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The effects and structure of individual forms of disinformation on the population in connection with the COVID-19 pandemic in CZE, POL, SVK

## Report

The effects and structure of disinformation on the population in connection with the COVID-19 pandemic in the Czech Republic, Poland and Slovakia (comparative report)

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#### **Research Parameters**

The study had two main goals: to investigate the information environment of Czech, Polish and Slovak society and its influence on opinions about the Covid-19 epidemic and epidemiological policy.

In **Czech Republic**, the survey was conducted on a sample representative of the Czech Internet population (18+) using the CAWI (computer-assisted web interview) method. Quota sampling (age, education, municipality size, standard of living) was used. The respondents were recruited through Czech National Panel and the data were collected by the STEM/MARK research agency. Data collection period lasted from 1 to 12 June, 2022 (N = 1002).

In **Poland**, the survey was conducted on a sample representative of the adult population (18+) using the CAWI (computer-assisted web interview) method. Random samples were used. Data collection period lasted from 20 to 28 June, 2022 (N = 1021). The study was carried out by PBS.

In **Slovakia**, the survey was conducted on a sample representative of the Slovak Internet population (18+) using the CAWI (computer-assisted web interview) method. Quota sampling (age, education, municipality size, standard of living) was used. The respondents were recruited through Czech National Panel and the data were collected by the STEM/MARK research agency. Data collection period lasted from 1 to 17 June, 2022 (N = 1013).

#### Sources of gaining and verifying information

**Czechs** gain information mostly from news websites (67%), public TV (59%), friends (52%) and family (52%). Regarding the verifying information, the most popular are friends (37%), family (36%) and news websites (35%). Regarding gaining information from news websites, this behavior is amongst respondents between 30-44 years of age (72% in this age group). This age group also frequently gains information (93%) from the national public TV channel Česká televize (Czech TV). Also, a significant percentage (70%) of high-school graduates gain information from news websites. In

contrast to the same percentage (70%) of university-educated respondents who use national public TV, Česká televize (Czech TV).

Regarding verifying information, there are no significant differences between socio-demographic groups. The younger generation (18–44) tend to verify information with friends more than the older generation (45+ years). More university graduates (40%) verify information with friends than do respondents with a lower-level education.

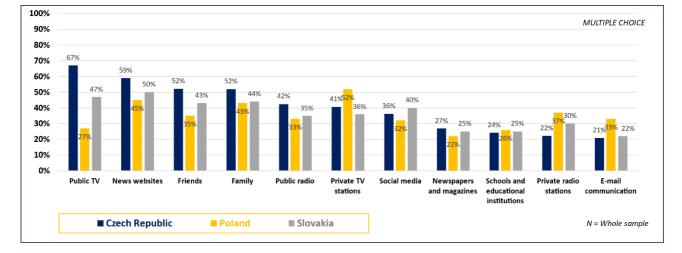
The most frequently used source of information without further verification in **Poland** is private television (stations such as TVN and Polsat). Most people use the information that appear there without verifying it. Respondents use TVP materials much less frequently and about half of the users verify the information that appear there. Private radio is used more extensively than public radio. A significant proportion of adults use - without verifying - messages that are personally communicated by family members or friends.

When all the sources of information used are taken into account, internet websites rank first in terms of use. The vast majority of Poles get their news from people they know personally (family and friends), from private television channels, as well as from social media and messages sent by e-mail.

As for the most used source of information, news websites are dominant (50%) in **Slovakia**. They are followed by public television (48%), family (44%) and friends (43%). Regarding gaining information from news websites, this behavior is most expressed by the people between 45 and 59 years of age (53% respondents included in this age group). Every second person belonging to this age group (52%) also frequently gains information from TV stations operated by public broadcaster RTVS (Radio and Television of Slovakia), which are also preferred the most by the oldest age group (60+ years – 58%). A significant ratio of respondents with higher professional education (68%) gain information from news websites. Based on education, every second high school graduate (54%) and university-educated person (52%) also use news websites to acquire information, whereas

respondents with university education gain information from the public broadcaster RTVS almost in the same frequency (53%).

When looking at the most used sources for verifying information, we have to further consider the already mentioned sources. The most popular are family (39%), friends (38%) and news websites (35%). As for verifying information, the youngest generation of respondents (18 – 29 years) tend to verify information by visiting news websites (42%). On the contrary, the oldest age group (60+ years) tends to favor personal contacts – family (49%) and friends (48%).





#### **Radio and television**

The **Czech** national public TV Česká televize (Czech TV) is the main source of information for Czech respondents who use audiovisual media for these purposes. To verify information, these respondents often watch Česká televize (28%) or FTV Prima (21%). The research shows that Czechs prefer audiovisual media (TV channels) to "purely" audio (radio stations) for gaining and verifying information.

In **Poland**, TVN (including TVN24) dominates the television news market and is used by the majority of adults. About half got information from Polsat, and a much smaller group, which consists of about one third of adults, obtains information on TVP. Such stations such as TV Republika or TV Trwam

are niche players. As regards to radio stations, RMF FM clearly dominate the market for news: more than half of adult Poles say that they got their news there. These results confirmed the results of the audience surveys, according to which this station was the leader of the radio market. Radio Zet came second, far ahead of the public radio.

In **Slovakia**, the primary TV channel Jednotka operated by Slovak national public TV and radio broadcaster RTVS, is the main source of information for the respondents who use audio-visual media for these purposes (54%). As for verification, the research participants often watch Jednotka (26% of respondents) or private television channel Markíza (26%). The research shows that Slovak people prefer audiovisual media (TV channels) over audio sources (radio stations) while gaining and verifying information. In case of radio stations, the respondents' preferences correspond with the results of radio popularity survey Radioprojekt and also with MML-TGI (both conducted by MEDIAN SK).

#### Newspapers and magazines

The most popular newspapers and magazines in terms of gaining and verifying information in **Czech Republic** are MF Dnes, Deník and Lidové noviny (all broadsheet daily newspapers). MF Dnes, Lidové noviny and Metro are operated by the MAFRA group, which were previously owned by Agrofert Holding, and directed by former Czech prime minister Andrej Babiš. As PM, Babiš transferred ownership to two private trust funds to comply with conflict of interest laws. Metro is a free daily newspaper distributed worldwide.

The most frequently mentioned dailies in **Poland** are: Gazeta Wyborcza, Fakt, Super Express and local or regional dailies. Among the weeklies, Newsweek had the strongest position, followed by Polityka, Gazeta Polska and the weekly wSieci. Respondents indicate both the print and online editions of these titles. About half of the adults do not use any press titles.

The most popular **Slovak** newspapers in terms of gaining and verifying information are Denník N, SME and Pravda (all daily newspapers). These newspapers represent elite journalism. The most

popular tabloid in terms of gaining and verifying information is the daily newspaper Nový čas (4th place overall). Besides daily newspapers, the respondents frequently mentioned additional sources for gaining or verifying information – weekly or monthly magazines Zdravie, Plus 7 dní and Život.

#### News websites

**Czech** respondents using news websites for gaining and verifying information rely most on easy-toaccess platforms. Almost two thirds (63%) of respondents gain their information from the news platform Seznam zprávy, closely followed by 60% from the news pages of the Novinky server.

In **Poland**, Onet is by far the most popular internet portal, followed by Wirtualna Polska. Gazeta.pl is significantly behind them.

The most used source not only for gaining but also for verifying information in **Slovakia** is the news website Aktuality.sk (78%). We can suppose that the recent popularity of the news website might be connected to the murder of the journalist of Aktuality.sk Ján Kuciak and his fiancée Martina Kušnírová in February 2018, which shocked Slovak public and also European community. Other news websites achieved comparable results – more than one third of the respondents use them for gaining or verifying information (this statement, however, does not apply to one of the sources, Pluska.sk).

#### Social media

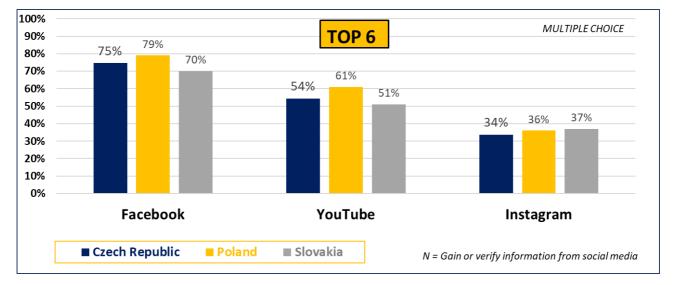
If **Czech** respondents gain or verify information on social media, they do so most often on Facebook (gaining 75%, verifying 23%). On the subject of verification, YouTube (27%) is even more commonly used, and is second as a social media source of information (54% of the sample gain information from this source).

The dominant position of Facebook in **Poland** is clearly visible among social media - it is the most frequently indicated source among all outlets. Interestingly, YouTube has built a strong position as

an information outlet, probably as an alternative to television. More than a third of Poles use Instagram for information and about a fifth each uses TikTok and Twitter.

If **Slovak** respondents gain or verify information on social media, they often do so while using Facebook (gaining 70%, verifying 27%). Regarding verification, even more commonly used is YouTube (30%) which is the second most popular social media source of information (54% of the sample gain information by this source). Higher numbers related to using Facebook, YouTube and Instagram are not surprising since these social media outlets are also the most popular in Slovakia, as recorded by the 2021 survey conducted by Go4insight.

Our results also support the claim made by Reuters Institute for the Study of Journalism that Facebook is the most used social networking site in terms of gaining information (preferred by 54% of Slovaks, as stated in Reuters Digital News Report 2022).





### Sources of gaining and verifying information about COVID-19 vaccination

The most common source of gaining information about COVID-19 vaccination amongst the **Czech** population is the national public TV channel, Česká televize (Czech TV). It is used for this purpose by

68% of respondents who use public TV for gaining or verifying information. This information are also commonly verified by family or friends (32%) who use it for gaining or verifying information.

The use of specific sources of information in **Poland** correlate with opinions. Among people who read newspapers and magazines, as well as among users of private electronic media, support for the vaccination campaign is the greatest and the fear of negative consequences is the lowest. The support for such campaigns is lower among people who obtain information from social media and state TV. People who learn about the pandemic at school relatively rarely support vaccination - they are the youngest respondents, skeptical about the pandemic policies due to their age. The vast majority of respondents use many different sources of knowledge. Opinions about COVID-19 are positively influenced by the diversity and multiplicity of information sources.

The most common sources of gaining information about COVID-19 vaccination amongst **Slovak** population are TV stations operated by Slovak public broadcaster RTVS (Radio and Television of Slovakia), that are used for this purpose by 59% of respondents who use public TV for gaining or verifying information in general. Regarding the best verifying source about COVID-19 vaccination, the respondents stated family or friends (this is claimed by 35% of those who use family and friends for gaining or verifying information in general). Within this question, only the respondents who marked a specific source as their source for gaining or verifying information in general could also choose this option as the one used for gaining or verifying information in the context of vaccination against COVID-19.

#### **Opinions on COVID-19**

#### **Czech Republic**

In the **Czech Republic**, more than half of the respondents (51%) completely or somewhat support COVID-19 vaccination. On the other hand, 28% of the sample is composed of determined opponents

of COVID-19 vaccination. The same opinion is held by another 15% of people, who stated their position less strongly. In their attitude to COVID-19 vaccination, women are more reserved than men. We also identify a higher percentage of women (42%) than men (15%) who completely disagree with the statement. More than 6 respondents in 10 from the 30-44 age group do not support COVID-19 vaccination (somewhat or completely disagreeing with the statement). Czechs living in the bigger cities (with more inhabitants) tend to support COVID-19 vaccination, while respondents from small-sized municipalities are more reserved. The acceptance of COVID-19 vaccination also declines with the fall in the standard of living. More than one third of respondents with a very high standard of living somewhat- or fully-support vaccination, whereas only 16% of people with a very low standard of living state the same.

For the Czech respondents, the type of the vaccine really matter. Only 28% of them think (rather or completely) that the COVID-19 vaccination should be given to population without considering the type of the vaccine. More than one third of people (35%) completely disagree with the statement that people should be vaccinated against COVID-19, no matter what type of vaccine. Another one fourth of the sample share the same opinion, but do not express it that confidently (somewhat agree). Czech women placed higher importance on the type of vaccine than Czech men. Only 24% of women agree with the statement (somewhat or completely). In the case of male respondents, the percentage is higher (32%). There is also a higher ratio of strong supporters (completely agree) amongst men.

Over two thirds of Czech respondents (69%) would not get vaccinated if the only possible vaccination type available is Sputnik. The possible acceptance (somewhat or completely agree) of the Sputnik vaccine is quite low (13%). A higher possible acceptance of Sputnik is amongst the oldest generation (respondents aged 60 and above). One in five in this age group (22%) somewhat or completely disagree with the statement. Gender, level of education, municipality size, and standard of living do not play a substantial role in the respondents' decision-making.

More than one third of Czech respondents believe that being vaccinated with one or two doses of the vaccine against COVID-19 is sufficient. In contrast, a further 34% completely or somewhat disagree with this opinion. The remaining respondents (32%) either do not know or are not willing to answer the question. This may be due to the fact that an opinion is partly formed based on scientific evidence, and these respondents do not feel educated enough to judge the science. The younger generation (respondents 18-29 years old) agree more than one or two doses of COVID-19 vaccine are sufficient – 45% of them somewhat or completely support the statement.

Approximately one third of Czech respondents (34%) think that COVID-19 vaccination is somewhat more risky than beneficial. This statement resonates more amongst less educated people, especially who have had a vocational education and have not graduated from high school (40%). On the other hand, there is a generally positive opinion of vaccination amongst respondents. 48% of all respondents somewhat or completely disagree with the statement. The strongest opposition to the statement is expressed by the oldest respondents in the sample (aged 60 and above). As a result, more than half of them (55%) somewhat or completely disagree with the statement, and another 14% are not sure about the topic.

Czechs in our sample are not sure if the Czech government used the COVID pandemic to strengthen its position. 41% somewhat or completely agree with this statement, but a similar percentage (39%) do not share that opinion. The other fifth of respondents are not sure or do not want to answer the question. People living in cities of up to 100,000 inhabitants "blame" the national government for misusing their position because of COVID-19. 50% of them somewhat or completely reject the statement. This is less than the national average 50% of respondents with a low standard of living, and 62% of those with very low standard of living, somewhat or completely agree with the statement.

Just almost one in five Czech respondents (19%) agree that COVID-19 is a Chinese political weapon. More than half (53%) somewhat agree or completely reject the statement. The uncertainty ratio is quite high – 30% of respondents are not able or willing to answer the question. Surprisingly, women tend to agree with the statement more than men – 21% of female respondents somewhat or completely agree with the statement, whereas only 14% of men do. Middle-aged Czechs (30-59 years) also express greater concern than the younger generation (18-29 years) and pensioners (60 and above).

Similar to the previous statement, less than one fifth of Czech respondents somewhat or strongly agree. 55% of respondents think that the statement is not valid (39% completely disagree, 16% somewhat disagree). More than one in four respondents (27%) do not know or are not able to reply to the question. In comparison with the average, the younger generation (18-29) do not agree with the statement (only 9% somewhat or completely agree). Almost one half of them (47%) also completely disagree with the statement that COVID-19 is an American political weapon. People with a higher-than-average standard of living reject the statement more than the sample average. 63% of respondents with a very high standard of living somewhat or completely disagree, and 68% of respondents who report their standard of living as high.

This research shows that over one fourth of the Czech population (27%) have concerns about the influence of COVID-19 testing on people's health. In contrast, half the respondents (55%) do not agree with the statement. More women than men perceive that COVID-19 testing may possibly influence people's health. 30% of women somewhat or completely agree with the statement, and 24% of male respondents somewhat or completely agree.

The majority of the Czechs (69%) do not have serious doubts about the safety of COVID-19 testing. In contrast, 18% of respondents agree that COVID-19 testing is not safe (7% completely agree, 11% somewhat agree). According to the <u>infomore.cz</u> website, adverse reactions were mentioned for all vaccines. Disinformation websites spread misinformation and scientifically unsubstantiated states, such as vaccinations cause people to have strokes, polio, or infertility.

Czech respondents approach the COVID-19 vaccination of children more skeptically than they do vaccination in general. Only 12% of respondents completely agree that they support COVID-19

vaccination of children, and a further 19% of respondents somewhat agree. On the other hand, more than half of the sample (54%) do not support COVID-19 vaccination of children, and 37% of that percentage are completely sure in their opinion regarding this issue. Women support COVID-19 vaccination of children even less. Hence 58% of them did not support it (somewhat or completely). Only 49% of men expressed a negative opinion.

A reserved attitude of Czechs towards COVID-19 vaccination of children is also evident from an unwillingness to vaccinate their own children. Only 22% of people agree with the statement, *"I would like to vaccinate (or have already vaccinated) my child/ children against COVID- 19"*. Four in ten respondents from the sample completely disagree. Men are slightly more open than women to the COVID-19 vaccination of children (25% men vs 20% women agree; 48% men vs 55% women disagree). The middle generation (30-44 years old) disagrees the most intensely with the COVID-19 vaccination of their children (66% somewhat or completely disagree with the statement).

Slightly less than one third of the sample (30%) somewhat or completely agree that COVID-19 vaccination can complicate pregnancy. In contrast, 24% disagree with this statement. A relatively high percentage of respondents (45%) do not express an opinion on this issue. This may be due to a lack of specialised medical education and a reluctance to share unfounded opinions. There has been a lot of disinformation in the Czech media about the adverse effects of vaccines on pregnant women. This has been refuted by the <u>World Health Organization</u>.

For the Czech respondents, the type of the vaccine really matter. Only 28% of them think (rather or completely) that the COVID-19 vaccination should be given to population without considering the type of the vaccine. More than one third of people (35%) completely disagree with the statement that people should be vaccinated against COVID-19, no matter what type of vaccine. Another one fourth of the sample share the same opinion, but do not express it that confidently (somewhat agree). Czech women placed higher importance on the type of vaccine than Czech men. Only 24% of women agree with the statement (somewhat or completely). In the case of male respondents, the percentage is higher (32%). There is also a higher ratio of strong supporters (completely agree) amongst men.

Seven Czech respondents in ten (70%) stated that they have had a COVID-19 vaccination. Almost one half of them state that they had a booster (second or third dose according to the vaccine type). The other 30% stated that they are not vaccinated against COVID-19 at all. The COVID-19 vaccination rate positively correlates with the increasing age of the respondents. In the younger age group (18– 29 years) 39% have been vaccinated with one or two doses, and 29% of them have had a booster. 70% of people aged 60 and above have had a booster (and only 19% of them remain unvaccinated against COVID-19). While talking about the education distribution and COVID-19 vaccination, the most balanced ratio of vaccinated and unvaccinated is amongst people with a high-school education. Still, 63% of these respondents are vaccinated, but over one third (38%) are not.

#### **Poland**

Support for the vaccination campaign in **Poland** depends strongly on age and education: the elderly are much more positive about them than the young and support increased with education. On one side of the spectrum are the well-educated seniors, who support vaccination in the vast majority, and on the other - young people without education, are often reluctant or indifferent. Obviously, the vaccinated people have a much more positive view of the vaccination campaign than the unvaccinated. The latter group also express various kinds of fears much less frequently. It is worth noting, however, that concerns about vaccines and testing are not universal among the unvaccinated. While a majority of three-fifths believed vaccines do more harm than good, only a small minority fears testing or believes vaccination harms pregnant women. This means that health concerns were not the only (and perhaps not the main) reason for not getting vaccinated. The unvaccinated clearly more often than the vaccinated perceives the political aspects of epidemiological policy - both in the activities of the Polish government and in the policies of China and the USA.

Political views in Poland are related to opinions on epidemiological policy. The main difference is between the politically active (declaring the intention to vote in the next elections) and politically passive and undecided. People with party preferences mostly supported vaccination. Among the passive and the undecided, only a minority expressed support. The scale of support was greatest in the electorate of the Civic Coalition (KO).

Overall, most Polish inhabitants support the COVID-19 vaccination campaign. When children are concerned, support falls to less than half of respondents; an even smaller group are willing to vaccinate their own child. Less than two-fifths believes that everyone should be vaccinated, and therefore are in favor of compulsory vaccinations. As expected, the proportion of people who believes that vaccination against Covid-19 does more harm than good is close to the proportion not supporting vaccination, i.e. equal to about one-third of adults.

Relatively small groups of Polish respondents agree with the erroneous statements about the harmfulness of vaccinations and tests. This is probably the result of a widespread awareness campaign conducted by both public authorities and the media. During the pandemic, there were allegations that it is weaponized by the authorities, both in domestic and international politics. About half of adults believe that the Polish government is using COVID-19 to expand its powers. The belief that the Chinese authorities use the pandemic for their own purposes is expressed by less than a quarter. Few agrees with the thesis expressed by the Chinese authorities that the US is weaponizing the pandemic.

#### <u>Slovakia</u>

Less than half of the **Slovak** respondents (47%) completely or rather support COVID-19 vaccination in general. In comparison, 31% of the sample consists of determined opponents of COVID-19 vaccination. Basically, the same opinion is also shared by another 10% of the participants who, however, did not express their disagreement so strongly. In terms of their attitude to COVID-19 vaccination, men tend to be more pro-vaccination. 52% of them completely or rather agree with it. On the other hand, women do not seem to possess any clear attitude towards this issue since 44% of them are supporters and, on the contrary, 44% of them do not support vaccination. The strongest supporters of vaccination in general belong to the oldest age group (60+ years of age – 56% of them rather or completely agree with the statement). More than 4 people out of 10 from the age group 30 to 59 years do not support COVID-19 vaccination (rather or completely disagree with the statement). People living in bigger cities (with more inhabitants) tend to support COVID-19 vaccination while respondents residing in small-sized municipalities are more reserved regarding this issue.

Four people in Slovakia out of ten (40%) think that COVID-19 vaccination is more risky than beneficial. These thoughts resonate especially amongst the middle-aged group (people who are 30 – 59 years old). On the other hand, positive opinions on the effect of vaccination still prevail amongst the respondents (44% of all participants rather or completely disagree with the statement). The results of the survey also show a relation between municipality size and perceiving the benefits of vaccination – the more inhabitants a municipality has, the more respondents perceive the vaccination as beneficial. Slightly less than one third of the respondents (31%) rather or completely reject the statement that COVID-19 vaccination can complicate pregnancy. On the contrary, almost the same rate of respondents agrees with this thought (30%). Relatively high percentage of participants (38%) do not wish to express their opinion on this issue. Men have a slightly more negative attitude towards this topic than women (29% of men vs 33% of women rather or completely agree; 35% of men vs 29% of women rather or completely disagree).

Over one fourth of Slovak population (26%) have concerns about the influence of COVID-19 testing on people's health. On the other hand, most participants (57%) do not think that COVID-19 testing could impact people's health. The results also show that more than half of the participants (56%) do not have serious doubts about safety of COVID-19 testing. However, 28% of people claim that COVID-19 testing is not safe (13% completely agree, 15% rather agree). The idea that the testing is safe is supported mainly by residents living in big cities with 100,000+ inhabitants (62% of them) and university-educated respondents (70% of them). The biggest safety concerns regarding testing were expressed by people with higher professional education – 47% of this segment rather or completely agree with the given statement. Surprisingly, the same rate of respondents with higher professional education considers the testing not to be dangerous at all.

Slovak respondents were asked to comment on claims that point to a link between COVID-19 and achieving political goals both domestically and abroad. Almost half of them agree with the statement that Slovak government uses COVID-19 for strengthening its own position. 47% of the respondents rather or completely agree with this thought, whereas 37% do not share the same opinion. While amongst men the results are almost identical, women are more inclined to choose the opinion that the government uses the disease to its own advantage (50% of women completely or partially agree). On the contrary, only 31% of female participants expressed an opposing stance. Respondents living in villages (with less than 999 inhabitants) and small towns (1,000 – 4,999 inhabitants) agree with the statement more often than average; 53% of those living in villages and 50 % of small towns residents rather or completely agree with the idea. The opposite tendencies can be seen in larger towns and cities. People with poor (57%) or very poor (52%) standard of living "blame" the government for abuse of power thanks to COVID-19 more often than average. Contrary to that, 49% of the respondents with good and 53% of the respondents with very good standard of living completely or rather disagree with the statement.

Almost one of five Slovak participants (18%) agree that COVID-19 is a Chinese political weapon. However, more than half of the people (55%) rather or completely reject the statement. The identified uncertainty ratio is quite high – 27% of those asked were not able or willing to answer the question. Middle-aged Slovaks (30 - 59 years) disagree with the statement less often than the younger generation (18 - 29 years) and seniors (aged 60+). Considering education, the results show that as the level of education increases, so does disagreeing with the stated opinion. On the other hand, the use of the COVID-19 disease as a political weapon of the USA has considerably more supporters among Slovaks. Almost one third of the respondents (32%) rather or strongly support the statement. 45% of the participants think that the claim is not valid (33% completely disagree, 12% rather disagree). Almost one of four people (24%) do not know or are not able to answer the question. Considering sociodemographic, 59% of university-educated people reject the presented statement more than the average of the sample – 13% rather disagree and 46% completely disagree. While 67% of the respondents with very good standard of living rather or completely reject the claim, there are 44% of people with poor standard of living and 32% of people with very poor standard of living who believe the statement is true. In the case of the latter group, 32% of them rather or completely disagree with the idea and 36% do not know or are not able to react to the question.

The vaccination of children against COVID-19 has significantly less Slovak supporters than the COVID-19 vaccination in general. Only 11% of the respondents completely agree that they support COVID-19 vaccination of children, and further 21% of the participants rather agree with the claim. In contrast, more than half of the sample (54%) do not support COVID-19 vaccination of children, whilst 40% of them are completely against such a measure. Women support COVID-19 vaccination of children do not support it, whilst 44% are completely against it. Only 49% of men expressed negative opinions on this particular issue.

A lower level of willingness to have a child vaccinated is visible when the respondent's own child(ren) is/are involved. More than half of the respondents (51%) would not have their child or children vaccinated and only 27% of people would like to have their child(ren) vaccinated. Compared to the previous results on supporting vaccination of children, we can see an increase in the number of people who did not want to or were not able to answer (21%).

When we compare the opinions of Slovak people who have undergone vaccination against COVID19 and those who are not vaccinated at all, we consider it important to mention that six people out of ten in our sample (63%) declared being vaccinated against COVID-19. More than half of them have also received a booster shot (a second or third dose, based on the vaccine type). The rest (36%) declared that they are not vaccinated against COVID-19 at all. Unsurprisingly, vaccinated people strongly support vaccination against COVID-19. At the same time, more than half of them think that people should get vaccinated regardless of which vaccine they take. Four out of ten vaccinated Slovaks also support vaccination of children or consider one or two doses to be sufficient enough. The same number of vaccinated persons would be willing to be vaccinated with Sputnik V if there was no other alternative.

On the other hand, a significant majority of unvaccinated Slovaks consider vaccination to be more risky than beneficial, while every second unvaccinated person thinks that the vaccine can cause complications during pregnancy. Almost seven out of ten unvaccinated Slovaks think the government is using COVID-19 to their advantage, and one in two sees the disease as a U.S. political weapon.

#### **Opinions on effectivity of COVID-19 vaccine types**

#### Czech Republic

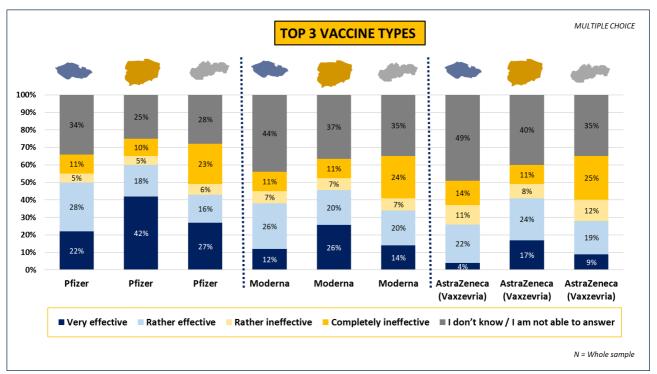
According to the respondents from **Czech Republic**, the most effective vaccine is the Pfizer one (somewhat or very effective by 50% respondents). Pfizer is followed by Moderna and AstraZeneca, but more than 4 in 10 respondents are not sure about the effect of those vaccines. Also, one-fifth to one-fourth of that sample do not think those vaccines have any effect at all. Vaccinations and vaccines have had a lot of coverage in the Czech media. According to research from the <u>infomore.cz</u> website, this topic saw a threefold increase in the average monthly number of references in the media between December 2020 and March 2021. Publicity for the vaccines they researched accounted for more than a third (36%) of the total vaccine coverage. The research shows that people trusted the Pfizer/BioNTech vaccine the most, perhaps because it was the most frequently mentioned brand in the media (34%). AstraZeneca accounted for 25% of mentions, and Moderna for 20%. Sputnik V (15%) and Johnson & Johnson (6%) had the lowest share of mentions.

#### <u>Poland</u>

**Polish** respondents express their opinion on vaccines used against the coronavirus. The mRNA type are rated the highest. The lowest scores are given to Russian and Chinese vaccines, not used in Poland. It should be noted that opinions depend not necessarily on the actual effectiveness of the vaccines, but on their media image and scale of use.

#### <u>Slovakia</u>

According to the opinion prevailing in **Slovakia**, the most effective vaccine type is made by Pfizer (seen as rather or very effective by 43% of the respondents). It is followed by Moderna and AstraZeneca. More than 3 people out of 10 are not sure about the influence of any vaccine (besides Pfizer). The results show that the most ineffective vaccine type is considered to be Sputnik V – 42% of the respondents find it rather or completely ineffective. As for the effectiveness of vaccines, the Pfizer-made vaccine is seen as the best; based on sociodemographic factors with dominance in all segments. It is considered effective by more than half of university-educated respondents (55%) or residents of large cities with the number of inhibitors exceeding 100,000 (52%). Five out of ten people with a good standard of living (52%) and six out of ten people with a very good standard of living (62%) are convinced of the effectiveness of this vaccine.





#### Conclusions

#### Czech Republic

**Czechs** gain information mostly from news websites (67%), public TV (59%), friends (52%) and family (52%). The most common source of gaining information about COVID-19 vaccination amongst the **Czech** population is the national public TV channel, Česká televize (Czech TV). It is used for this purpose by 68% of respondents who use public TV for gaining or verifying information. This information are also commonly verified by family or friends (32%) who use it for gaining or verifying information.

In the Czech Republic, more than half of the respondents support COVID-19 vaccination. On the other hand, more than one fourth of the sample is composed of determined opponents of COVID-19 vaccination.

Czech respondents approach the COVID-19 vaccination of children more skeptically than they do vaccination in general. Only 12% of respondents completely agree that they support COVID-19 vaccination of children, and a further 19% of respondents somewhat agree. Women support COVID-19 vaccination of children even less. A reserved attitude of Czechs towards COVID-19 vaccination of children is also evident from an unwillingness to vaccinate their own children. Only 22% of people agree with the statement, *"I would like to vaccinate (or have already vaccinated) my child/ children against COVID-19"*.

Seven Czech respondents in ten (70%) stated that they have had a COVID-19 vaccination. Almost one half of them state that they had a booster (second or third dose according to the vaccine type). The other 30% stated that they are not vaccinated against COVID-19 at all. Czech respondents favorize Pfizer and Moderna amongst other vaccine types.

#### <u>Poland</u>

The most frequently used source of information without further verification in Poland is private television (stations such as TVN and Polsat). Most people use the information that appear there without verifying it. Respondents used TVP materials much less frequently and about half of the

users verify the information that appeared there. Among Polish people who read newspapers and magazines, as well as among users of private electronic media, support for the vaccination campaign is the greatest and the fear of negative consequences is the lowest. The support for such campaigns is lower among people who obtained information from social media and state TV. People who learn about the pandemic at school relatively rarely support vaccination - they are the youngest respondents, skeptical about the pandemic policies due to their age.

Polish respondents supports the COVID-19 vaccination campaign. In case of children, less than half support their vaccination; an even smaller group are willing to vaccinate their own child. Relatively small groups of respondents agree with erroneous statements about the harmfulness of vaccinations and tests.

Support for vaccination is strongly influenced by age and education: the elderly are much more positive than the young; education increases support for vaccination. People using many different sources of information are also more supportive of the vaccination campaign than others.

#### <u>Slovakia</u>

**Slovak** respondents most often use news websites and public television as a source of information, while they tend to turn to family and friends for verifying the information. When gaining information about vaccination against COVID-19, they use the public broadcaster RTVS (Radio and Television of Slovakia) the most. As stated above, they verify information about vaccination especially with family members and friends.

Less than half of respondents support vaccination against COVID-19 (47% of the sample agree with it). On the other hand, 41% of people are against it. The support subsequently decreases in the case of vaccination of children in general (32% of the respondents agree with it) or vaccination of one's own child or children (27% of respondents agree with it), while there is a higher degree of disagreement than in the case of vaccination of the entire population.

More than half of the people do not consider COVID-19 testing to be dangerous and equally disagree that such testing has an impact on our health. Almost half of the respondents think that the Slovak government is using COVID-19 to its advantage.

Vaccinated persons generally support vaccination and more than half of them regardless of the vaccine. On the contrary, unvaccinated people consider vaccination as more dangerous than beneficial and perceive COVID-19 as a political "advantage" of the Slovak government.

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