Araştırma Makalesi

FROM PANDEMICS TO INFODEMICS: A NETNOGRAPHIC ANALYSIS ON A COVID-19 FACEBOOK SITE[1]

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Abstract

This study aims to gain insight into Covid-19 infodemic in online communities. For this purpose, a netnographic study was conducted on a Covid-19 specific Facebook site broadcasting in Turkish language. In this context, what kind of content people are exposed to on this site, how they react to the contents and participate in discussions, and how these content, and discussions differ from those around the world were examined. As a result of the thematic coding, it was seen that the themes concentrated on 9 main themes: Precautions, Emotions, Government / Governance, Medicine / Science, Conspiracy Theories, Media, Risk, Business / Money, Ideology, and Religion. When examined in terms of variety and nature, it was seen that the content shared on the site and the discussions shape mainly around masks, Bill Gates, and irony / mockery expressions.

Keywords: Covid-19 Pandemic, Infodemic, Conspiracy Theories, Netnography

PANDEMİDEN İNFODEMİYE: BİR COVİD-19 FACEBOOK SİTESİNDE NETNOGRAFİK BİR ANALİZ[2]

Öz

Bu çalışma, çevrimiçi topluluklarda Covid-19 infodemisi hakkında fikir edinmeyi amaçlamaktadır. Bu amaçla, Türkçe yayın yapan Covid-19'a özgü bir Facebook sitesinde netnografik bir çalışma uygulanmıştır. Bu bağlamda, ilgili sitede insanların ne tür içeriklerle

karşılaştıkları, içeriklere nasıl tepki verdikleri ve tartışmalara nasıl katıldıkları, bu içerik ve tartışmaların dünya genelinden nasıl farklılaştığı incelenmiştir. Araştırma kapsamında yapılan tematik kodlama sonucunda şu 9 ana temaya yoğunlaşıldığı görülmüştür: Önlemler, Duygular, Devlet / Yönetişim, Tıp / Bilim, Komplo Teorileri, Medya, Risk, İşletme / Para, İdeoloji ve Din. Çeşitlilik ve nitelik açısından incelendiğinde, sitede paylaşılan içerik ve tartışmaların ağırlıklı olarak maske, Bill Gates ve ironi / alaycı ifadeler etrafında şekillendiği görülmüştür. Komplo teorileri açısından değerlendirildiğinde, toplulukta paylaşılan komplo teorilerinin özellikle Amerika ve Avustralya'dakilerden kısmen farklı olduğu görülmektedir.

Anahtar Kelimeler: *Covid-19 Pandemisi, İnfodemi, Komplo Teorileri, Netnografi*

INTRODUCTION

As emerged back in November 2019, Covid-19 is currently on the agenda of the whole world. Since the beginning of 2020, the governments, press & media, scientific institutions, and corporations from around the world are alert as well as people. As Covid-19 has been spreading, the amount of conversations about it has also been on the rise.

Social media is a major channel for news and information sharing. While there are 7.7 billion people in the world, 3.5 billion of these are online; which means social media platforms are used by one-in-three people in the world, and more than two-thirds of all internet users (Ortiz-Ospina, 2019). Facebook seems it dominates the social media ecosystem with more than 2 billion users.

In contrast to traditional media like newspapers, TV, radio, etc., which provide a one-directional information flow, social media allow people to have an interaction with each other. As virtual groups are formed as a result of these interactions, many different issues can be discussed by large masses of people. In spite of the fact that these groups sometimes lead to echo-chambers to be formed, these virtual platforms also represent a media for forming public opinion.

During Covid-19 pandemic, it is seen that social media is also a platform for sharing health information as well as misinformation, and disinformation –infodemic in short. As World Health Organization states, an infodemic is an overabundance of information – some accurate and some not – occurring during an epidemic (World Health Organization, 2020).

This article aims to get an insight into the conversation taking place on Facebook, the most used social media platform in Turkey and in the world, by applying a qualitative analysis on a Covid-19 specific Facebook site. The most outstanding finding is that (1) the conversation taken place on the target Covid-19 page is mostly about mask usage and Bill & Melinda Gates, and (2) other than these two topics (mask and Gates), the nature and the context of the conversations differ from the general Covid-19 related conversations taken place in the world, especially in America, and Australia.

BACKGROUND

Human Coronaviruses have been known since the 60's, and every year many people had it in mild forms. It is estimated that the rate of colds that are caused by Coronavirus is 15% (Kahn & McIntosh, 2005). However, a new virus has emerged in China in December 2019, which is called 2019 novel coronavirus (2019-nCoV), to be called as Covid-19 from now on, and caused a pandemic.

Since the start of pandemic, social media has majorly been the main source of conspiracy theories about Covid-19. In addition to Covid-19 related conspiracy theories, and myths, misinformation (unintentionally misleading information), disinformation (intentionally deceptive information), and infodemic (unnecessarily excessive amount of information) have also come to the fore.

On February 15, 2020, in Munich Security Conference, Dr. Tedros Adhanom Ghebreyesus, World Health Organization Director-General, expresses the concerns regarding the Covid-19 related fake news as;

"… But we're not just fighting an epidemic; we're fighting an infodemic. Fake news spreads faster and more easily than this virus, and is just as dangerous. That's why we're also working with search and media companies like Facebook, Google, Pinterest, Tencent, Twitter, TikTok, YouTube, and others to counter the spread of rumours and misinformation (World Health Organization, 2020)."

Infodemic can be regarded as an enemy to fight since it may influence crowds very strongly, and alter people's behaviors against the measures taken by the governments, and health authorities. Especially in online platforms and social media, infodemic may be extremely dangerous and uncontrollable. False news reaches more people than the truth does (Vosoughi, Roy, & Aral, 2018). To give an example, according to the research based on a Twitter dataset, "the top 1% of false news cascades diffused to between 1000 and 100,000 people, whereas the truth rarely diffused to more than 1000 people (Vosoughi, Roy, & Aral, 2018)."

It is known that in order to fight infodemic many governments take several different measures. According to Radu, "anti-misinformation measures adopted by governments vary greatly on a soft-hard law continuum; when legislation is passed, the regime type (democratic, non-democratic) does not influence significantly its content with respect to freedom of expression limitations and long-term chilling effects (de Gregorio & Radu); democracies tend to have more counter-measures that are publicly deliberated (task forces, media literacy courses, etc.), whereas autocracies tend to pass new laws or extend existing provisions to cases of disinformation (Radu, 2020)." However, it is clear that in spite of all the measures infodemic does not seem to be seized.

When it comes to the question of why people are sharing misinformation about the virus, the study (Pennycook, McPhetres, Zhang, Lu, & Rand, 2020) about Covid-19 misinformation on social media reveals significant results from an online survey conducted with 1700 adults who are active Twitter or Facebook users located

in the U.S. During the survey, 15 true and 15 false news about Covid-19 were shown to the participants in random order. They were first asked their opinion as to whether a news shown to them is true or not (to best of their knowledge); and then asked if they would share that news. The results showed that people with less intellectual capacity and who usually rely on their intuitions fail to discern true and false content, and tend to spread fake information more.

Currently, millions of people are getting information and changing ideas via online communities like groups, forums, social networking sites, and so on. Online connections and alignments are increasingly affecting our social behavior as citizens, as consumers, as friends and family, and as social beings (Kozinets, 2010, s. 13). For this reason, online communities are becoming more and more popular field for social researchers. The Covid-19 pandemic has also become a frequently shared issue in social media. For this reason, it would be meaningful to conduct a netnographic study to examine the reflection of the pandemic on social media.

Known by Kozinets, netnography is a method which aims to study the online communities and cultures. Netnography is similar to etnography with an only major difference that netnography focuses on online communities. Ethnography is the study of people in naturally occurring settings or 'fields' by means of methods which capture their social meanings and ordinary activities, involving the researcher participating directly in the setting, if not also the activities, in order to collect data in a systematic manner but without meaning being imposed on them externally (Brewer, 2000, s. 10). Referring to ethnography, Kozinets (2010) describes netnographic procedure as planning, entrée (formulating research question(s) and choosing the appropriate online community), gathering data, interpretation, and adhering to ethical standards (s.59).

The intention of this paper is to research how the specific Facebook audience discuss Covid-19 online, and what these conversations tell us about how the audience perceive the disease.

Research questions:

This research explores the discourse (posts and comments) on a Covid-19 related Facebook page. The guiding questions of the research are as follows:

• What type of information are people exposed to in these online communities?

• Which experiences, opinions, feelings, and attitudes about Covid-19 related information do people express?

• Which topics do these posts, and comments focus on most, and are they different from the ones discussed worldwide?

METHODOLOGY

Procedure

This explorative netnographic study was conducted on a Facebook site "Corona Gerçeği (Corona Truth) – Corona news that is not on the agenda" which is liked by 820 people and followed by more than 8.000 people. The language of the site is Turkish. There are also a Twitter account, and a web page linked to the site. The study is a netnographic study, and the study only covers the posts and comments only on "Corona Truth Facebook Site".

The site has been open since May 2, 2020, and is still posting. In this study, the data represent the posts, and the arguments (comments) published for two months, between May 2 to June 29. After gathering the qualitative data through Facebook posts and comments, full transcripts were analyzed through content analysis using the QACDAS program, QDA-Miner Lite.

In qualitative studies, it is important that people who are experts in the field of qualitative research follow the study and provide critical feedback to the researcher. Feedback received from experts increases the reliability of qualitative research. For this purpose, ideas were exchanged with two experts in the field during this research process and the expert opinions of these people were taken into consideration.

With the light of the content and the field notes taken during the study period, a codebook was codified. At the end of the coding process, there appeared 9 basic themes: Precautions, Emotions, Government / Governance, Medicine / Science, Conspiracy Theories, Media, Risk, Business / Money, Ideology, and Religion. To prevent loss of meaning, the codes, the sub-codes, and example content were translated into English in the final phase of this study.

Table 1: Codebook for Facebook Data

Main Codes	Sub-codes	Example Content
Precautions	Mask Usage	* I have actually witnessed that the mask reduces oxygen intake. I can breathe through my nose comfortably without a mask, but even breathing through my mouth is not enough with a mask.
		* While wearing a mask, our lungs turn the fresh air into carbohydrates, it becomes difficult to breathe. I say try it for 2 hours without removing it.
	Social Distancing	* In the WHO's comprehensive report of more than 100 pages in 2019, no evidence was found that social distancing, travel restrictions and curfews reduce the risk of spreading.
	Hygiene	-

	Quarantine / Lockdown / Isolation	* Quarantine weakens our immune systems. We'll all stay in quarantine for long, then we'll all go out all at once, and when our immune systems are weakened, we'll exchange germs and viruses again.
	Testing	* They officially took humanity hostage with fake tests.
		* What vaccine of the virus, which is determined by unreliable tests by 86,6%, has not been separated, and is said to exist only according to the information from the center? Moreover, such a low death rate? They will fool more in the flu season called the 2nd wave.
	Travel Restrictions	* The contradiction of removing the travel restriction and still keeping the age of 65 in homes is not understandable!
	Closure of Schools	* Are Children Immune to Covid-19? Is Closing Schools Useful or Not? In a comprehensive study from Iceland, it was found that no child under 10 years of age was infected with the virus.
Emotions	Fear / Panic	* For months, a lot of nonsense, such as viruses, masks, social distances on TV screens, night and day, lies and lies ... Creating confusion and making people completely in fear and panic, and unresponsive. Wasn't these what the global rulers had already constructed?
	Thanking / Appreciation / Celebration	* I mean, I'm not convinced by such things anymore, I don't believe everything I see. at least my questioning capacity is increasing. I can compare it within my own body. So thank you for your sharing.
		* Well said girl! It could only be spoken so well in that short time.
	Irony / Mockery	* Once upon a time, the world power made a dog out of people.
		* Keep hypnosis?
		* The so-called patient (!) forcibly held in the Quarantine Center in Russia
	Hate / Anger	* Plague take it!
		* All the same, psychopath, liar, far from science
		* California based trickster game
	Profanity / Insult	* These are evil, killer. They defile everything.
		* Mentally ill, homo. Playing god.
	Doubt	* I can no longer distinguish what is true and what is a lie. I do not know.

		* This image does not seem convincing to me. It is like an effort to be shown scientifically.
Government / Governance	WHO (World Health Organization)	* In 2017, the World Health Organization (WHO) reluctantly admitted that the global explosion in polio was predominantly vaccine-induced.
		* There was a scene there and the World Health Organization played in this game.
	Government / Policy	* The people depicted as the dog in the photograph, and the government depicted as human. I just realized.
		* More people die when the virus kills, due to the Corona measures put into effect by the government.
	Citizen / Civil Rights	* While constitutional and human rights are being violated, opposing voices are being heard from all over the world.
		* Wearing a mask limits my freedom.
Medicine / Science	Chloroquine (and other compounds)	* If treatment with hydrochlorine does not end soon, there is widespread risk of death, especially in Africa.
	Vitamin C	* It is known that chloroquine and high doses of vitamin C damage erythrocytes that carry oxygen in the blood, namely red blood cells, in the "glucose 6 phosphate dehydrogenase deficiency". This is also called "Favism".
	Immunity / Immune System	* If this were a brand new virus, as claimed, our immune system would not have the chance to recognize this virus so quickly.
		* The immune systems of the people who are locked up at home are weakened due to fear and inactivity.
	Vaccine(s)	* Denmark imposes obligations on the upcoming vaccine. If you object, the security units will be able to raid your house and force you inoculation.
		* I am not against vaccines until the age of 16, but it is not clear what happens in vaccines for influenza or cervical cancer.
	Other diseases (like Pneumonia, Dyspnoea)	* These cases are more common when the underlying two factors coexist: hemolysis, microthrombia, and shortness of breath, without the typical symptoms of pneumonia.
	Smoking	* Most important of all; smokers please stop suicide blissfully.
		* Well, on any average day when you go out, how many times are you exposed to a smoker (s) on the street while walking?
Conspiracy Theories	Plandemic	-

	Bill / Melinda Gates	* Gates says, I am quoting his own words; "If we are successful in vaccines, health and reproduction, we can reduce the world population by 10-15 percent."
		* Yes, very true, unfortunately, it's all a game. Bıll Gates wants to take control of the whole world and forcibly vaccinate. Everybody wake up, do not get vaccinated.
	5G Technology	* Corona is an excuse. Viva slavery with 5G.
		* Scientific Evidence of the Negative Effects of 5G on Health and the Environment: http://www.ehtrust.org
	Population Control	* A month later, Gates said on Ted Talk that new vaccines could "reduce the population".
		* Saying that the world population should be reduced, how come Bill Gates is trying to find a vaccine..
	BIG Pharma	* Institutes that should check the vaccine manufacturers have not been able to provide any documentation / evidence that the vaccines are safe.
		* South African newspapers, on the other hand, express their complaints by saying "We are guinea pigs for pharmaceutical companies".
	Biological Weapons	-
	Filing Misleading Death Causes	* Even if I'm going to die, I won't print Covid on my death report
		* Doctors are pressured to say Covid when writing death reports.
	Other Conspiracy Theories	* Vaccine is an excuse. They'll chip us.
		* The Rockefeller Foundation's Surveillance-Audit Scenario from 2010 that tells these days.
Media	Censorship	* In the last 3 months, a record level of information on social media and YouTube has been deleted and banned.
		* One of Facebook's penalty justifications says that you do not have the right to wake our sheep about the corona.
	Fake News	* Don't let anything you see in mainstream media influence your perceptions and form your opinions.
		* Biased and false news shared on social media is poisoning our country.
	Misinformation / Verification	* Independent confirmations that Facebook decided to be independent said it was unfounded for this video? They even don't have a name!.

		* The Report concluding the "false alarm for Covid" leaked to the press by the German official.
Risk	Fatality Rate	* Based on figures from various countries, it calculates that the lethality of Covid-19, like influenza, is about 0.1%.
		* This corona virus is no more dangerous and deadly than the strong flu waves of the past.
	Infectiousness	* There was no Covid, but the doctors wrote 'infectious disease' in the death report, and this is impossible because if my deceased father has Covid, our family should also have Covid.
Business / Money	Service Industry	* Both human and goods mobility stalled at the international level.
	Medical Services	* What about the doctors and healthcare teams dealing with patients called Corona?
	Education System / Industry	* Is it helpful or not to shut down schools?
	Tourism	* Because of the pandemic tourism industry weakened.
	Technology Industry	* Scanners using advanced functional magnetic resonance imaging (fMRI) technology to become the standard in airports and other public areas to detect "antisocial intention"
	Economy (in general)	* But believe me, we are about to enter the deepest economic crisis we have seen in the last 300 years.
Ideology and Religion	Capitalism	* The global mafia wants to earn more.
		* The capitalists are obsessed with the oxygen of the nation
	Racism	-
	Religion / Creator / God	* You will all be punished by God.
		* Nobody but God can help us. Let's pray a lot.

Source: Compiled by the author

Ethics

During the period of this study, close attention was paid to the ethical implications in data collection stage, field notes stage, and analysis stage. Not any single account and/or person is specifically investigated and/or contacted to. All argumentations among the users and the moderator are followed quietly, and without any interruption (lurking).

The necessary permission was taken from the moderator of the Facebook site in written form. In addition to the moderator's permission, an approval was taken

from Scientific Research and Publication Ethics Committee of Sivas Cumhuriyet University.

Limitations

The Facebook site "Corona Facts" has been open since May 2, and is still posting. But the study covers the data from May 2 to June 29. In addition to the time boundary, the study covers a small purposeful sample –a single Covid-19 related Facebook site-, so it limits the findings' generalizability. However, a qualitative research does not always aim to generalize but to help the researcher gain an insight into the topic. Qualitative research, by nature, also has limitations in complete objectivity. Almost all qualitative researches include subjectivity at some scale, since it may be affected by the researchers own ideas, point of views, logic, and emotions.

Within the context of this specific research there are also other limitations. The first is, during the period of this study, some contexts (posts) were shared by the moderator more than once. Since every time the context had got visibility, and got different comments (in most cases from different users), each context was included separately in the study. The second is, many times external links (other web sites, news sites, YouTube videos, scientific and non-scientific articles, etc.) were included in the posts. The transcriptions were not done for these external links. Nevertheless, if these external links' contexts were "organically" shared as "contexts" in the page, the context was accepted as raw data, and included in the analysis. And the last limitation is, only the posts in text format was included in the analysis. Audiovisual content, like videos, gifs, and pictures, were not included in the analysis.

RESULTS AND DISCUSSION

The final results of the research reveal that the most talked about topics in the site are masks (theme precaution), Gates (theme conspiracy theories), irony / mockery (theme emotions), government / policy (theme governance).

**Figure 1:** The Frequency of Most Talked About Topics

Distribution of codes (Frequency)
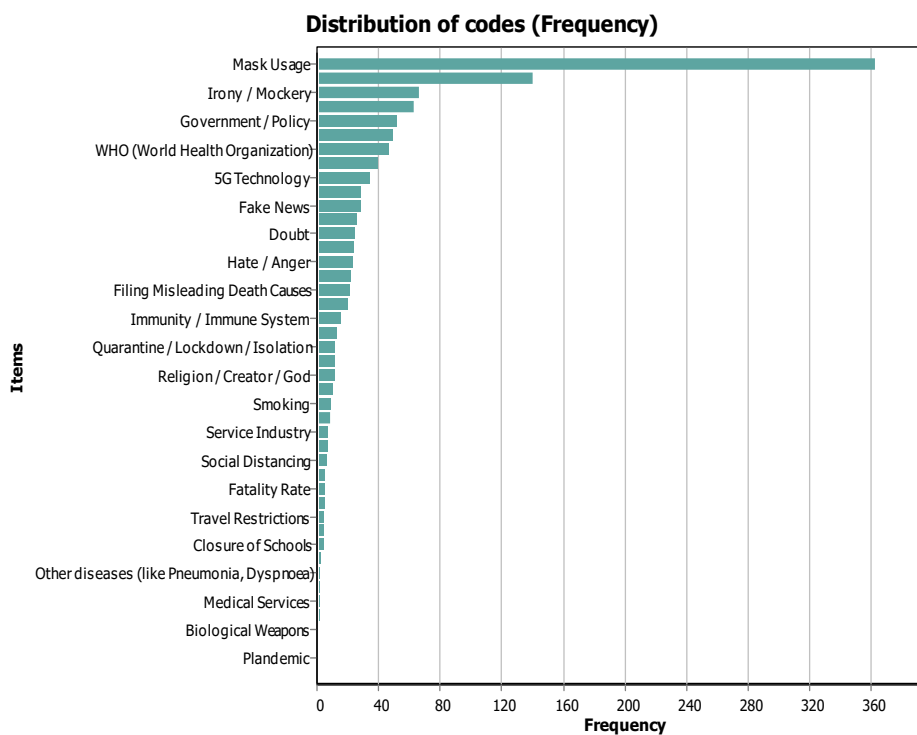
Figure 2: Word Cloud
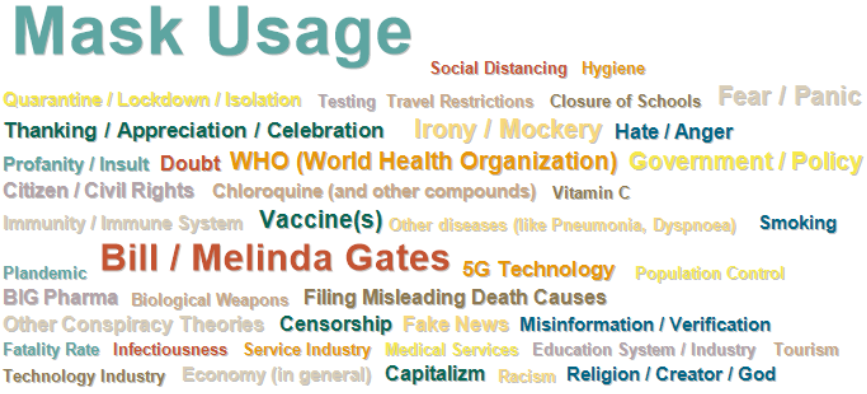
As for the themes, below are the detailed analysis of the themes and topics.

Theme 1. Precautions:

Currently, the "mask, distance, hygiene trio" has been used as the health communication message. Nonetheless, in the current study, mask seems as the predominant theme. Among many Covid-19 precautions, including the "mask, distance, hygiene trio", masking is the one around which the most conversation is shaped (by 93%). In most of the cases, people are against the mask claiming that mask usage decreases the oxygen intake, it is hard to use masks, there is no evidence about the protection it supplies, etc.

In the study, there is almost no conversation about hygiene, washing hands for at least 20 seconds, and not touching face; which is very interesting. The reason behind that result could be Turkish people think they are very hygienic and it is not a specific topic to discuss.

Figure 1*:* Frequency of Theme 1- Precautions
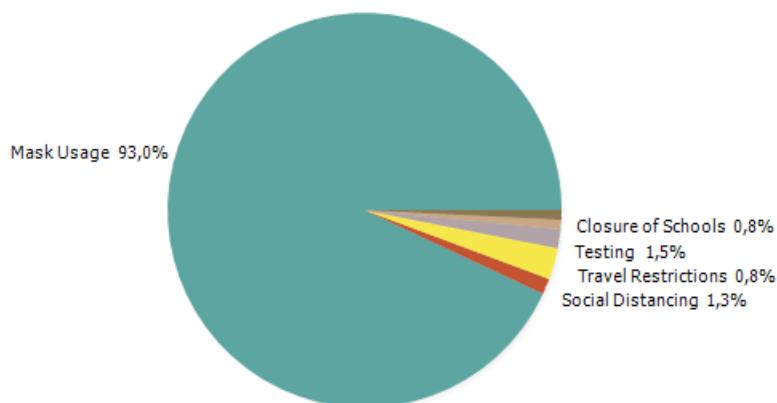
As for the high percentage of conversation about mask, the reason behind it may lie under "availability heuristic". Since the beginning of the pandemic, Turkish people have many issues with masks. In the early times of the pandemic, mask supply chain was not efficient enough, and many people had difficulty finding mask. So, it would not be wrong to say that the mask subject has long been in people's heads.

Figure 2: Turkey Google Trends Search Result about Covid-19
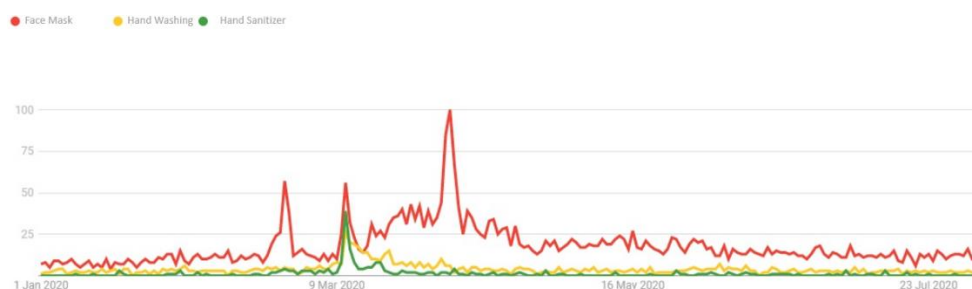
Another reason why "mask" is a popular topic is that people can see, and feel the masks. It is solid and tangible. It is not like an invisible thing or concept. People see a lot of people wearing masks every day. They see mask tutorials on TV, web or on YouTube. They are obliged to use masks. But no one forbids them to hug or to wash their hands. So this precaution is at hand, and easily available to complain.

Secondly, and more expectedly, using mask is really discomforting. This is the crystal clear reason behind the conversations. And this explanation is the "Occam's Razor".

Theme 2. Emotions

When looked at the emotions it is seen that frequencies are almost fairly distributed. The dominant emotion is Irony/mockery (30%) followed by fear/panic (28%).

Figure 3: Frequency of Theme 2 – Emotions
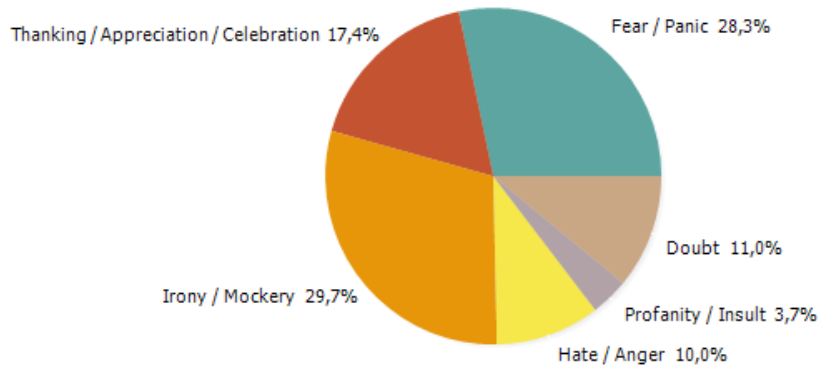
In the specific Facebook site, Corona Truth, the conversations are mostly about the claim that Covid-19 is not a thing to exaggerate. The posts shared, the comments made are mostly defends this claim. There are many conversations claiming that people are deceived, and smart ones are awake and alert. For this reason, there are a lot of conversations with mockery/irony sentiment.

As for fear and panic, most content claim that people are purposefully driven to fear by government, WHO, and media.

Most of the thanking context (17%) comes from people who think the contexts and ideas confirm their beliefs. So it is possible to say that, thanking is closely related to "confirmation bias". Doubt (11%) is also mostly coming from confirmation (like in the sentence "however, the numbers are also doubtful").

As for the rest, hate, anger, and insult, the audience of the community do not seem quick-tempered but moderate people. The insults or hate feelings are mostly mild ones (like "dogs, donkeys, slaves". There are no F words, no racist words etc., with an only exception which is a homophobic insult "Mentally ill, homo. Playing god").

Theme 3. Government / Governance

Under the government theme, it is seen that government (43%) is criticized mostly for taking exaggerated precautions for Covid-19. As for WHO (39%), it is mostly blamed for the so-called Pandemic. It is also seen from the conversations and contexts that most precautions seem as a violation of human rights.
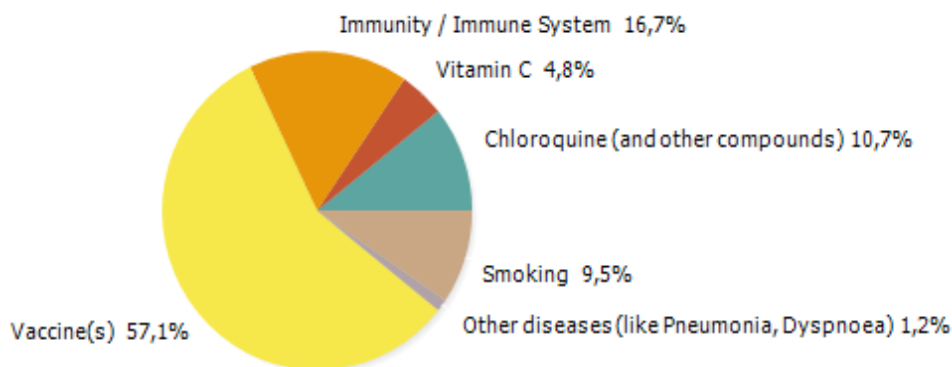
Figure 6: Frequency of Theme 2 – Governance
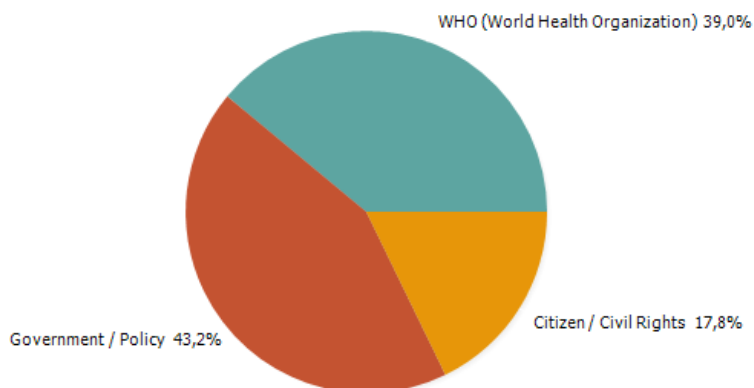
Theme 4. Medicine / Science

Under medicine and science theme, the most conversations area about vaccines (57%), followed by immunity (17%), Chloroquine (11%), and smoking (10 %).

Figure 7: Frequency of Theme 2 – Medicine / Science

Vaccines, being the hot topic under this theme, are very frequently used word in everyday language. Currently, the whole world relies on the vaccine to be developed. So this result is an expected result. As for immunity, most arguments on the Corona Truth Facebook site about immunity claim that our immune system is strong enough to fight such a virus as it fights with seasonal flu and other infections. In spite of the fact that some low voices (comments) state it is just wishful thinking, they are really minority indeed.

It is seen that smoking is somehow important topic for the audience as Covid-19 is a respiratory virus infection, and people are aware of that (regardless of how serious one should take Covid-19 is) smoking is harmful, no doubt.

Under this theme, the most interesting topic is Chloroquine (and Vitamin-C in some cases). It is seen that the word Chloroquine is not mentioned by individuals. We see the word in the text shared as posts, not as comments. There may be two reasons for that, the first the audience may not know this compound since it is a chemical and sounds highly scientific, it is not like "aspirin". The second is the word is so complicated to say and to spell correctly. Even one knows it is a compound used for Covid-19 treatment, in order to make a comment about it one should have even a little scientific knowledge and confidence.

Theme 5. Conspiracy Theories

According to Cornell University Alliance for Science website (Cornell Alliance for Science, 2020), top 10 current conspiracy theories are;

- Blaming 5G
- Bill Gates as scapegoat
- The virus escaped from a Chinese lab
- Covid-19 was created as a biological weapon
- The US military imported Covid-19 into China
- GMOs (genetically modified organisms) are somehow to blame
- Covid-19 doesn't actually exist
- The pandemic is being manipulated by the 'deep state'
- Covid-19 is a plot by Big Pharma
- Covid-19 death rates are inflated

As for the myths, there are a lot of myths about Covid-19 from around the world. World Health Organization (WHO) has compiled many of them as follows;
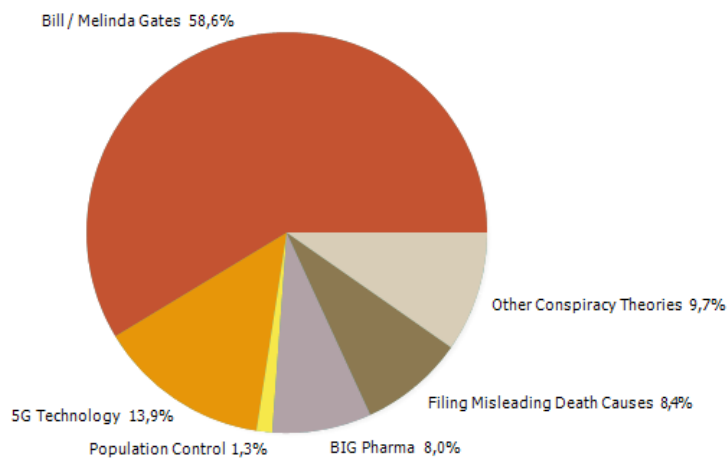
Figure 8: WHO - Coronavirus Disease (Covid-19) Advice for the Public: Mythbusters

- 5G Mobile networks
- Alcohol
- Antibiotics
- Bleach
- Cold weather, snow
- Drugs
- Garlic
- Hand dryers
- Holding your breath

- Hot and humid climates
- Hot baths
- Hot peppers
- Houseflies
- Hydroxychloroquine
- Masks, CO2 intoxication
- Masks, exercise
- Medicines
- Methanol, ethanol
- Mosquitos

- Older people, younger people
- Pneumonia vaccines
- Recovery
- Saline
- Shoes
- Sunny and hot weather
- Thermal scanners
- Ultra-violet (UV) lamps
- Viruses, bacteria, antibiotics

Source: World Health Organization, 2020

However, in this current study, the results are as follows,

Figure 9: Frequency of Theme 2 – Conspiracy Theories

Bill / Melinda Gates 58,6%
Other Conspiracy Theories 9,7%
Filing Misleading Death Causes 8,4%
BIG Pharma 8,0%
Population Control 1,3%
5G Technology 13,9%

Under this theme there are interesting results and insights. It can be said that Turkish people are more familiar to Microsoft programs than others, like macOS or Linux. People, in general, know Bill Gates (like they know Steve Jobs, another highly known celebrity). As far as it is known, there is no study exploring how Turkish people perceive Bill Gates, but ever since Bill Gates has been known together with Microsoft, and in case of a situation related to capitalism or conspiracy he also comes to minds. Covid-19 case is not different. When looked at the conversation on the site, Bill Gates (and Gates Foundation) is depicted as a person

who wants to decrease world population (mostly because of his TED talk), as an investor who invests in weapon industry, a person who sacrifice a huge amount of money to change people's genes and so on. In general, people do not understand why Bill Gates, as a tech giant, is interested in world population. This bears many suspicious thoughts about Bill Gates in people's minds.

Under this theme it is seen that 5G Conspiracy Theory is the second popular by 14%, followed by Other Conspiracy Theories (10%), Filing Misleading Death Causes (8%), and Big Pharma (8%). All conspiracy theories are the ones almost whole world talks. So it is not surprising to see these conspiracy theories. Under this theme, what is the most surprising is that we cannot see any theories about "Plandemic" which is a conspiracy theory video, released on May 4, 2020, promoting misinformation about the Covid-19.

Throughout the transcript, there is only one "Plandemic" word in that comment (posted in June);

"They could not get the profit they wanted from the illnesses they had planned such as Mad Cow, Swine Flu, Bird Flu, SARS, MERS in the past, they imprisoned eight billion people in their homes with a non-existent virus, Plandemic lie."

Clearly, this sentence does not mean "Plandemic" in its literal meaning; the owner of the comment probably meant "Pandemic" not "Plandemic". It could be either she/he had the word in his/her mind and he/she understood the word wrong, or she/he made a fat finger error. So, this data was not counted in the analysis as "Plandemic Conspiracy Theory".

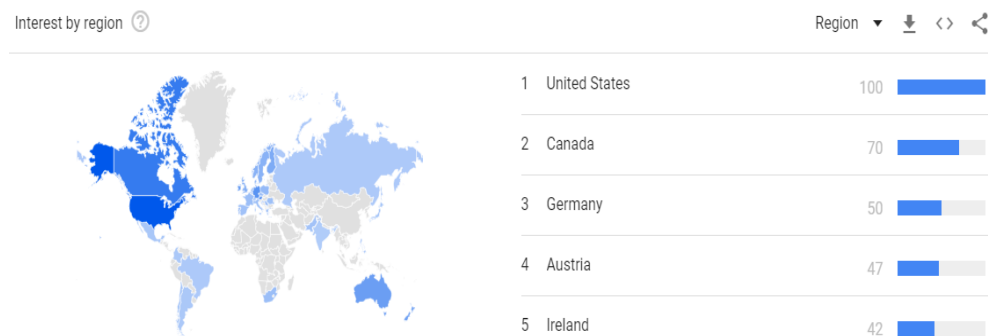**Figure 10:** Google Trends for Plandemic
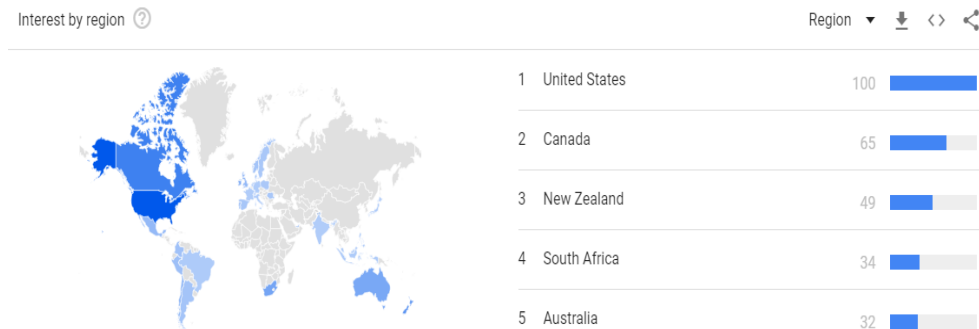
Figure 11: Google Trends for Plandemic - Turkey

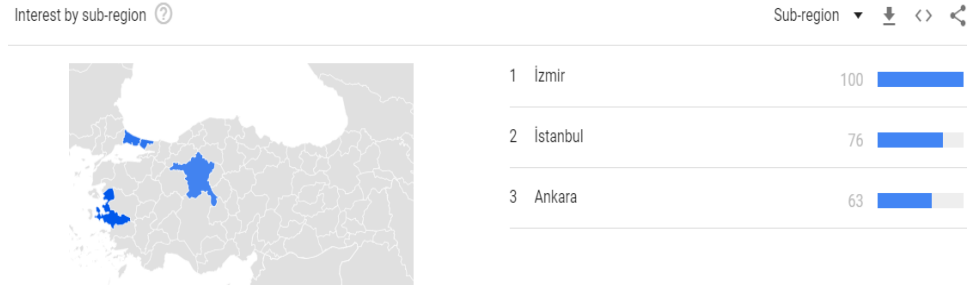| Interest by sub-region		Sub-region
1	İzmir	100
2	İstanbul	70
3	Ankara	64
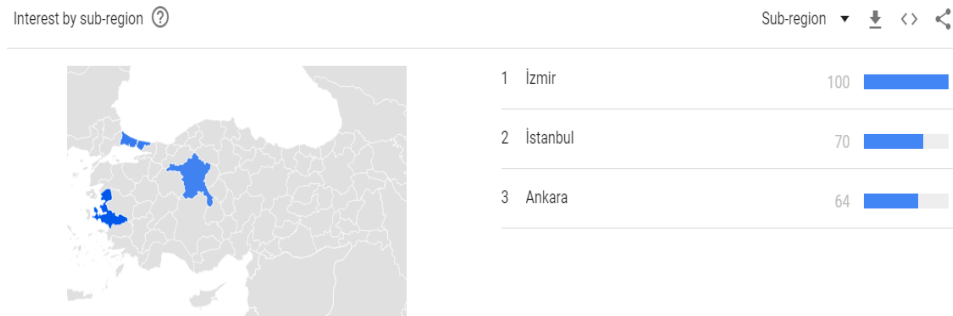
During May, and the first part of June, Plandemic video had become popular in Turkey. Many people have watched and shared the video (with Turkish subtitles) via Whatsapp, Facebook, and other media. The video was so convincing, and during that times many people believed the claims asserted. However, it would be wrong to say that many Turkish people do not know what "Plandemic" is. The people in U.S., Canada, and New Zealand may be familiar with this conspiracy theory (Figure 6). However, it is seen that Plandemic word was searched only in the three biggest cities in Turkey (Figure 7). So it is no surprise that Plandemic word does not mean a thing for Turkish people.

QAnon is also a conspiracy theory which is sometimes linked to Covid-19. The above thoughts are also valid for QAnon (see the figures below).

Figure 12: Google Trends for QAnon

Interest by region		Region
1	United States	100
2	Canada	70
3	Germany	50
4	Austria	47
5	Ireland	42

**Figure 13:** Google Trends for QAnon - Turkey

The most interesting finding under this theme is, the Corona Truth community do not mention anything claiming Covid-19 is a laboratory-made virus or as a biological weapon. There may be two reasons for that. The first is of popularity bias, resulting from an increased awareness of the condition within the general population, making a condition "fashionable" and more likely to be cited (Catalogue of Bias Collaboration, 2017). In the site, most conversations are shaped around Gates, and 5G. The second is the community does not believe such a conspiracy theory at all, which is less likely than the first reason.

Lastly, it is important to mention that according to a study investigating global network for discussing low credibility information about Covid-19, less credible information tends to stay within the country (Huang & Carley, 2020). In the same study it is also investigated where in the world are those who discuss low credibility information, however, it is hard to reach a solid conclusion because of the language differences among the countries.

Theme 6. Media

Under theme media, there are 3 sub-themes: Fake News (42%), Censorship (39%), and Misinformation / Verification (19%). Under fake news sub-theme, the statements are mostly about media releasing fake news about Covid-19. As for censorship, the statements are about Covid-19 truths are being censored. Lastly, for misinformation / verification, the statements are about Facebook erased the posts and comments which includes misinformation.
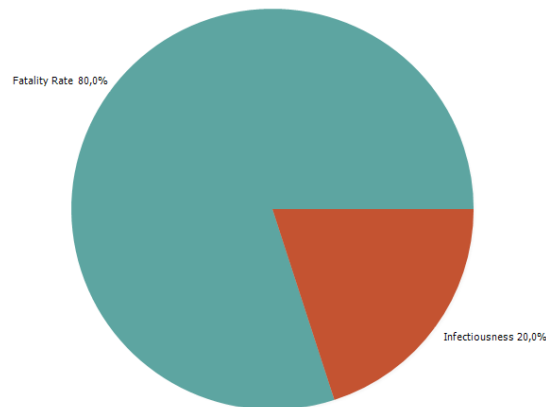
Figure 14: Frequency of Theme 2 – Media
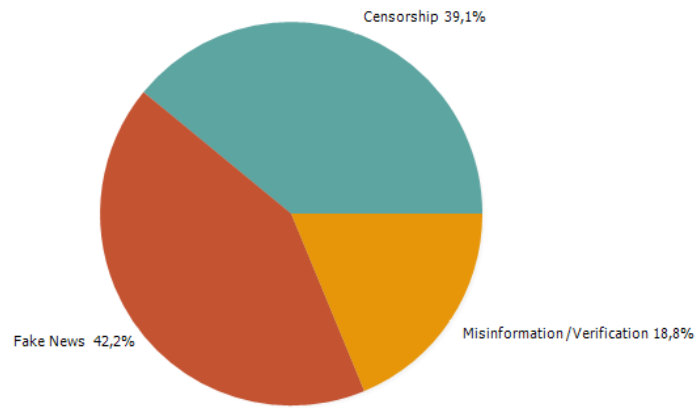
Theme 7. Risk

Under theme Risk, fatality rate (80%), and infectiousness (20%) are seen. The content is mostly made up of fatality rate. The statements under this theme are mainly around the claims that Covid-19 is neither more fatal nor more infectious than seasonal influenza.

Figure 15: Frequency of Theme 2 - Risk

Theme 8. Business / Money

Under Theme Business / Money, "Economy in general" sub-theme is expressed heavily (42%) followed by Service (25%), and Education (17%). As known, during the pandemic, the importance of medical services has much increased. However, in the research, the sub-theme "Medical Services" it is seen that medical services are not on the agenda at all. It is because owners of the posts and comments clearly do not believe the "so-called" pandemic created a huge amount of work for medical staff.

Figure 16: Frequency of Theme 2 – Business / Money
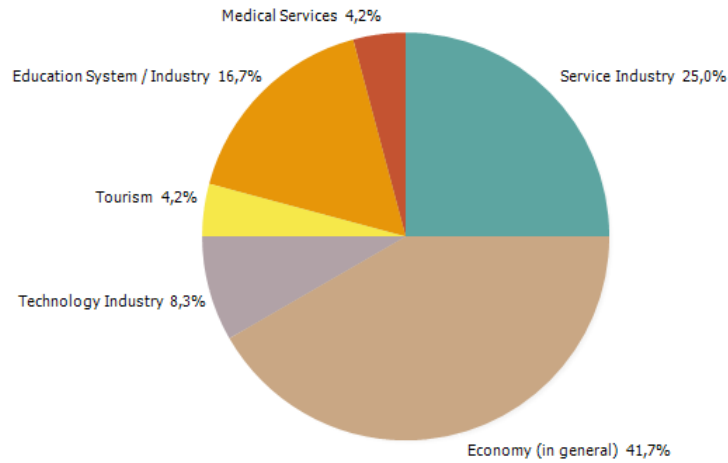
Theme 9. Ideology, and Religion

Under the Theme Ideology, and Religion, two major sub-themes are seen; Capitalism (73%), and Religion (27%). Most conversation, under this theme, is about that the pandemic is a capitalism tool that aims to knock sense into the people. As for religion, most content is about that God is the only power, fate cannot be escaped, and people should pray for these days to pass.

Figure 17: Frequency of Theme 2 – Ideology and Religion
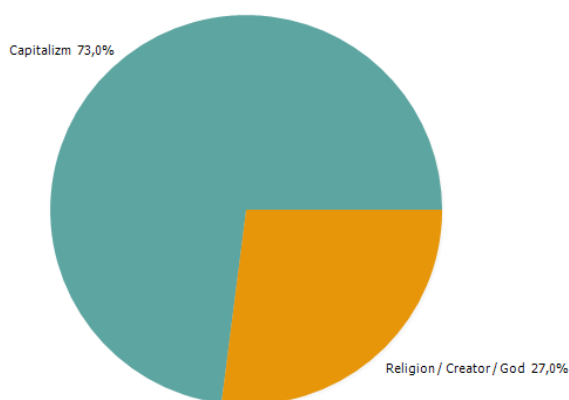
Table 2: Summary of the Study

	Count	% Codes	Cases	% Cases
Precautions				
● Mask Usage	361	30,7%	1	100,0%
● Social Distancing	5	0,4%	1	100,0%
● Hygiene				
● Quarantine / Lockdown / Isolation	10	0,9%	1	100,0%
● Testing	6	0,5%	1	100,0%
● Travel Restrictions	3	0,3%	1	100,0%
● Closure of Schools	3	0,3%	1	100,0%
Emotions				
● Fear / Panic	62	5,3%	1	100,0%
● Thanking / Appreciation / Celebration	38	3,2%	1	100,0%
● Irony / Mockery	65	5,5%	1	100,0%
● Hate / Anger	22	1,9%	1	100,0%
● Profanity / Insult	8	0,7%	1	100,0%
● Doubt	24	2,0%	1	100,0%
Government / Governance				
● WHO (World Health Organization)	46	3,9%	1	100,0%
● Government / Policy	51	4,3%	1	100,0%
● Citizen / Civil Rights	21	1,8%	1	100,0%
Medicine / Science				
● Chloroquine (and other compounds)	9	0,8%	1	100,0%
● Vitamin C	4	0,3%	1	100,0%
● Immunity / Immune System	14	1,2%	1	100,0%
● Vaccine(s)	48	4,1%	1	100,0%
● Other diseases (like Pneumonia, Dyspnoea)	1	0,1%	1	100,0%
● Smoking	8	0,7%	1	100,0%
Conspiracy Theories				
● Plandemic				
● Bill / Melinda Gates	139	11,8%	1	100,0%
● 5G Technology	33	2,8%	1	100,0%
● Population Control	3	0,3%	1	100,0%
● BIG Pharma	19	1,6%	1	100,0%
● Biological Weapons				
● Filing Misleading Death Causes	20	1,7%	1	100,0%
● Other Conspiracy Theories	23	2,0%	1	100,0%
Media				
● Censorship	25	2,1%	1	100,0%
● Fake News	27	2,3%	1	100,0%
● Misinformation / Verification	12	1,0%	1	100,0%
Risk				
● Fatality Rate	4	0,3%	1	100,0%
● Infectiousness	1	0,1%	1	100,0%
Business / Money				
● Service Industry	6	0,5%	1	100,0%
● Medical Services	1	0,1%	1	100,0%
● Education System / Industry	4	0,3%	1	100,0%
● Tourism	1	0,1%	1	100,0%
● Technology Industry	2	0,2%	1	100,0%
● Economy (in general)	10	0,9%	1	100,0%
Ideology and Religion				
● Capitalizm	27	2,3%	1	100,0%
● Racism				
● Religion / Creator / God	10	0,9%	1	100,0%

CONCLUSION

Since the beginning of the Covid-19 pandemic, increasing amount of infodemic has always been an issue. Worse, infodemic cannot be avoided and/or regulated, at all. The present study provides significant insight on the community's perceptions, emotions, and beliefs that can be regarded as Covid-19 infodemic at some points.

During the pandemic period, a great majority of people developed a feeling of fear and helplessness against the unknown. People tend to understand and try to explain this threat which they never expected. Most people believe that big events have big causes: There can be no simple explanation for a major problem like a pandemic that threatens the whole world. Especially when conspiracy theories are examined, it is possible to see the following feeling in people's expressions: "I see the big game. A lot of people are too stupid to see the big game, but I'm aware of everything". From this point on, it is possible to say that there is a serious confirmation bias in the content shared on the site. The manager and the audience tend to share the news that reflects their own beliefs, thus affirming their own beliefs quite often. Ostrich effect can also be seen from time to time in the content and comments shared on the site. Because people tend to avoid bad news heavily (like the number of deaths or people hospitalized).

While examining this specific study, it should be noted this study has its own limitations. It should be kept in mind that the limitations affect the generalizability of the results. The study covers the data from May 2 to June 29. In addition to the time boundary, the study covers a small purposeful sample so it limits the findings' generalizability. Audiovisual content, and inorganic external links were excluded. In addition, qualitative research, by nature, also has limitations in complete objectivity.

As a result of the content analysis, when the most shared and spoken topics in the community are examined, the main themes that stand out are seen as: mask, Bill Gates, irony, government, WHO, and 5G. These themes' high rating is of course an expected result, but it is also a significant result that these themes appear much more dominantly than many other themes. The reason why these themes are talked about so much is of course that they are important topics for the audience, but another reason is probably the popularity bias. These topics get such high visibility on the site that sharing other topics is no longer considered necessary.

FUTURE RESEARCH

So, with reference to this research, it is possible to make additional, and maybe more comprehensive studies. According to a current report (We are Social & Hootsuite, 2020), there are 37 million Facebook users in Turkey, and Turkey is among the top 10 countries using Facebook with 37 million users, and ranks first in Europe. This was the first reason for choosing Facebook as the research media (and

the second reason was data retrieval and lurking the audience on Facebook was much easier). Considering that this study was run only on a specific Facebook site, it is evident that similar researches can be performed on the other popular social media communities. In addition, it may be interesting to see how the results differ for different countries and/or cultures according to Hofstede's cultural dimensions, regimes of the countries, religions, geographies, and economics.

It will probably be interesting to make an additional study to reveal the education level of the audience and to measure critical thinking skills of the audience (since during the study the author witnessed and noted that there are many arguments with logical mistakes, fallacies, biases as well as wrong spelling, grammar mistakes, and incorrect sentence forms).

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APPENDIX

Annex 1: Moderator's Permission

Corona Gerçeği   16:20
Alıcı: ben ▾

elbette, bilgilerin daha geniş kitlelere ulaşıp insanlığa hizmet etmesi yolunda sitemizdeki her türlü bilgi ve belgeyi kullanabilirsiniz. zamanınız ölçüsünde de yardımcı olmaya çalışırız tabi ki.

10 Ağu 2020 Pzt, saat 19:35 tarihinde Sebnem Ozdemir <sebnemozdemirtr@gmail.com> şunu yazdı:

...

Sayın yönetici,

Sayfanızı neredeyse açıldığı günden beri takip etmekteyim. İzniniz olursa paylaşımlarınızı halihazırda yapmakta olduğum araştırmada kullanmak ve ihtiyacım olduğu durumlarda da bilginize başvurmak isterim.

İlginiz ve zaman ayırdığınız için şimdiden teşekkür ederim.

Saygılarımla / Regards

Sebnem Ozdemir