkopolski (approx. 115,000 inhabitants) and Opava (approx. 56,000 inhabitants) – was motivated by the intention to minimize the impact of macrostructural variables (e.g., access to cultural institutions or labour market size) while maintaining relative sample homogeneity (students of social sciences).

RESULTS

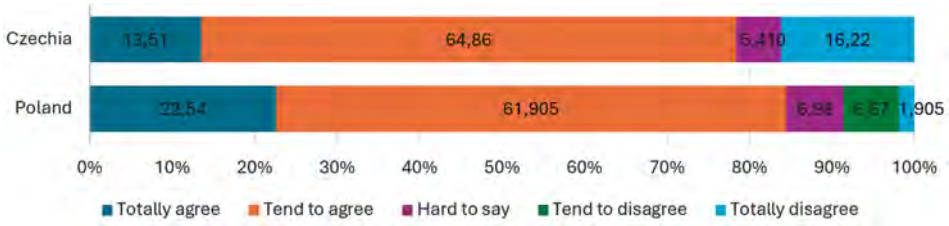
Respondents' sense of security

In the conducted study, students were asked whether they felt safe. In response to this broadly formulated question, the majority of respondents provided a positive answer (84.4% in Poland and 78.4% in the Czech Republic). However, it is worth noting that over 16% of students surveyed in the Czech Republic reported feeling decidedly unsafe. In Poland, only about 2% of respondents gave such a decisive response. It is also important to highlight that the study was conducted in two Central and Eastern European countries during the ongoing Russian aggression against Ukraine. Nonetheless, the proximity of the war did not have a significant impact on the respondents' sense of safety at the time of the study. However, as demonstrated in a separate article, it did affect attitudes and perceptions of threat related to the specific danger of war[26]

[26] Ibid., pp. 295-297.

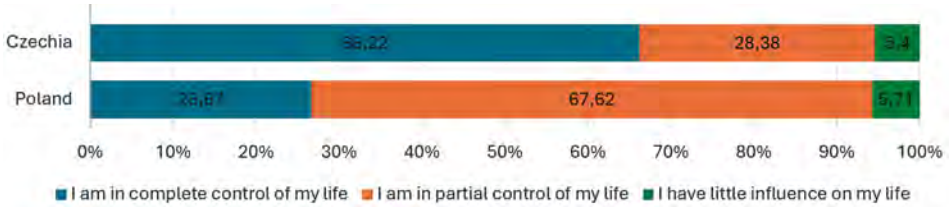
(see Chart 1). This should be taken into account when analysing responses to questions concerning selected conspiracy theories related to the pandemic or mandatory vaccinations. The opinions on these topics, analysed below, are expressed by individuals who predominantly reported feeling safe.

Chart 1. Do you feel safe?



A significant difference between Czech and Polish students is evident in their responses regarding internal versus external locus of control: over two-thirds of respondents in the Czech Republic declared that they have full control over their lives. Among Polish respondents, only 27% provided such responses (see Chart 2). It seems that this could influence susceptibility to conspiracy theories.[27] This hypothesis, in relation to Polish students, will be further examined later in the article.

Chart 2. Which of the following statements best describes your life situation?

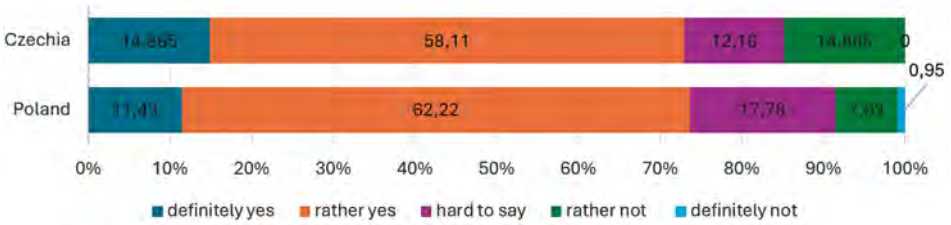


Most of the surveyed students declared trust in science and scientists, which may be particularly important in the context of susceptibility to conspiracy theories. In Poland, 74% of respondents expressed this view, and nearly 73% of students in the Czech Republic shared the same opinion. However, it should be noted that the majority of these respondents did not express strong certainty but indicated a more cautious 'rather yes' response. In contrast, 15% of Czech and nearly 16% of Polish respondents held the opposite view. This is especially interesting considering that the respondents were students, and the research was conducted during the academic process (see Chart 3). This should be considered when analysing responses to questions concerning selected conspiracy theories related to the pandemic or mandatory vaccinations. The opinions

[27] See A. Heitkamp, T.J. Mowen, "Self-Control and Belief in Conspiracy Theories", *Social Currents*, vol. 10, no. 6 (2023), pp. 503-511.

on these topics, analysed below, are expressed by individuals who generally declare trust in science and scientists.

Chart. 3. Do you trust science and scientists?

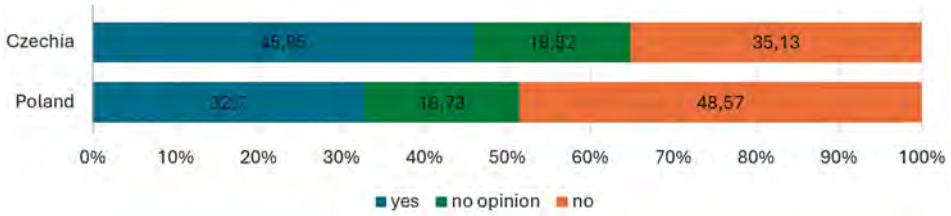


Vaccinations – opinions

The issue of mandatory vaccinations in Poland and other European countries has, in recent years, become not only a subject of debate within the public health sector and a challenge for those involved in health promotion but also a significant point of reference in political discourse. The anti-vaccination stance is represented by various political groups, such as the Eight Stars Movement in Italy, and Konfederacja and Kukiz'15 in Poland or Freedom and Direct Democracy and the Communist Party of Bohemia and Moravia in the Czech Republic. This issue gained particular prominence during the COVID-19 pandemic.[28] Therefore, this topic was also addressed in the conducted research.

Nearly half of the Polish students and one-third of the Czech students declared opposition to mandatory vaccinations in general. Additionally, in both countries, over 18% of respondents were undecided on this issue. In the Czech Republic, however, positive responses, at 46%, outweighed negative ones. In Poland, only 33% of respondents identified themselves as supporters of mandatory vaccinations (see Chart 4). This highlights a significant and growing challenge for the public health sector, as well as the political relevance of this issue for planned election campaigns by political parties. It is also a sensitive area of potential informational (disinformational) influence by external entities.

Chart 4. Are you in favour of mandatory vaccinations?

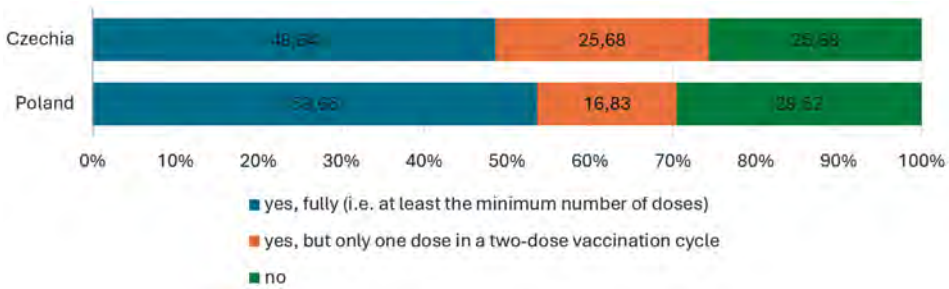


[28] A. Demczuk, "Ruch antyszczepionkowy w Polsce i jego kabiny pogłosowe w alt-internet w latach 2020-2022," *Rocznik Instytutu Europy Środkowo-Wschodniej*, vol. 20, no. 3 (2022), pp. 9-35; M. Caiani, P. Susanszky, N. Saridakis, "Radical Right and Anti-Vax Protests between Movements and Parties. A Comparative Study," *Acta Politica*, vol. 60 (2025), pp. 139-166.

An essential element in mitigating the spread of the coronavirus pandemic and preventing severe cases of the disease was vaccination.[29] In the European Union, through the actions of the European Commission and the support of manufacturers (from research and development to market implementation), as well as national agencies responsible for executing the vaccination process, access to vaccines was provided to everyone according to the schedule adopted by each Member State.[30] In both Poland and the Czech Republic, vaccinations were free and voluntary, depending solely on the citizen's decision. However, alongside the implementation of vaccination strategies, the increase in misinformation on the subject was also noted as a significant issue at the European level.

In the conducted study, students were asked whether they had been vaccinated against COVID-19. It is noteworthy that nearly one in three students in Poland and one in four in the Czech Republic declared themselves as unvaccinated. Considering the significant proportion of unvaccinated respondents during the pandemic, as well as the relatively high number of opponents of mandatory vaccinations in general, one could hypothesise a growing crisis in this area of public health.

Chart 5. Are you vaccinated against COVID-19?



COVID-19 pandemic conspiracy theories

In an effort to determine respondents' susceptibility to conspiracy theories, several questions were posed regarding specific claims about the SARS-CoV-2 virus and the COVID-19 pandemic, which have been and continue to be widespread in public discourse. Correlations with selected answers to other questions were then examined. One of the questions also addressed the war in Ukraine and its alleged connection to the pandemic.

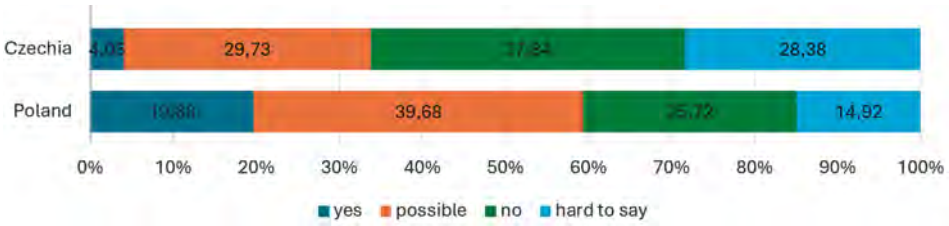
[29] R. Forman, S. Shah, P. Jeurissen, M. Jit, E. Mossialos, "COVID-19 Vaccine Challenges. What Have We Learned So Far and What Remains To Be Done?," *Health Policy*, vol. 125, no. 5 (2021), pp. 553-567.

[30] European Commision, "Preparedness for COVID-19 Vaccination Strategies and Vaccine Deployment," Communication from The Commission To The European Parliament and The Council, Brussels, 15.10.2020, COM(2020) 680 final, at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52020DC0680.

This was previously discussed in a published article.[31] However, it is worth revisiting, given that Russia's invasion of Ukraine occurred while the pandemic was still ongoing. At that time, a theory emerged in the informational sphere suggesting that the invasion was intended to divert attention from the ongoing deadly toll of the disease. When asked about this, the majority of respondents rejected such a possibility. However, respondents in the Czech Republic dismissed it significantly more often (77%) than those in Poland (59%). Three out of ten respondents in Poland believed this was the case or at least considered it possible (7% believed it was true, 22% considered it possible). In the Czech Republic, this was only one in ten respondents (3% believed it was true, 9% considered it possible). Thus, the vast majority of respondents rejected this supposition.

A derivative of the first set of questions posed in the authors' study on conspiracy theories included further inquiries suggesting the possible goals of the pandemic being 'caused by a conspiracy' and its alleged instigators. In these cases, a significant portion of respondents also believed in or considered the possibility of conspiratorial actions. This was evident in the responses to the question of whether the virus is a biological weapon intended to reduce the global population. In Poland, as many as six out of ten surveyed students were convinced or found this plausible. In contrast, there was a considerable difference in responses from Czech students, where only one in three believed or considered this probable. In Poland, one in four respondents (26%) rejected this possibility, while in the Czech Republic, four in ten students (38%) did not believe in such a scenario. Notably, a large proportion of Czech respondents (28%) had no opinion on the matter, compared to 15% in Poland (see Chart 6).

Chart 6. Do you agree with the statement that the SARS-CoV-2 virus is a biological weapon aimed at reducing the human population?



A similar question was posed in the study by F. Czech and P. Ścigaj, although the researchers narrowed the depopulation narrative to specifically target older adults. In response to this particular question, 23% of respondents strongly agreed with the statement, 25% somewhat agreed, 19% somewhat disagreed, 17% strongly disagreed, and 16% had no opinion on the matter.[32]

The next two questions posed to respondents concerned the potential 'perpetrators' of the pandemic. In the first question, we asked whether the wealthiest and most

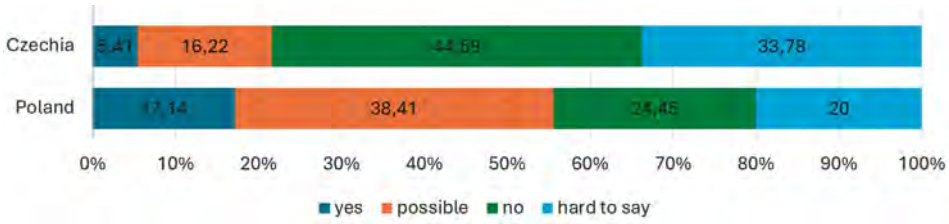
[31] T. Marcinkowski, J. Sikorski, L. Vomlela, "The Sense of Security in the Face of the War in Ukraine...," pp. 292-316.

[32] F. Czech, P. Ścigaj, *Popularność narracji spiskowych w Polsce czasu pandemii COVID-19...*, p. 20.

influential people in the world were behind the creation of the virus. Such theories have been mentioned by Bill Gates himself, who, in his 2022 book, remarked, *During the pandemic, I was astonished to discover the wildest conspiracy theories, of which I was the main character*.[33]

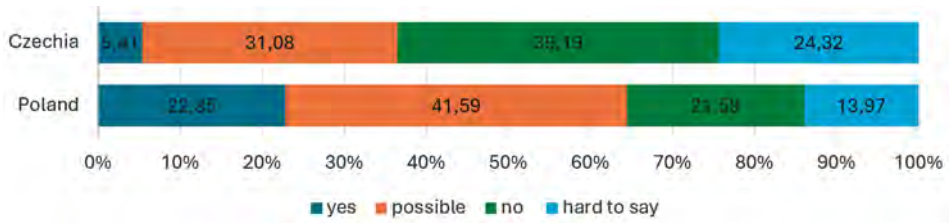
More than half of the students in Poland accepted or considered this statement possible (17% yes, 38% possible). Such opinions were significantly less common among respondents in the Czech Republic (5% yes, 16% possible). In the Czech Republic, almost half of the respondents rejected the idea (45%), whereas in Poland, only 24% held a similar view. Once again, a concerningly large group of respondents had no opinion on the matter—one in three in the Czech Republic and one in five in Poland (see Chart 7).

Chart 7. Do you agree with the statement that the richest and most influential people in the world participated in the creation of the SARS CoV-2 virus?



In the next question, respondents were asked to comment on the statement that so-called 'Big Pharma,' anticipating future profits, was involved in creating the virus. Once again, significantly more Polish students believed in this possibility than Czech students. Among students from Opava, only 5% agreed with the statement, while 16% considered it possible. In the group of Polish students, these values were notably higher: 17% yes and 38% possible. Nearly half of the Czech students (45%) disagreed with this opinion, but, concerningly, one-third had no opinion on the matter (34%). Polish respondents were less likely to reject this supposition, with only one in four (24%) dismissing it. One in five Polish students had no opinion (20%) (see Chart 8).

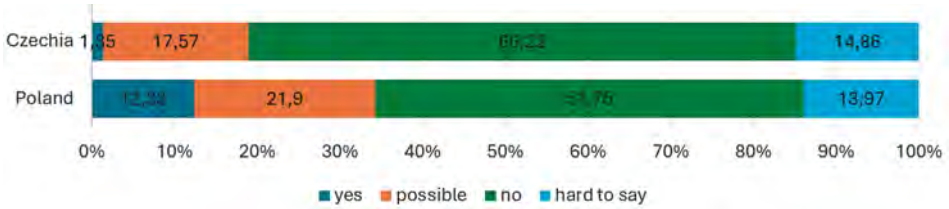
Chart 8. Do you agree with the opinion that large pharmaceutical companies participated in the creation of the SARS CoV-2 virus, hoping to increase income from the sale of drugs and vaccines?



[33] B. Gates, *Jak zapobiec kolejnej pandemii*, transl. by M. Rogalski, Warszawa 2022, pp. 27-28.

The respondents were also asked whether they believed that the pandemic was fabricated to expand surveillance and control over society. This narrative, it seems, gained particular popularity, at least during the initial phase of the disease's spread. Nearly seven out of ten Czech students strongly rejected this possibility (66%). Similarly, half of the Polish respondents (52%) shared this view. Only a small portion of the Czech participants were certain of it, while nearly one in six considered it possible (18%). In contrast, this conspiracy theory found significantly more support among Polish respondents. One in eight was certain of it (12%), and almost one in five deemed it possible (22%). Approximately one in seven Czech (15%) and Polish (14%) students were undecided on the matter (see Chart 9).

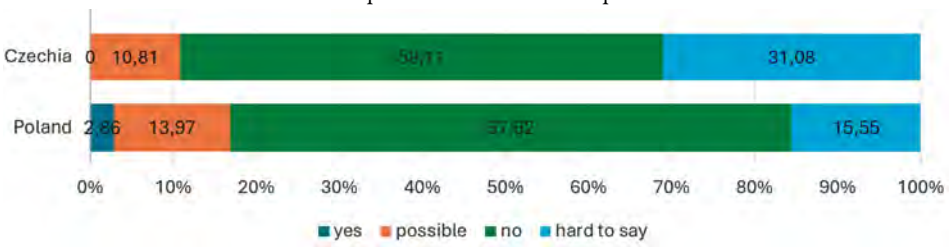
Chart 9. Do you agree with the statement that there is no disease or pandemic and there never was one, everything was invented to increase surveillance over societies?



Another widespread theory that gained traction at the onset of the pandemic was the idea that the spread of the virus was influenced by the rapidly expanding 5G technology. At the time, this was the latest standard in mobile networks, enabling faster data transmission and more efficient operation of a significantly larger number of devices connected to the network. The technology stirred controversy and strong emotions. Many public figures, lacking expertise in the field – such as actors and celebrities – expressed negative opinions about it. As a result, acts of vandalism occurred, in which already erected 5G masts were destroyed in protest against the technology.

Students were therefore asked for their opinion on this matter. The vast majority rejected this possibility (58% of Czech students and 68% of Polish students). Just under 3% of Polish respondents believed it to be true, while fewer than 14% considered it possible. Among Czech students, only one in ten thought it might be possible. However, a third of Czech respondents (31%) had no opinion on this conspiracy narrative, while one in six Polish students (16%) expressed uncertainty (see Chart 10).

Chart 10. Do you agree with the statement that 5G technology is related to the development of the COVID-19 pandemic?

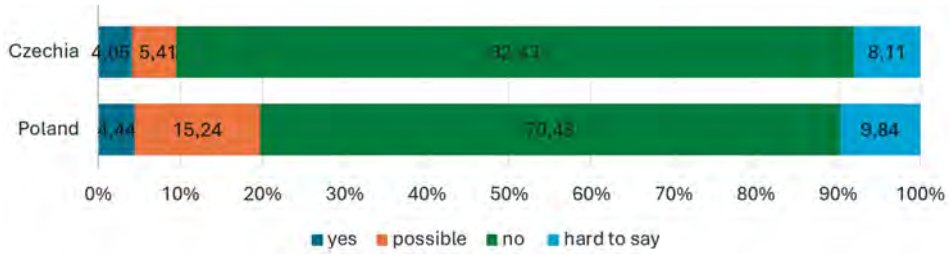


Researchers from the Jagiellonian University approached this issue somewhat differently. Their respondents were asked whether they agreed with the statement: *Information is being hidden for profit that the new technologies, such as the 5G mobile network, are causing the coronavirus*. Thirteen percent of respondents strongly believed this to be true, 17% somewhat agreed, 21% somewhat disagreed, while 30% strongly rejected this possibility. Nineteen percent of those surveyed had no opinion on the matter.[34]

A popular theory, though seemingly driven more by its sensationalism than by being perceived as a real threat, and thus exploited for a relatively short time, was the narrative concerning the risk of microchips being implanted into the human body via the COVID-19 vaccine. This content was primarily propagated by anti-vaccine groups, sometimes with the involvement of well-known individuals, celebrities, and influencers, and occasionally with covert support from pro-Kremlin entities.

This issue was also addressed in the study. A significant majority of respondents rejected the possibility, though this was more common among Czechs (82%) than Poles (70%). Polish students showed slightly more indecision on the matter. One in ten students from Gorzów had no opinion, compared to one in twelve among students from Opava. Both groups of students indicated similarly low levels of belief in the actual threat. However, three times more Poles (15%) than Czechs (5%) considered it possible (see Chart 11).

Chart 11. Do you agree with the statement that there is a real risk that microchips may be introduced into the human body along with the vaccine?



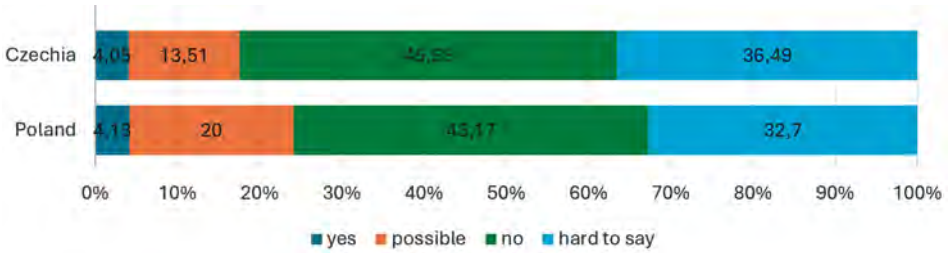
Respondents were also asked whether they believed that Americans had secret laboratories in Ukraine where biological weapons were being produced. This narrative, heavily promoted since 2014, aimed to discredit both the United States and Ukrainian authorities. In reality, American laboratories did exist in Ukraine (as well as in several other former Soviet states). However, they operated under a programme aimed at securing and neutralising weapons of mass destruction, including biological materials. These were by no means secret and were civilian facilities, primarily involved in the monitoring of infectious diseases. The United Nations also confirmed the lack of evidence for the existence of secret laboratories in Ukraine.[35]

[34] F. Czech, P. Ścigaj, *Popularność narracji spiskowych w Polsce czasu pandemii COVID-19...*, p. 20.

[35] J. Landay, H. Pamuk, S. Lewis, "U.N. Says No Evidence to Back Russian Claim of Ukraine Biological Weapons Program," *Reuters*, 11 March 2022, https://www.reuters.com/world/un-says-not-aware-any-biological-weapons-program-ukraine-2022-03-11/, 9 September 2024.

Nearly half of the Czech respondents (46%) and slightly fewer Polish respondents (43%) rejected the possibility that American laboratories in Ukraine were producing biological weapons. However, significant groups of participants were uncertain: one in three Poles (33%) and Czechs (36%) expressed doubts. Only four percent of both Czech and Polish respondents considered this narrative to be true, while one in five students from Gorzów and 14% from Opava believed it to be possible.

Chart 12. Do you agree with the opinion that the US operated secret laboratories for the production of biological weapons in Ukraine?



Assessment of EU and government responses to the pandemic

In the conducted research, respondents were also asked to evaluate the response of the EU and the national governments of both the Czech Republic and Poland to the pandemic crisis. The distribution of responses regarding the EU's handling of the crisis revealed significant variation, particularly in the negative assessments. A majority of students in Opava gave negative evaluations (53%). In Gorzów Wielkopolski, the number of positive (39%) and negative assessments (35%) was comparable (see Chart 13).

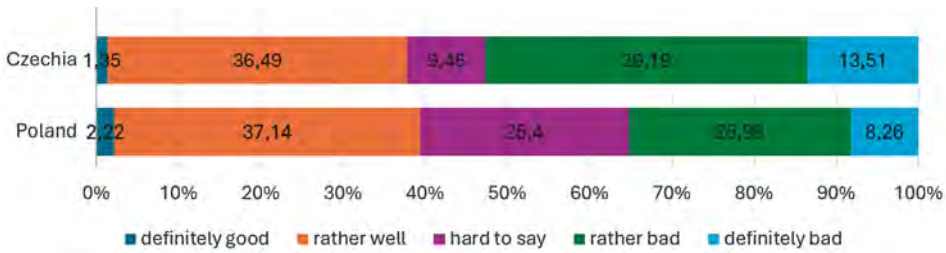
One of the research problems in the Europe-wide studies conducted for the European Parliament in 2020 was the assessment of the European Union's image during the pandemic. In contrast to the student surveys analysed here, negative responses were in the minority. Over 40% of respondents in the European Union indicated that the EU's image was positive (7% very positive, 34% rather positive). One-third of respondents gave a neutral assessment (34%), while one-fifth viewed the EU negatively (6% very negative, 15% rather negative). It is worth noting that, within just a few months of the pandemic, there was a significant increase in the number of respondents offering a positive evaluation. In the first round of the survey (April/May 2020), this was 31%. At the same time, negative assessments decreased from 28% in the first round to 21%.[36] Thus, it appears that the objective challenges posed by the pandemic did not lead to

[36] European Parliament, "Uncertainty/EU/Hope. Public opinion in times of Covid-19. Third round. Public opinion survey commissioned by the European Parliament. A Public Opinion Monitoring Study," Brussels 2020, at https://www.europarl.europa.eu/at-your-service/files/be-heard/eurobarometer/2020/public_opinion_in_the_eu_in_time_of_coronavirus_crisis_3/en-covid19-survey3-report.pdf, 7 March 2021.

a significant shift in attitudes toward a more negative perception of the EU, despite numerous disinformation campaigns.

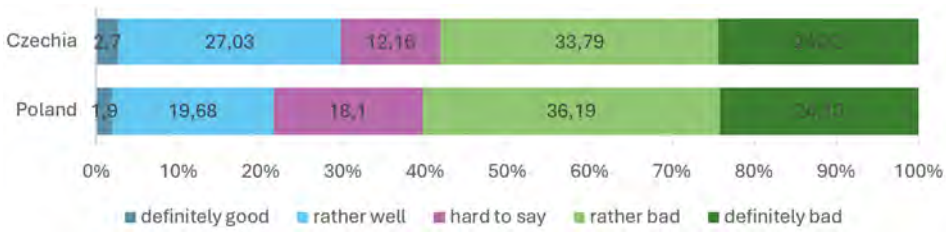
In the analysed European studies on the EU's image during the pandemic, a significant difference emerged between the Czech Republic and Poland. In the Czech Republic, the lowest percentage of positive evaluations was recorded (25%), while in Poland, the number was more than double (52%). Similarly, the proportion of negative assessments was higher in the Czech Republic (38%) compared to Poland (16%). Although it is difficult to directly compare the two survey questions, it appears that students from universities in Opava and Gorzów Wielkopolski were much more critical in their assessment of the EU's actions regarding the pandemic from a 2023 perspective than the surveyed Poles and Czechs were in their evaluations of the EU's image during the pandemic.

Chart 13. How do you assess the EU's response to the pandemic crisis?



Respondents were also asked to evaluate their national government's response to the COVID-19 pandemic. In both the Czech Republic and Poland, negative assessments dominated: 58% in Opava and 60% in Gorzów Wielkopolski. Notably, in both countries, one in four respondents indicated that the government's response was 'definitely poor.' Positive evaluations were given by nearly one-third of respondents in the Czech Republic and one-fifth in Poland. It is worth highlighting that, in the case of Poland, significantly more negative assessments were recorded regarding the government's actions during the pandemic compared to those related to the European Union. Among Czech students, the level of criticism toward both the EU and their national government was similar.

Chart 14. How do you assess the response of your country's government to the pandemic crisis?



Susceptibility to Conspiracy Theories – In Search of Answers

During the analysis of the conducted studies, a research question was posed regarding which factors might determine a greater tendency to believe in conspiracy theories. Due to the small sample size from the university located in Opava, the correlations were tested only on the sample of Polish students to examine the hypotheses. Naturally, these results cannot be generalised due to the specific characteristics of the group studied (in terms of age, education, and place of residence). However, it is worth noting the correlations observed during the analysis and treating them as leads to be explored in future studies, either with representative samples or through qualitative research methods.

The surveyed students were asked whether they identified as religious. The distribution of responses revealed a significant difference between the two countries. In the Czech Republic, negative declarations dominated – 72% (43% definitely not, 28% rather not), with only one in four students in Opava responding positively. In Poland, positive and negative responses were more balanced, although slightly more respondents identified as religious – 49%. Conversely, 44% of Polish students declared themselves non-religious.

For the purpose of the current analysis and the attempt to identify factors contributing to susceptibility to conspiracy theories, the level of religiosity was correlated with one of the questions concerning conspiracy beliefs. The study was conducted solely among Polish university students due to the sample size. The analysis focused on the conspiracy theory question that yielded the highest rate of affirmative responses. Specifically, participants were asked whether they agreed with the statement: *Do you believe that large pharmaceutical companies were involved in the creation of the SARS-CoV-2 virus in hopes of increasing profits from the sale of drugs and vaccines?*

As shown in the graph below (Figure 16), moderate differences were observed in relation to the declared level of religiosity when analysing responses to the aforementioned question. Although affirmative and uncertain responses ('yes' and 'possible') dominated among both religious and non-religious individuals, the rate was 13 percentage points higher among religious respondents. Similarly, non-religious individuals more frequently indicated that they did not support the conspiracy theory in question, with a difference of 7.7 percentage points compared to religious respondents. In order to identify a statistically significant correlation based on the available data for Polish students, a chi-square test was conducted. The analysis yielded a p-value of 0.028. Since $p < 0.05$, this result indicates a statistically significant association between religiosity and attitudes toward conspiracy theories. However, such studies must account for the considerably more complex context of these factors, as has also been noted by other scholars.[37]

[37] A. Jedinger, P. Siegers, Pascal, "Religion, Spirituality, and Susceptibility to Conspiracy Theories. Examining the Role of Analytic Thinking and Post-Critical Beliefs," *Politics and Religion*, vol. 17, no. 3 (2024), pp. 389-409; P. Jabkowski, J. Domaradzki, M. Baranowski, "Religiosity and Beliefs in Medical Conspiracy Theories in 37 European Countries during the COVID-19 Pandemic," *Humanities and*

Chart 15. Declarative religiosity of the respondents

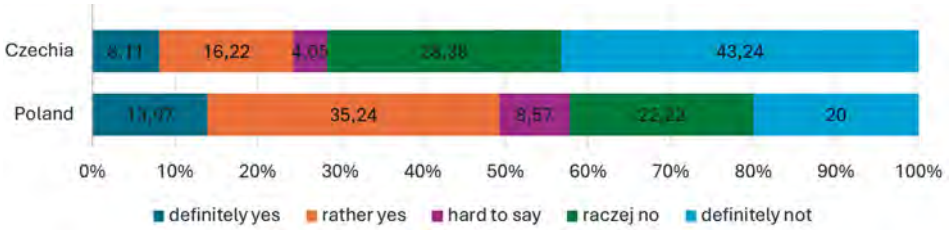
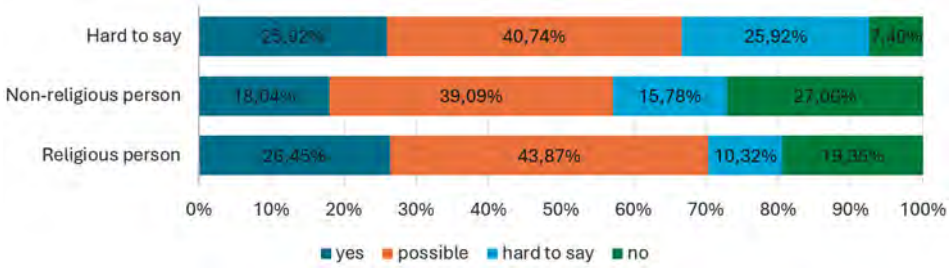


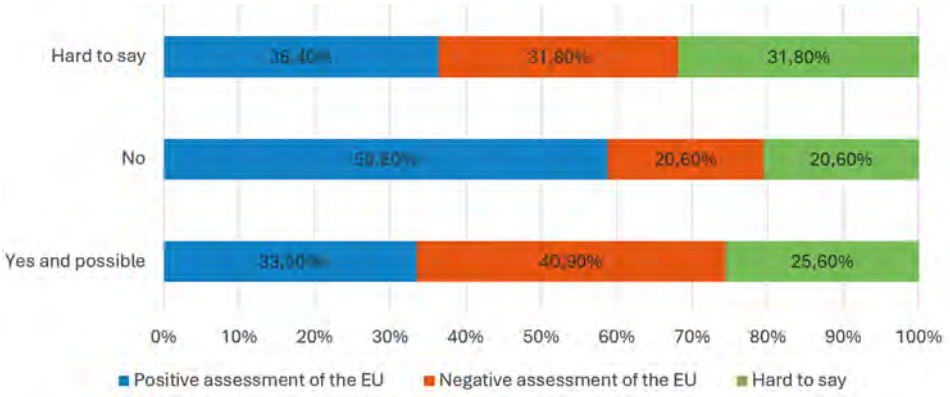
Chart 16. Religiosity and conspiracy theories



In examining data pertaining exclusively to the Polish student group, an analysis was also conducted on the relationship between susceptibility to conspiracy theories (based on responses to the same question as above) and the assessment of the European Union's actions during the pandemic crisis. As depicted in the chart, individuals who believed that global pharmaceutical corporations were involved in the creation of the COVID-19 pandemic, or who considered such a possibility, were significantly more likely to evaluate the EU's actions during this crisis negatively. Negative assessments within this group outnumbered positive ones (40.9% negative, 33.5% positive). Among respondents who rejected the above-mentioned conspiracy theory, positive assessments of the EU predominated (58.8%). This suggests the increasing importance of disinformation as a factor influencing perceptions of European integration and potentially threatening the cohesion of the EU. In an effort to identify a statistically significant correlation based on the available data for Polish students, a chi-square test was performed. The analysis yielded a p-value of 0.0032. A p-value of < 0.01 indicates a statistically significant association between the evaluation of the EU's actions during the pandemic and attitudes toward conspiracy theories.

Social Sciences Communications, vol. 12, article no. 434 (2025); P. Łowicki, M. Marchlewska, Z. Molenda, A. Karakula, D. Szczepańska, "Does Religion Predict Coronavirus Conspiracy Beliefs? Centrality of Religiosity, Religious Fundamentalism, and COVID-19 Conspiracy Beliefs", *Personality and Individual Differences*, vol. 187, article no. 111413 (2022).

Chart 17. Conspiracy Theories and the Evaluation of EU Actions During the Pandemic – A Case Study



CONCLUSION

The COVID-19 pandemic, beyond its immediate health consequences, has exposed profound weaknesses in the information ecosystem and public trust within democratic societies. Through a comparative analysis of Polish and Czech university students, this study highlights the extent to which conspiracy narratives permeated pandemic-related discourse and identifies key socio-cultural and psychological factors influencing susceptibility to such beliefs. The findings reveal not only significant differences between the two national samples, particularly in their acceptance of conspiracy theories and perceptions of institutional responses, but also emphasise the role of religiosity in shaping individual worldviews.

Importantly, the study confirms that conspiracy beliefs are neither marginal nor incidental phenomena. Rather, they are embedded within broader frameworks of distrust, identity, and social conflict. The observed correlations between belief in specific conspiracy theories and negative evaluations of the European Union or government responses suggest that these narratives may serve as proxies for deeper discontent and institutional scepticism. In this context, the spread of disinformation should be understood not merely as a cognitive deficit, but as a reflection of socio-political dynamics and identity-based information processing.

This article contributes to ongoing interdisciplinary debates on disinformation, security, and democratic resilience, particularly in the context of health policy, by providing empirical data from a region often overlooked in global analyses. Future research should build upon these findings by incorporating longitudinal and qualitative methodologies to deepen our understanding of contemporary challenges in public communication during crises.

BIBLIOGRAPHY

Bastard G., *Dziennik z dni zarazy*, Poznań 2024.

Bäcker R. et al., *Metodologia badań politologicznych*, Warszawa 2016.

Brands H., Gavin F.J, "COVID-19 and World Order," in H. Brands, F.J. Gavin (eds), *COVID-19 and World Order. The Future of Conflict, Competition, and Cooperation*, Baltimore 2020, pp. 1-20.

Brooks E., Guy M., "EU Health Law and Policy. Shaping a Future Research Agenda," *Health Economics, Policy and Law*, vol. 16, no. 1 (2021), pp. 1-7, https://doi.org/10.1017/S1744133120000274.

Caiani M., Susanszky P., Saridakis N., "Radical Right and Anti-Vax Protests between Movements and Parties. A Comparative Study," *Acta Politica*, vol. 60 (2025), pp. 139-166, https://doi.org/10.1057/s41269-024-00339-5.

Czachór Z., Marcinkowski T., Sikorski J., "Polityka zdrowotna Unii Europejskiej w obliczu działań klasyfikowanych jako walka informacyjna. Casus pandemii COVID-19," in K.A. Nawrot, K. Prandecki (eds), *Skutki i zagrożenia cywilizacji informacyjnej*, Warszawa 2023, pp. 159-179.

Czech F., Ścigaj P., *Popularność narracji spiskowych w Polsce czasu pandemii COVID-19. Raport z reprezentatywnych badań sondażowych*, Kraków 2020, at http://www.ism.uj.edu.pl/wp-content/uploads/2020/07/covid-narracje-spiskowe.pdf.

Dawidczyk A., Jurczak J., *Metodologia bezpieczeństwa w przykładach i zastosowaniach. Podręcznik akademicki*, Warszawa 2022.

Demczuk A., "Ruch antyszczepionkowy w Polsce i jego kabiny pogłosowe w alt-internet w latach 2020-2022," *Rocznik Instytutu Europy Środkowo-Wschodniej*, vol. 20, no. 3 (2022), pp. 9-35, https://doi.org/10.36874/RIESW.2022.3.1.

European Commision, "Preparedness for COVID-19 Vaccination Strategies and Vaccine Deployment," Communication from The Commission To The European Parliament and The Council, Brussels, 15.10.2020, COM(2020) 680 final, at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52020DC0680.

European Commission, "What Are Conspiracy Theories? Why Do They Flourish?," at https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/fighting-disinformation/identifying-conspiracy-theories_pl.

European Parliament, "Uncertainty/EU/Hope. Public opinion in times of Covid-19. Third round. Public opinion survey commissioned by the European Parliament. A Public Opinion Monitoring Study," Brussels 2020, at https://www.europarl.europa.eu/at-your-service/files/be-heard/eurobarometer/2020/public_opinion_in_the_eu_in_time_of_coronavirus_crisis_3/en-covid19-survey3-report.pdf.

Forman R., Shah S., Jeurissen P., Jit M., Mossialos E., "COVID-19 Vaccine Challenges. What Have We Learned So Far and What Remains To Be Done?," *Health Policy*, vol. 125, no 5 (2021), pp. 553-567, https://doi.org/ 0.1016/j.healthpol.2021.03.013.

Gates B., *Jak zapobiec kolejnej pandemii*, transl. by M. Rogalski, Warszawa 2022.

Golinowska S., Zabdyr-Jamroz M., "Zarządzanie kryzysem zdrowotnym w pierwszym półroczu pandemii COVID-19. Analiza porównawcza na podstawie opinii ekspertów z wybranych

krajów," *Zdrowie Publiczne i Zarządzanie*, vol. 18, no. 1 (2020), pp. 1-31, https://doi.org/10.4467/20842627OZ.20.001.12655.

Golka M., *Bariery w komunikowaniu i społeczeństwo (dez)informacyjne*, Warszawa 2008.

Grzesiak-Feldman M., *Psychologia myślenia spiskowego*, Warszawa 2016.

Heitkamp A., Mowen T.J., "Self-Control and Belief in Conspiracy Theories," *Social Currents* vol. 10, no. 6 (2023), pp. 503-511, https://doi.org/10.1177/23294965231193382.

Islam Md.S. et al., "COVID-19-Related Infodemic and Its Impact on Public Health. A Global Social Media Analysis," *The American Journal of Tropical Medicine and Hygiene*, vol. 103, no. 4 (2020), pp. 1621-1629, https://doi.org/10.4269/ajtmh.20-0812.

Jabkowski P., Domaradzki J., Baranowski M., "Religiosity and Beliefs in Medical Conspiracy Theories in 37 European Countries during the COVID-19 Pandemic," *Humanities and Social Sciences Communications*, vol. 12, article no. 434 (2025), https://doi.org/10.1057/s41599-025-04781-4.

Jedinger A., Siegers P, "Religion, Spirituality, and Susceptibility to Conspiracy Theories. Examining the Role of Analytic Thinking and Post-Critical Beliefs," *Politics and Religion*, vol. 17, no. 3 (2024), pp. 389-409, https://doi.org/10.1017/S1755048324000130.

Kapsa I., Lubik-Reczek N., Ušiak J., "War in Ukraine from the Perspective of Polish and Slovak University Students," *Athenaeum. Polish Political Science Studies*, vol. 75, no. 3 (2022), pp. 270-287, https://doi.org/10.15804/athena.2022.75.16.

Landay J., Pamuk H., Lewis S., "U.N. Says No Evidence to Back Russian Claim of Ukraine Biological Weapons Program," *Reuters*, 11 March 2022, at https://www.reuters.com/world/un-says-not-aware-any-biological-weapons-program-ukraine-2022-03-11/.

Łowicki P., Marchlewska M., Molenda Z., Karakula A., Szczepańska D., "Does Religion Predict Coronavirus Conspiracy Beliefs? Centrality of Religiosity, Religious Fundamentalism, and COVID-19 Conspiracy Beliefs," *Personality and Individual Differences*, vol. 187, article no. 111413 (2022), https://doi.org/10.1016/j.paid.2021.111413.

Marcinkowski T., "Polityka antykryzysowa Unii Europejskiej w obliczu pandemii SARS CoV-2 w obszarze zdrowia publicznego w 2020 roku. W poszukiwaniu rozwiązań funkcjonalnych," *Rocznik Integracji Europejskiej*, no. 15 (2021), pp. 181-194, https://doi.org/10.14746/rie.2021.15.12.

Marcinkowski T., Sikorski J., "The European Union's Policy towards the COVID-19 Crisis in 2020 and the Russian Contribution to Infodemic," in N. Moch, W. Wereda, J. Stańczyk (eds), *Information, Security and Society in the COVID-19 Pandemic*, Abingdon–New York 2023, pp. 147-172.

Marcinkowski T., Sikorski J., Vomlela L., "The Sense of Security in the Face of the War in Ukraine. Comparative Study of Poland and the Czech Republic," *Eastern Journal of European Studies*, vol. 15, no. SI (2024), pp. 292-316, https://doi.orf/10.47743/ejes-2024-SI14.

Marino G, Iannelli L., "Seven Years of Studying the Associations between Political Polarization and Problematic Information. A Literature Review," *Frontiers in Sociology*, vol 8 (2023), pp. 1-17, https://doi.org/10.3389/fsoc.2023.1174161.

Pałka-Suchojad K., "Disinformation Virus. Fake News in the Pandemic Era," *Athenaeum. Polish Political Science Studies*, vol. 68, no. 4 (2020), pp. 32-41, https://doi.org/10.15804/athena.2020.68.03.

Savranska K., *Problematyka walki informacyjnej w relacjach Rosji z wybranymi państwami europejskimi. Perspektywa medioznawcza*, Gdańsk 2020.

Sikorski J., "Social Implications of Infodemic Concurrent with COVID-19," *Polish Political Science Yearbook*, vol. 52, no. 4 (2023), pp. 79-89, https://doi.org/10.15804/ppsy202253.

Sikorski J., "Infodemia," in W. Fehler (ed.), *Leksykon bezpieczeństwa informacyjnego*, Siedlce 2023, pp. 158-160.

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