

Addressing Online Misinformation: Vaccines and Autism
Policy Brief for Reddit

Leona Hasani and Leona Hoxha

Data Science for Society and Business, Constructor University, Bremen

MDSSB-DTRANS-01: Digital Public Sphere

Dr. Mandi Larsen

May 28, 2024

Executive summary

In the digital age, platforms such as Reddit serve as vital spaces for public discourse; however, they also face challenges in combating misinformation, particularly with regard to health-related topics such as the link between vaccines and autism.

This policy brief begins by providing some background information about the public's concern regarding vaccines. It does so by providing answers to questions such as where the concern originated and why it has not been clarified yet. Subsequently, this project will proceed to investigate the role that Reddit plays as a digital public sphere, as well as the ways in which this platform influences perceptions of truth and the common good in discussions concerning autism and vaccines.

Through the lens of sentiment analysis, topic modelling, and policy analysis, this policy brief will concentrate on analysing data from Reddit in order to discover patterns of misinformation distribution and user engagement based on the data. The other step is to make recommendations for Reddit, despite the fact that there may be significant obstacles to properly enhance its capacity for a more knowledgeable and responsible digital community.

Keywords: Reddit, misinformation, vaccines, autism, social media, misinformation, combat, suggestions

Addressing Online Misinformation: Vaccines and Autism

In today's world, technology is developing further each day by expanding the public sphere and transforming the way we communicate and interact with each other. Therefore, it is crucial but also quite difficult to stay correctly informed and adapt to the diversity of news and information that is being shared online.

One platform that is really helpful for the purpose of sharing genuine opinions and concerns on social media is Reddit. Moreover, this platform allows its users to engage in different discussions or topics and connect with people from around the world who share similar interests.

For this project, we want to understand how Reddit functions as a digital public sphere and how it promotes the truth and the common good through information sharing. We are specifically interested in the topic of "The link between vaccines and autism", and how misinformation about it is being spread.

The content on the Reddit platform is categorized into subreddits, and each community consists of members who share and discuss relevant topics (Krohn & Weninger, 2022). Hence, subreddits work like echo chambers for Reddit since they are usually made of groups of people with the same ideas and opinions; thus, spreading misinformation around different topics can be easier due to them.

Subreddits interact with each other through links, where one subreddit references another. These links could promote communities and also increase user engagement for a specific topic (Krohn & Weninger, 2022). Furthermore, in our case, this means that misinformation about "Vaccines causing autism" could be spread from one 'echo chamber' to another just by using these promotional links and the influence of a specific subreddit.

The spread of misinformation around vaccines and autism can have a big impact on vaccine rates and hesitancy all around the world. Therefore, it is very important to have strict

policies and actions targeting this issue and to support the right initiatives that could benefit the whole public.

In our age of fake news and social media manipulation, platforms like Reddit have a big responsibility to prioritize the truth, as users will feel confident in the authenticity of the content they are consuming. Consequently, since Reddit is interested in getting more and more content on its site and increasing the activity of its users, building the trust of its users is very essential to continuing to thrive and maintaining its credibility.

On the other hand, for a platform like Reddit, it's also necessary to focus on the common good, especially when it comes to the health sector, since it's very critical for parents and individuals to make the right decisions. Vaccination rates can affect the entire population's immunity; thus, misinformation leading to vaccines can lead to disease outbreaks all around the world.

Furthermore, the process of promoting truthfulness and the common good involves trying to find the right balance between free speech and responsibility to prevent harm caused by misinformation. This could be done by providing accurate information, fact-checking false claims, and contributing to a culture of evidence-based discussion on Reddit.

Thereupon, the audience for this policy brief includes Reddit's policymakers, moderators, and community managers. They play a crucial role in setting policies in place that aim to eliminate false information and improve the platform's capacity to protect public health. Accordingly, to effectively address the issue, it is crucial to first understand the underlying problems, the factors contributing to the spread of misinformation, and the key players involved. After that, continue with recommendations of strategies for Reddit to enhance the platform's ability to support truth and the common good in the context of vaccine-related information in their digital sphere.

Background and context/problem statement

Throughout history, vaccines have played a crucial role in saving millions of lives, especially children, by preventing deadly infectious diseases such as the first smallpox, rabies, or polio.

However, trust in vaccines has diminished in recent years due to misinformation and fear of side effects. Among this misinformation are unfounded worries about the dangers of vaccine ingredients and their connections to disorders like autism (Gabis et al., 2022).

Reasons why this concern arose

Studies have shown that conspiracy beliefs are linked to feelings of powerlessness (Abalakina-Paap et al., 1999). Consequently, the absence of a clear explanation for autism can leave parents feeling helpless and uncertain about the competence of medical professionals. This uncertainty drives the need for alternative explanations and reasoning, providing parents with a sense of clarity and control over their situation.

Part of the reason for the concern of parents around vaccines could arise from the fact that the prevalence of autism has increased significantly over the last few years (CDC, 2024). According to the most recent CDC data in 2020, 1 in every 54 children has been diagnosed with autism spectrum disorder, whereas in 2007, 1 in every 150 children was affected (CDC, 2024). This discrepancy in numbers highlights the reason behind an increasing amount of information, whether accurate or not, circulating online.

Another part of the reason for this concern could be the presence of mercury in certain vaccines. Mercury is known to be neurotoxic, and high exposure to it could cause severe developmental disorders (Gabis et al., 2022). Historical events such as the Minamata disaster in Japan led many people to have serious health issues due to their high exposure to the mercury ingredient (Harada, 1995). However, such cases were due to the poisoning from exaggerated dosages and not the low intake of mercury. In addition, any excessive dosages of a substance,

such as lipid-soluble vitamins (A, D, K, and E) and vitamins such as B12 and folate, can result in brain damage (Zhou et al., 2013).

Consequences of vaccine hesitancy

The number of parents choosing not to have their children immunized has significantly reduced "herd immunity" among populations, which has raised the possibility of contracting potentially more dangerous infectious diseases (Taylor et al., 2014). This could lead to very serious problems in public health, especially spreading these diseases to vulnerable populations with limited resources and those with poor immune systems (Gross, 2009).

How misinformation is being spread

The way the accuracy and misinformation around the link between vaccines and autism is being spread on the internet is very different (Gabis et al., 2022). While anti-vaccines group tries to create as many websites and interactive discussion groups that appear more scientific and believable, the pro-vaccines group offers limited interactivity, focuses on evidence-based knowledge, and is perceived as more distant and dictatorial (Gabis et al., 2022). Moreover, commenting styles within the media revealed that vaccination and antivaccination use different kinds of language in their communication of information (Dredze et al., 2016; Grant et al., 2015). Medical anthropologists also suggest that scientific facts should be presented in a more compelling and emotional context to counteract these myths (Gross, 2009). For instance, some families initially refused to vaccinate their first child but later had a second child diagnosed with autism, even though the second child was never vaccinated (Gabis et al., 2022). If these experiences, which led the families to realize that genetics might be the cause of the disorder, were shared with the public, it could help in fighting the myths and misinformation about vaccines causing autism in children.

Studies that have given evidence that the vaccines do not cause autism

There have been different analysis reports that have provided the correct information about this speculation and tried to educate the general population on it.

There was a big analysis done that gave evidence that there was no link between vaccination and autism in a sample size of over 1,256,407 children (Taylor et al., 2014). These outcomes were independent of whether the MMR vaccination or any of its components were used as the intervention.

Nevertheless, all vaccines can cause mild side effects like pain, swelling, fever, irritability, drowsiness, and rash, while serious adverse events like severe rash, infections, encephalitis, or death are rare (Gabis et al., 2022).

Another study in Denmark, which was a nationwide cohort, examined data from population registries to investigate the link between the MMR¹ vaccine and autism. The study, which included over 5 million person-years of follow-up, found that the MMR vaccine does not increase the risk of autism or trigger autism in individuals who may be susceptible (Hviid et al., 2019). Consequently, numerous studies and substantial evidence over the years have been published to dispel the myth that vaccines cause autism. However, parental vaccine hesitancy continues to be prominent and poses a major public health threat.

Measures that are being held to inform the population by organizations and agencies

Therefore, concerns about vaccine safety are increasing the need for reliable information. The U.S. federal agency, CDC (Centers for Disease Control and Prevention), provides resources to reassure the public about the safety and efficacy of vaccinations (Gabis et al., 2022).

Following the banning of Donald Trump and related accounts by Reddit and other platforms, a spokesperson for then-German Chancellor Angela Merkel made a statement in

¹ Measles, Mumps, and Rubella

response (Nakajima Wickham & Öhman, 2022). The spokesperson emphasized that while freedom of expression can be restricted, such restrictions should be made according to the law and within the legal framework set by lawmakers, not based on decisions made by social media platform management (Bermingham, 2021).

Policy analysis

Retrieving data from the Reddit API

The dataset was retrieved through the Reddit API while using a personal script with a specific client ID and secret key. The query used in order to retrieve the data from the Reddit API was 'vaccines autism', where it would take one hundred of the most relevant posts and their comments through all time and not a specific time period. This process was done in Python while using the *Praw* library in order to get the needed data for this policy brief. In Table 1, we can see the features that were used to build this dataset.

Table 1

Information on the features of the dataset

Name of the feature	Meaning
<i>Subreddit</i>	<i>The subreddits to which a specific post/comment belongs</i>
<i>Title</i>	<i>Title of a specific post</i>
<i>Selftext</i>	<i>The information that a post contains</i>
<i>ID</i>	<i>Each post has a unique ID number</i>
<i>Author</i>	<i>The author who has written the subreddit post</i>
<i>URL</i>	<i>The link of the subreddit post</i>
<i>Score</i>	<i>Each specific subreddit post has a number of score (likes)</i>
<i>Num_Comments</i>	<i>The number of comments within each different post</i>
<i>Created</i>	<i>The time when the subreddit post was posted</i>
<i>Comment</i>	<i>The comment's text within the specific subreddit post</i>
<i>Comment_Author</i>	<i>The person who has commented in that subreddit post</i>
<i>Comment_Score</i>	<i>The number of score (likes) the comment has received</i>

This dataset contains 17883 rows, or examples, where each specific row represents a different comment from a specific post or subreddit.

Data pre-processing

As a first step before exploring any data, we need to check for missing values and how we can handle these missing values. This step was also taken, and therefore we checked and removed all the missing values from our dataset. The next point of our analysis has to do with text pre-processing and manipulations that need to be taken before we continue with the sentiment analysis and cluster modelling.

Text pre-processing steps

These steps are widely used in every natural language processing project, and thereby it is very essential to take these steps before continuing with the sentiment analysis and topic modelling cluster. Below are the pre-processing steps taken for this dataset:

- ***Turning text into lowercase and normalization*** - which means that every word that is written in capital letters will be turned into lowercase letters,
- ***Tokenization*** - breaks text into individual units called tokens, assuming a bag-of-words model that ignores grammar and word order,
- ***Removing stopwords*** - we remove common filler words or stopwords, like ‘and’, ‘the’ and many others, since they add no value to the analysis of the posts or the comments.
- ***Removing punctuation and special characters*** - in this step, we will be removing punctuation, numbers, and special characters from the posts and the comments,
- ***Text lemmatization*** - “involves breaking words down to their root word”,
- ***Creating bigrams*** - where a bigram is a pair of consecutive words used as tokens in text analysis, unlike single-word tokens known as unigrams (Anandarajan et al., 2019).

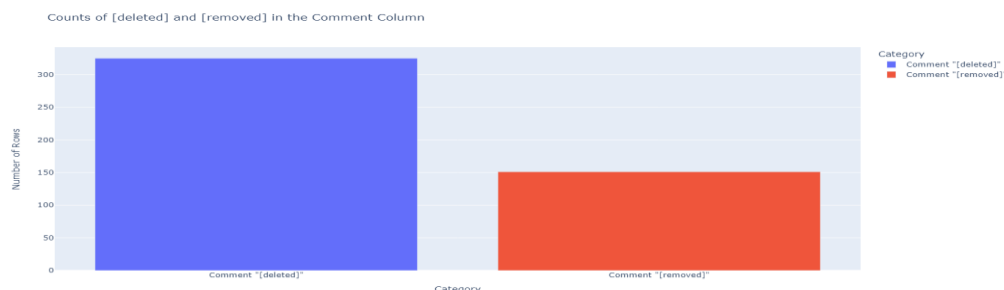
Handling the ‘[deleted]’ and ‘[removed]’ comments in the dataset

A comment is labelled as '[deleted]' when the author of the comment or the post deletes it, whereas '[removed]' indicates that the comment/selftext has been removed by the subreddit's moderator for breaching community rules (Chandrasekharan et al., 2018). Figure 1 shows that

the comment author cancelled 300 comments, whereas the subreddit administrator removed approximately 150 comments.

Figure 1

Barplot of '[deleted]' and '[removed]' comments in the dataset



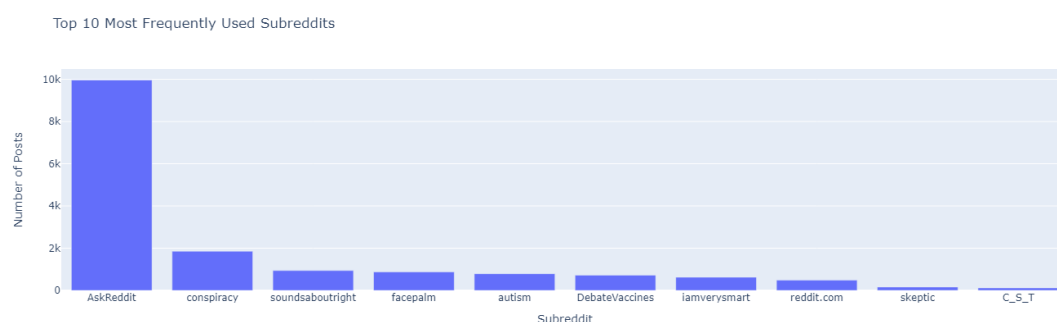
As a result, both categories of comments were removed row-wise before proceeding with the analysis.

The subreddits where this topic is being mostly discussed

The bar plot in Figure 2 shows that the question of whether vaccinations cause autism is predominantly debated in subreddits such 'AskReddit,' 'conspiracy', 'soundsaboutright', 'autism,' and 'DebateVaccines.' This demonstrates a high degree of participation and interest in the issue among these communities. The concentration of these in such various subreddits demonstrates the spread of disinformation and misinformation regarding vaccination.

Figure 2

Barplot showing the 10 most frequently used subreddits from the dataset



The range of scores through the posts and comments

Registered participants on Reddit may up-vote or down-vote comments to help organize and rank them on the site (Weninger et al., 2015). The code snippet thresholds = `[-float('inf'), 0, 5, 20, 50, float('inf')]` sets precise ranges for classifying comment scores. These thresholds separate scores into five categories: negative, neutral, low positive, medium positive, and high positive. This classification allows for a more systematic analysis and a better presentation of the distribution and influence of comment ratings within the dataset.

Figure 3

Posts Scores Categorized

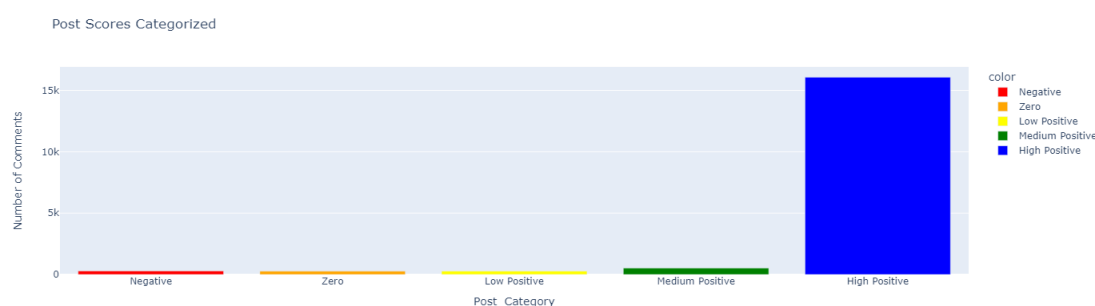
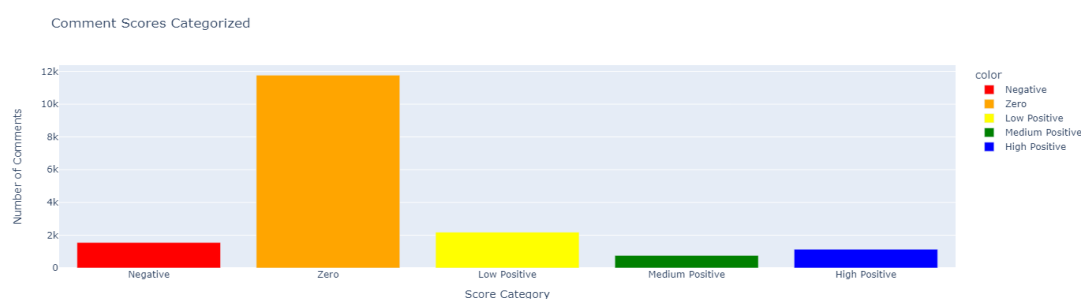


Figure 4

Comments Scores Categorized



Post Scores

From Figure 4, the majority of posts have a "high positive" rating, indicating a significant number of votes. This demonstrates a strong degree of interest and support for

postings about this topic. On the other hand, there are few posts with negative, zero, or low positive scores, indicating that postings are either highly engaged or attract little to no attention.

Comment Scores

From Figure 5, the distribution of comments is more diverse in comparison with the post scores. While the "zero" category dominates, showing that many comments do not earn either upvotes or downvotes, there is also a significant number of comments with high positive scores. This demonstrates that, while many comments go ignored, a considerable amount generate good engagement.

How this topic is perceived within the users - Sentiment Analysis

From Figure 6, we see that post titles tend to have more negative sentiment, followed by neutral tones. This pattern implies that users may create titles with a negative tone to gain more attention. Next, Figure 7 shows that the content of subreddit posts (selftexts) is largely neutral, with rare examples of both negative and positive feelings. Finally, Figure 8 shows that the sentiment distribution of comments on these subreddit postings closely matches a normal distribution. Although most comments lie in the neutral zone, the distribution of negative and positive feelings is roughly equal.

Figure 6

Sentiment Scores of Title Bigrams

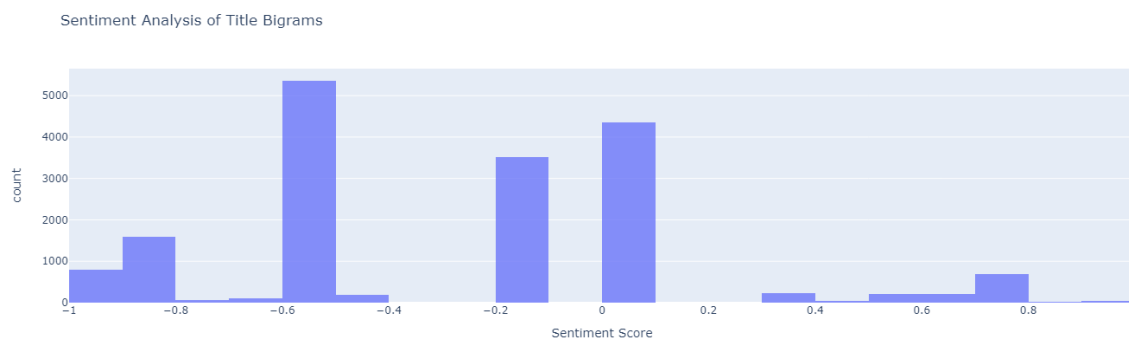
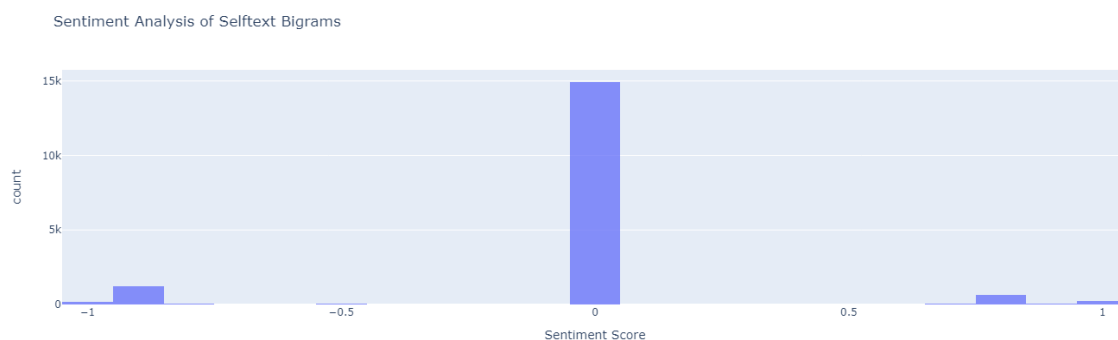
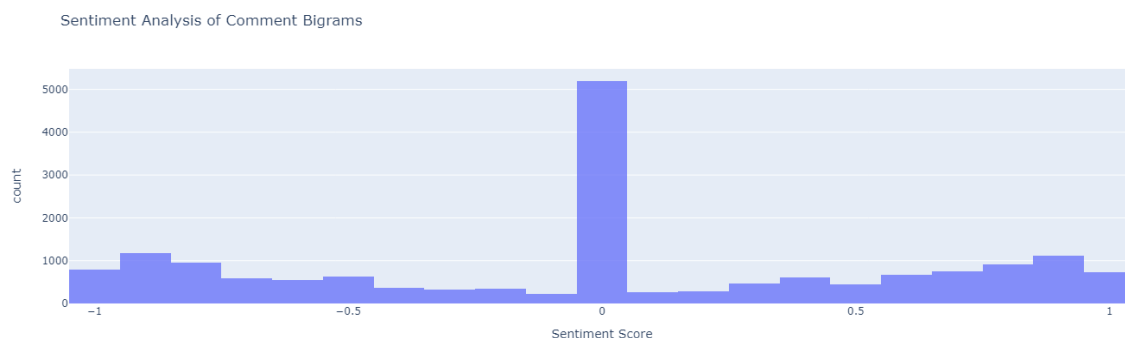


Figure 7*Sentiment Scores of Selftext Bigrams***Figure 8***Sentiment Scores of Comment Bigrams*

According to this analysis, subreddit post titles are frequently chosen to be negative in order to catch attention, although the actual content and following comments tend to be more balanced.

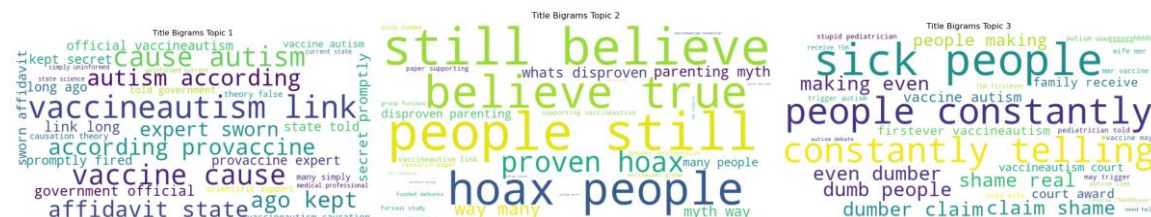
Topic modelling through clustering

Now we want to see in the headline (title), selftext (content), and comments what themes are most commonly discussed on the Reddit platform regarding the relationship between vaccines and autism, as well as how this misinformation is interpreted by various Reddit users. The number of clusters per category was chosen with the ‘elbow method’.

Title Topic Clusters

Figure 9 a-c

Posts' title topic clusters



Topic 1: 'Experts and government officials have shown that vaccines cause autism'

- In this cluster, the title attempts to show other users how government officials, as well as studies, have shown that there is a link between vaccines and autism and that vaccines cause autism. Some of these headlines are misleading, such “*Vaccines DO Cause Autism According to Pro-Vaccine Expert: The sworn affidavit states that he told government officials about the vaccine/autism link long ago, but they kept it secret and promptly fired him.*”². Overall, this headline demonstrates how extremism, appeals to authority, and conspiracy theories may be used to manipulate public opinion and propagate misinformation.

Topic 2: ‘Hoax or true?’ - This cluster, on the other hand, attempts to determine whether or not this information is correct and whether there is a link between vaccines and autism. It also shows that they want to show that maybe it is simply a myth that has not been confirmed.

Topic 3: ‘False claims on the link between vaccines and autism’ - shows the intense discussion about vaccines and the propagation of misinformation. Users in this cluster frequently communicate their opinions violently, demonstrating irritation and anger. This cluster shows how emotional the vaccine-autism debate is, caused by contradicting information and the controversial nature of the subject.

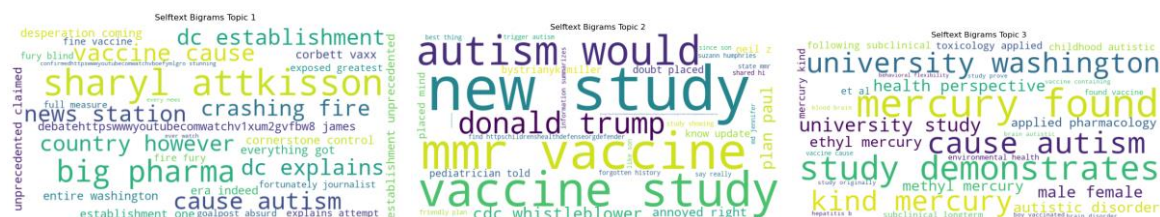
² Accessed via

https://www.reddit.com/r/conspiracy/comments/af839i/vaccines_do_cause_autism_according_to_provaccine/

Selftext Topic Clusters

Figure 10 a-c

Posts' selftext topic clusters



Topic 1: 'Big Pharma and Sharyl Attkisson' - This cluster contains falsehoods, stating that "Big Pharma" and the mainstream media covered up the vaccine-autism link. It portrays vaccines as hazardous and potentially suggests that powerful interests are suppressing this information.

Topic 2: 'Studies on vaccines-autism' - In this cluster, they are attempting to demonstrate fresh studies on 'mmr vaccines', thereby displaying the most recent research on this topic.

Topic 3: 'Study shows that mercury was found' - This demonstrates that they are linking the cause of autism to vaccines because mercury is thought to be a possible trigger for autism.

Comment Topic Clusters

Figure 11 a-d

Posts' comments topic clusters





Topics 1, 2, and 4: ‘Connecting the vaccines-autism narrative to conspiracy theories’

- In the subreddit's comments area, we see three topic clusters linking conspiracy theories, such as the flat earth idea, continuous misinformation, and the truthfulness of the moon landing, to the 2020 US elections and Donald Trump. Thus, the rhetoric in the comments section reflects a general preference to connect the vaccine-autism narrative with broader conspiracy ideas.

Topic 3: ‘Vaccines’ side effects’ - On the other hand, there are still people in the comments who are attempting to reinforce the concept that vaccines cause autism and that the side-effects may result in neurological damage and autistic children.

Recommendations

The data and text analysis show the prevalence of misinformation and disinformation on the link between vaccines and autism spectrum disorder in distinct subreddit communities. To build a more democratic public realm on Reddit, it is critical to apply techniques that mitigate misleading information exposure. By detecting and correcting these trends, we may create a digital environment in which truth and evidence drive discussions, allowing for better informed decisions that benefit society. In this section, we will look at what steps Reddit should take to reduce the spread of inaccurate information about vaccines and autism so that the platform does not become a channel for misleading information and lose its reputation. The strategies listed below are recommended to Reddit for implementation:

Moderation policies and User Reporting Mechanisms - Fostering clear community guidelines

Looking back at the Content Policy of Reddit, we can see that there is not much information on how people should handle or whether they are allowed to post information that

is false and misleading. From their Content Policy, especially Rule 5, it states that “You don’t have to use your real name to use Reddit, but don’t impersonate an individual or an entity in a misleading or deceptive manner” and Rule 6, it states that “Ensure people have predictable experiences on Reddit by properly labelling content and communities, particularly content that is graphic, sexually-explicit, or offensive” (Reddit, n.d.). Both of these restrictions in Reddit’s Content Policy illustrate that even if a user does not disclose their true name, they should not impersonate someone else, and that users are not permitted to post obscene or improper information.

Looking closely at Reddit’s Content Policy, we can see that there is a lack of attention put into how they will manage posts or even comments that communicate misinformation or disinformation. This lack of transparency in their policy applies to all types of misleading or inaccurate information, not just health-related information.

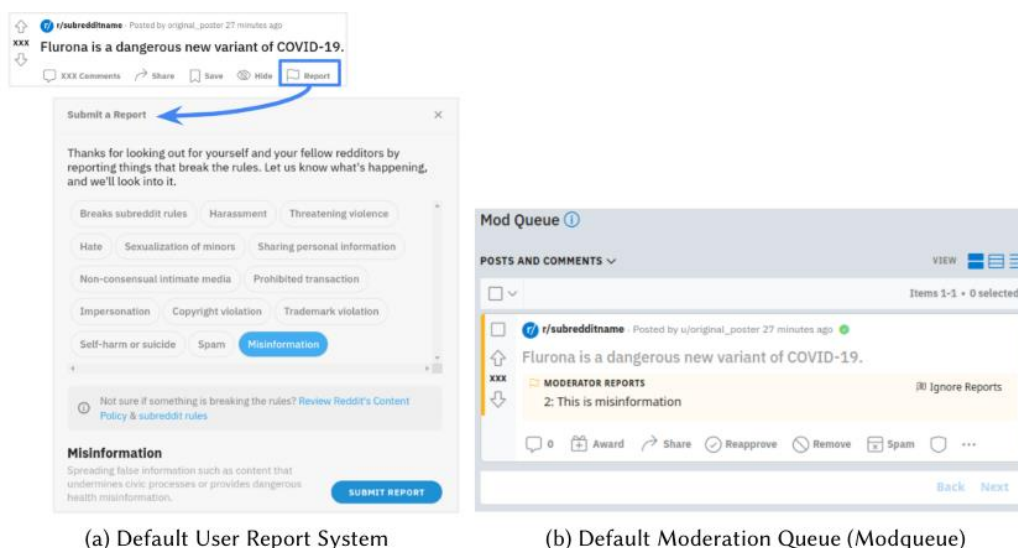
Our policy brief tries to fill this space by incorporating a new rule that prevents users from posting misleading and false information without being proven scientifically. This rule should explicitly mention that *‘Users are not allowed to publish content that contains misleading or inaccurate data. All statements regarding health should be supported by scientific evidence. Posts and comments that convey misinformation or disinformation without scientific validation will be moderated, removed for repeated users and they also may risk account suspension or banning’*.

Update Content Policy and Moderation

Labelling or flagging a post as misinformation was possible during the coronavirus period. They named it crowdsourced fact-checking, which is described as the process by which community members comment on a post to identify misinformation. For example, as illustrated in Figure 12, users could label a post as misinformation and comment on it with “This is misinformation.” (Bozarth et al., 2023).

Figure 12

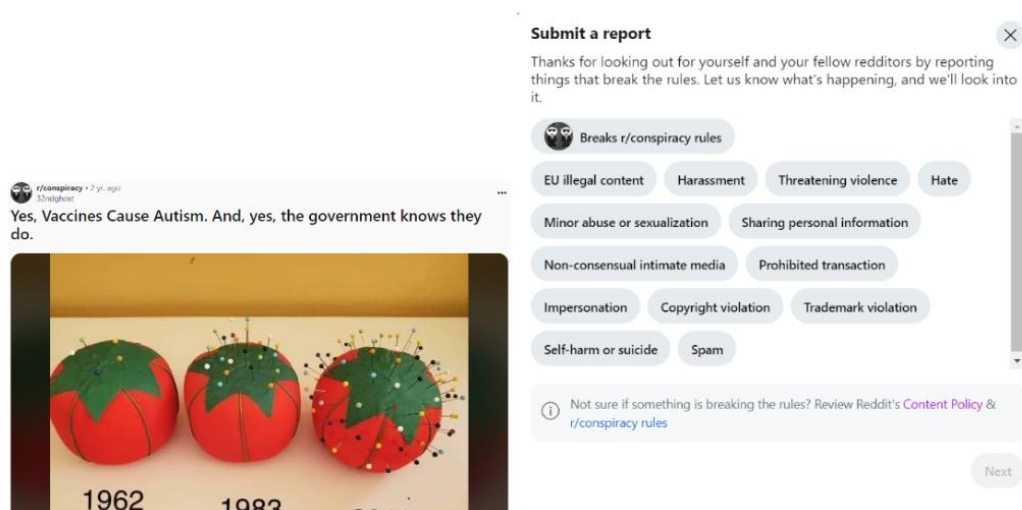
Labeling misinformation on the Reddit platform³



Unlike the situation that was before, this label no longer exists, as shown in Figure 13.

Figure 13

A subreddit post and its reporting options⁴



It seems obvious that crowdsourced fact-checking is no longer one of the reporting possibilities on Reddit posts. As a consequence, it is critical that Reddit reintroduce this option

³ Adopted from (Bozarth et al., 2023)

⁴ Accessed from https://www.reddit.com/r/conspiracy/comments/za1qo4/yes_vaccines_cause_autism_and_yes_the_government/

and include the formerly stated new rule for addressing misleading misinformation in its own Policy Content in order to foster a more democratic digital public sphere.

Additionally, crowdsourced fact-checking by users and an update to the Content Policy are not the only two measures required to promote truth and the common good on the Reddit platform. Another step that could be taken is for the subreddit's moderator to flag these subreddits as misleading and then send warnings to the author of these misinformation posts. If this process is repeated more than three times by the same author, they should be banned from the specific subreddit community.

Educate Users and provide fact-checked information

According to the World Health Organization (WHO, 2021), social media platforms should utilize standards to identify reputable health information sources and help content creators share accurate health information. They stressed the importance of media literacy training for the general population in identifying reputable health information online and urged platforms to establish such programs. Content monitoring should be broadened to cover many platforms and languages, especially comment sections where misinformation and disinformation can propagate. Finally, social media businesses should commit to removing misinformation, assisting users in meeting high health standards, and working with authorities and researchers (WHO, 2021). The steps that Reddit should take in order to handle misinformation related to health, especially the link between vaccines and autism, are listed below:

- ***Collaborate with WHO and other reputable health organizations*** - Reddit should work closely with WHO in order to combat the spread of online misinformation and disinformation. Reddit should form an official partnership with WHO and other reputable health organizations in order to promote accurate health information. Lastly, Reddit, in collaboration with these organizations, should offer joint health campaigns

and promote them more on their platform in order to prevent misinformation and educate users on accurate health information.

- ***Enhance fact-checking*** - Reddit should integrate into its platform third-party fact-checking services in order to review health-related posts and comments for accuracy and prevent false information. On the other hand, Reddit should also introduce a new label known as “verified by credible sources” and these posts and comments should be more prioritized in order to make it easier for users to identify credible information.
- ***Promote media literacy*** - In order to prevent false information in the link between vaccines and autism and to promote truth and common good norms in their platform, Reddit should create educational content that shows users how to identify credible sources of information. This type of content could include videos, quizzes, and tutorials in order to engage users in learning about media literacy and the importance of accurate health information.
- ***Expand content moderation*** - It is a known fact that users across different social media platforms communicate their thought/ideas in different languages, and Reddit is not an exception. Therefore, Reddit should build artificial intelligence (AI) and machine learning (ML) tools in order to detect and flag various languages misinformation content in real-time while at the same time assisting human moderators.

Impact and Implementation

Economic Impact

Implementing those guidelines might improve Reddit's image as a trustworthy source of information, attract more users and advertisers, and result in a larger user base and income. However, implementing these policies may involve considerable financial expenditure, which might have a negative effect on revenues. The expense of training and developing new AI systems, as well as training moderators, will be significant for Reddit.

Social Impact

Promoting legitimate health information and combating misinformation on Reddit can result in improved public health outcomes. Users who will be well-educated on health topics like vaccines and autism are more likely to make informed decisions, which may increase vaccination rates. On the other hand, increased surveillance may have an adverse impact on speech, prohibiting people from sharing or participating in debates regarding controversial but crucial health concerns.

Political Impact

By efficiently combating misinformation, Reddit may enhance its political responsibility while simultaneously building relationships with lawmakers and practicing more influence over its policies. Contrary to the belief that combating misinformation is needed for a well-functioning digital public sphere, it could be seen as politically biased.

Challenges to implementation

- **Technical and operational challenges** - When developing and training machine learning models in order to detect misinformation in different languages on Reddit, it could be a complex and intensive task. While training these tools, the developers should keep in mind that it is a very challenging task to have low false positives or negatives. Moreover, recruiting and training enough experienced moderators to address health misinformation in several languages is difficult, but it is critical to maintain continuous moderation.
- **Balancing free speech** - Content moderation on Reddit will also have challenges from the viewpoint of a digital public sphere where free speech is essential. As we mentioned before, according to a study, content moderation involves balancing freedom of expression and preventing harm from misinformation. This research shows that most US citizens, regardless of their political views, prefer to remove harmful

misinformation over protecting free speech, especially when misinformation or disinformation has serious consequences (Kozyreva et al., 2023).

Implementing these proposals might dramatically improve Reddit's reputation as a responsible platform for public health information. While there are economic, social, and political obstacles to address, the potential advantages for public health, accurate information, and overall well-being justify these efforts.

Conclusion

In this policy brief, we demonstrated the role Reddit plays as a digital public sphere, especially in the context of displaying information about critical health issues like the link between vaccines and autism. Our analysis reveals that, while Reddit provides a very good platform for interactive debate, it also unintentionally facilitates the spread of misinformation via its echo chambers or subreddits and its not-so-well-structured content policy. Moreover, we emphasized the importance of this issue and why it is crucial that platforms like Reddit have the responsibility to work on it as soon as possible.

Therefore, we recommend enhancing user reporting mechanisms and implementing stricter moderation policies by updating the platform's content policy to explicitly prohibit the dissemination of unverified health information. Moreover, collaborating with reputable health organizations like the WHO, integrating third-party fact-checking services, and promoting media literacy among users are also essential steps toward having a more truthful and responsible digital public sphere.

Consequently, addressing misinformation on Reddit not only protects overall public health but also preserves the platform's reputation and trustworthiness. If these efforts were made, then we would all have a more informed and healthier community, knowing that the discussions on Reddit are based on evidence and fact, thereby encouraging the truth and the common good.

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Code and Dataset

The code and the dataset could be accessed in GitHub via this link:

<https://github.com/leonahasanii/PolicyBriefReddit>