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Research Article

A review on perceptions of the COVID-19 vaccine passports: A problem solver or a problem maker?

COVİD-19 aşı pasaportlarına ilişkin algılar üzerine bir inceleme: Bir problem çözücü mü yoksa problem yapıcı mı?

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Abstract

The study aims to understand the approaches of Twitter users toward vaccination passports, explain the reasons for these approaches, and reveal the relationship between these approaches and sustainability. More than 104 thousand tweets and retweets from 56 different hashtags were obtained with the NVivo 12 program to achieve these goals. The analysis of these data was carried out with the inductive analysis method. According to the research results, there are three basic views on compulsory vaccination passports. These; Those who fully support vaccination passports, reject vaccination passports altogether, and reject mandatory passports. Those who fully support their vaccination passports; demonstrate this approach with the positive effect of vaccines on human health, the desire to return to social life, and the desire to revive the economy. Those who reject vaccination passports entirely and those who refuse to make these passports compulsory exhibit these approaches because of their vaccine hesitation, concerns about equality and discrimination, concerns about freedom, and the belief that new world order has been created. One of the actual results of the research is related to sustainability. According to this result, while those who support vaccination passports focus on economic and social sustainability, those who accept the social sustainability dimension associate the reason why these practices are compulsory with economic sustainability. According to them, governments, authorities and large commercial enterprises place profitability above public health.

Keywords: COVID-19 Vaccination Passport, Social Sustainability, Economic Sustainability

Jel Codes: I18, M10, M20

Öz

Bu çalışmanın amacı, Twitter kullanıcılarının aşı pasaportlarına yönelik yaklaşımlarını anlamak, bu yaklaşımların nedenlerini açıklamak ve bu yaklaşımlar ile sürdürülebilirlik arasındaki ilişkiyi ortaya koymaktır. Çalışmada bu amaçlara ulaşmak adına NVivo 12 programı ile 56 farklı hashtag'den 104 binden fazla tweet ve retweet elde edilmiştir. Bu verilerin analizi tümevarımsal analiz yöntemiyle gerçekleştirilmiştir. Araştırma sonuçlarına göre zorunlu aşı pasaportlarına yönelik üç temel görüş bulunmaktadır. Bunlar; aşı pasaportlarını tamamiyle destekleyenler, aşı pasaportlarını tamamiyle reddedenler ve bu pasaportların zorunlu olmasını reddedenlerdir. Aşı pasaportlarını tamamiyle destekleyenler; aşıların insan sağlığına olumlu etkisi, sosyal yaşama geri dönme arzusu ve ekonomiyi yeniden canlandırma isteğiyle bu yaklaşımı sergilemektedir. Aşı pasaportlarını tamamiyle reddedenler ve bu pasaportların zorunlu olmasını reddedenler ise aşı tereddüdü, eşitlik ve ayrımcılık kaygıları, özgürlük endişeleri ve yeni bir dünya düzeni yaratıldığına dair inançlar nedeniyle bu yaklaşımları sergilemektedir. Araştırmadaki önemli sonuçlardan biri de sürdürülebilirlikle ilgilidir. Bu sonuca göre aşı pasaportlarını destekleyenler ekonomik ve sosyal sürdürülebilirlik üzerinde dururken; desteklemeyenler sosyal sürdürülebilirlik boyutunu reddederek bu uygulamaların zorunlu olmasının nedenini tümüyle ekonomik sürdürülebilirlikle ilişkilendirmektedir. Onlara göre hükümetler, otoriteler ve büyük ticari işletmeler karlılığı halk sağlığının üzerinde tutmaktadır.

Anahtar kelimeler: COVİD-19 Aşı Pasaportu, Sosyal Sürdürülebilirlik, Ekonomik Sürdürülebilirlik

Jel Kodları: I18, M10, M20

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Introduction

The discovery of the vaccine for COVID-19 disease is good news for most people. This news has created a miracle for the improvement of not only human health but also economic systems. Thanks to the vaccines, which are considered to be highly effective against the COVID-19 virus by the scientific community, people have started to be allowed to return to work and social life again. Thanks to these vaccines, some countries have abandoned full quarantine practices, giving flexibility to those vaccinated. While these flexibility are related to areas such as the freedom to travel, the freedom to enter indoor areas, and the ability to participate in entertainment and event activities; In some countries, vaccination is mandatory even to be able to use public transport or continue working (Mithani, Bota, Zhu and Wilson, 2021: 2; Thomas, Flood, Krishnamurthy, Tanner and Wilson, 2021: 3; Gostin, Cohen and Shaw, 2021: 1933).

Social and economic life, which has started to mobilize thanks to the vaccination passport, is a more effective solution than total closures for many. It is preferred instead, bringing freedom to the society again. At the same time, it is a lifeline for sectors that have come to a standstill, such as tourism and aviation. Travel bans brought to protect from the pandemic have devastated the tourism and aviation sectors. In 2020, there was an unprecedented decline in international tourism, with a loss of 73%. In January 2021, this decrease reached 83% (Pavli and Maltezou, 2021: 1). The loss in the aviation sector is no less than that. Due to the pandemic, there has been a more than 90% decrease in global passenger traffic in 2020. With this effect, the aviation revenues of all associated enterprises operating in the aviation sector have reached a standstill (Kurt, 2021: 1). In 2021, compared to 2019, it was expected that the seats offered by airlines would decrease by 60% to 63%, passengers would decrease by 71%-74%, and the gross operating income of airlines will be lost between 246 and 254 billion USD (ICAO, 2021). Preventing these losses, creating potential again in the relevant sectors, depends on the arrival of people to tourism points by travelling.

Regarding the economic sustainability of enterprises in the tourism and aviation sectors, the vaccination passport is seen as an effective tool that can provide re-normalization (Wang, Kunasekaran and Rasoolimanesh, 2021: 1-2; ACI, 2021). Re-normalization will also activate the national economies because the tourism and aviation sectors significantly contribute to the national economies. For example, in 2019, tourism accounts for approximately 12% of the Spanish economy; In 2020, this rate dropped to 4% (Davidson, 2021). In short, vaccination passports are considered a precursor of salvation so that these sectors, the most critical steps of global economies, can be revived and people can interact in a social life again.

In addition to these positive effects, vaccination passports are mandatory in most developed countries. As a result, developing countries have brought along new discussions for citizens who are hesitant about vaccination or do not yet have access to the vaccine. Today, both individuals, politicians, public health experts, lawyers, and scientists have begun to have differences of opinion on mandatory vaccination passports (Naderi, Asgary, Kong, Wu and Taghiyareh, 2021: 3; Cope, Somin and Stremitzer, 2021: 2). On the one hand, there are advocates of the view that forcing people to have a vaccination passport is not by individual freedoms, is unethical, is against the law, and may create discrimination. On the other hand, according to another view, vaccination is the most effective solution to get rid of the pandemic. With such a severe threat to public health and the sustainability of systems in danger, individual freedoms can be pushed into the background (Osama, Razai and Majeed, 2021; Nga and Nhung, 2021: 1339; Seira, 2021: 82-83; Satria, Khalifa, Rabrenovic and Iqbal, 2021: 1; Nalubola, 2021: 2). Unfortunately, few other scientific studies in the literature include discussions on these issues (Naderi et al., 2021; Guidi, Romano and Sotis, 2021; Mithani et al., 2021; Thomas et al., 2021: 7).

This research reveals the nature of the opinions or approaches towards the Covid-19 vaccine passport; secondly, it is aimed to explain the reasons for these approaches and finally to discuss the relationship of these views with sustainability. For this purpose, the research seeks answers to the following research questions:

1. How do Twitter users approach the COVID-19 Vaccine Passports?
2. For what reasons do Twitter users exhibit these approaches?
3. What is the relationship between these approaches and sustainability?

Conceptual framework

In this study, two basic conceptual frameworks are used, following the purpose of the research. The first is COVID-19 vaccine passports, and the second is sustainability.

Vaccination passport

The emergence of mRNA vaccines with high efficacy on COVID-19, such as Pfizer–BioNTech and Moderna, has created a solution for milder recovery from the disease (Cope et al., 2021). Furthermore, with the spread of vaccination campaigns, the concept of a vaccination passport has also gained popularity. The concept of vaccination passports has emerged as proof that people have been vaccinated. Individuals must carry these passports with them only digitally and sometimes as digital documents. While these certificates are given to fully vaccinated people in most countries, in some countries, they are also given to people who have just recovered from this disease and have antibodies or prove that they are not infected with a negative PCR test result (Satria et al., 2021).

As Israel is the first country to develop the vaccination passport, many countries have started to keep up with this practice. Green Pass in Israel, NHS COVID Pass in England, and Digital COVID Certificate of the European Union are some of the digital passports with QR codes. In addition, some countries in Asia, including Japan and Thailand, have also issued paper-based vaccination passports for their citizens (Chen, Petersen, Blumberg, Piyaphanee and Steffen, 2021: 1; Hall and Studdert, 2021). On the other hand, the International Air Transport Association (IATA) has revealed a vaccine passport with the name Travel PASS (Sotis, Allena, Reyes and Romano, 2021: 2).

The primary purpose of this passport is to open the closed borders early and remove the obstacles in a controlled manner (Nga and Nhung, 2021: 1341). In summary, passports give people freedoms that give them back some of their normal lives before the pandemic, and this normalization leads to economic improvements. In addition, there are different debates about the purpose and effects of vaccination passports. This section includes the discussions mentioned.

Positive effects of the vaccine passport

COVID-19 vaccines and passports offer various benefits for improving society's physical and mental health and national and global economies. One of the most important results of vaccines is the decrease in the need for intensive care or the decrease in the death rate of people who are infected with the virus. Thanks to this effect, both human life is dried, and the burden on health systems alleviates (Cope et al., 2021: 43). Another benefit is that vaccination passports initiate a transitional phase to return to normal life. Thanks to the vaccination passports, which are a tool for a controlled transition to social life, people have begun to experience a more moderate process than the quarantine processes, including full closure in their homes (Jecker, 2021: 3). The opening of commercial enterprises to interact with people with vaccination passports has enabled businesses operating in areas such as food and beverage, entertainment, and travel to meet customers again (Gostin et al., 2021). Individuals have started to live a more normal life where they can go to cinemas and, concert venues, cafes again, socialize, interact with their loved ones by getting away from the feeling of loneliness and move physically again. Thanks to the vaccination passport, countries have reopened their borders to individuals with passports, contributing to people's regaining their freedom of movement, albeit within a limited framework. At the same time, schools were reopened (Pavli and Maltezou, 2021: 2). On the other hand, these developments contribute to alleviating the effects of physical and mental problems that people begin to experience due to inactivity and loneliness during the pandemic period. The relief of stress and anxiety, especially in the elderly, children, and healthcare workers, is one of the most important results of vaccination certificates (Satria et al., 2021). Because this process is much more difficult for children who cannot go to school and cannot meet with their friends and for the elderly, who are more separated from their loved ones because of the high-risk group. Another positive effect is that these rights, which people with a vaccination passport regain, will motivate others to turn to vaccination and contribute to the earlier end of the pandemic by increasing the vaccination rate (Jecker, 2021: 2).

Reopening sectors such as transportation, tourism, food and beverage, entertainment, and events to people with vaccination passports have contributed to the revitalization of businesses operating in these sectors (Schlagenhauf, Patel, Rodriguez-Morales, Gautret, Grobusch and Leder, 2021: 2; Davidson, 2021). Thanks to this effect, business owners whose economic sustainability has reached a standstill in most sectors have started generating income again. For example, airlines and hotels were able to meet their customers again. In addition, schools have been reopened; thus, stationary, school services and canteen businesses have also been normalised. In addition, small businesses such as barbers, coffee shops, cinemas, and gyms have also started to serve again. At the same time, the need for employment emerged in businesses that started to make profits again, and the unemployment rates, which increased

rapidly during the pandemic period, started to improve. All these developments contribute to the recovery of economies.

Adverse effects of the vaccination passport

According to some groups, mandatory vaccination passports are an unethical practice that restricts freedom rather than creating freedom, includes discrimination, and causes legal problems (Pavli and Maltezou, 2021: 2; Davidson, 2021). These are the problems to whom the vaccination passport will help and to whom it will create obstacles; who will gain and who will lose; who has access to the vaccine and who does not; It is closely related to issues such as who is willing and who is hesitant to get a vaccine. These issues can be briefly explained under vaccine hesitancy, discrimination, freedoms, and ethical and legal issues.

Vaccine hesitancy: Vaccine hesitancy or vaccine refusal is not a new phenomenon and is not simply an improved response to COVID-19 vaccines. In the past, people who refused to be vaccinated against vaccines for infectious diseases such as measles, mumps, and smallpox were encountered. In addition, some groups are reluctant to COVID-19 vaccines and vaccine passports and oppose making these practices mandatory. There are various reasons for these hesitations or vaccine rejection. One is that people do not trust governments' authority (Cope et al., 2021: 2). Others believe vaccination passports are used to track individuals and see this as a threat to their safety (Allena, Guidi, Reyes, Romano and Sotis, 2021: 1). Finally, some groups are hesitant because they do not trust the vaccine. These groups are hesitant to be vaccinated because they are concerned about the effectiveness of the vaccines, whether the vaccinated people transmit viruses or not, and the long-term side effects of the vaccine (Schlagenhauf et al., 2021: 2). These people believe vaccines are distributed early without adequate testing and comprehensive information about the results, and they hesitate to get vaccinated. Another reason to stay away from the vaccine is when the financial responsibilities of the vaccine are left to individuals, and people prefer to stay away because they do not want to pay the price of the vaccine (Naderi et al., 2021: 4). According to some, even mandatory vaccinations are reasons for rejecting a vaccination. Mandatory vaccination creates a backlash and can lead people to avoid vaccination psychologically. For this reason, some public health experts, politicians, public officials, and employers avoid the idea of making vaccination compulsory (Guidi et al., 2021).

Equality and Discrimination: One of the debates about vaccination passports is that vaccinations discriminate between various groups and are against the principle of equality. One of the debates on this issue is the limited access to the vaccine. Vaccines are mostly considered privileges enjoyed by developed and developing countries. For example, in the vast majority of African countries, no progress has been made in vaccination campaigns. Only 20% are planned to be vaccinated by the end of 2022 (Gostin et al., 2021: 1934). The fact that citizens in these countries, who cannot access the vaccine, are subject to travel restrictions due to income inequalities will continue to create injustice in these groups. According to some, there are barriers to accessing the vaccine in less developed countries and for minority groups in developed countries (Schlagenhauf et al., 2021: 2). At the same time, digital vaccine passports also discriminate as they require phones compatible with the technology (Pavli and Maltezou, 2021: 2). Because not everyone is at the level of income to buy a smartphone, for all these reasons, it is not a good practice to require vaccination passports because the infrastructure required for vaccination passports is not equal and accessible to everyone. Everyone should have a fair chance to return to normal life, and the first thing to do before making vaccinations mandatory is to achieve this justice (Gostin et al., 2021: 1934).

Freedoms: An essential discussion about vaccination passports concerns the limits of individuals' freedoms. According to this discussion, the mandatory application of vaccination passports and the granting of various exemptions only to people who hold passports violate the freedoms and privacy of others (Pavli and Maltezou, 2021: 2; Davidson, 2021). Furthermore, individuals should be free not to be vaccinated for religious or conscientious reasons, and making them compulsory also contradicts their freedom of religion and conscience (Thomas et al., 2021). Due to these concerns, while compulsory vaccination passport applications are becoming widespread in some regions, there are developments regarding not being compulsory in some regions. For example, different states of the USA exhibited different practices in this regard. The governors of states such as Texas, Florida, Arizona, and Utah, Arizona, Idaho have enacted regulations banning mandatory vaccination because it would violate the freedoms of individual citizens. Conversely, some states, such as New York City and California, favour the vaccination passport (Cope et al., 2021: 16; Davidson, 2021). This debate has settled on the general agenda of politicians, and different solutions continue to be sought with the concern of violating the fundamental freedoms of individuals (Guidi et al., 2021).

Ethics: Vaccine hesitations, problems in accessing the vaccine, and discriminatory practices that the unvaccinated may encounter also cause debates on how ethical the vaccination passports are. Limited access to COVID-19 vaccines worldwide, especially in low-income countries, and the requirement for a vaccine passport as a travel necessity may raise ethical issues. The equitable availability of the vaccine at the global level is an ethical issue (Pavli and Maltezou, 2021: 2). It is also an ethical problem to discriminate against these people because they cannot access the vaccine. In addition, some believe ethics should be considered a stretchable problem concerning deadly infectious diseases (Cope et al., 2021: 51). Mandatory vaccination passports also point to an ethical problem for bioethicists and techno-ethicists. Digital applications that can mediate the monitoring of people; Obligations based on vaccine or immunization applications whose efficacy or effects are not known with certainty are ethically controversial. Ethical standards should be established on specific issues to overcome these ethical problems. The first of these is disseminating the vaccine and its equitable access. The second is establishing public health campaigns explaining the vaccine's benefits and safety, and the third is pursuing anti-discrimination policies. Fourth, passports should be created with methods that do not allow individuals to be traced and protect their privacy. Finally, methods for vaccine security should continue to be developed according to the results of new scientific research (Jecker, 2021).

Law: Issues such as equality, discrimination, and freedom, which take place in the debates on the compulsory vaccination passport, are also the main issues of law. Many legal systems generally adopt the principle that people should be treated equally and their freedoms should be respected. In these systems, violating the principle of equality is associated with discrimination and is often the subject of a lawsuit (Cope et al., 2021: 49; Thomas et al., 2021: 4). Mandatory vaccination passports, according to some, limits individual freedoms and create two classes of citizens. For example, Ohio Republican US Senate candidate Josh Mandel tweeted, "Vaccination Passports violate human freedom." All these views or arguments are based on the idea that vaccines if administered with the approval and coercion of the government, will violate fundamental and possibly even constitutional freedoms (Cope and Stremitzer, 2021: 771). Furthermore, Digital vaccine passports, which are believed to collect data about individuals or mediate the tracking of individuals, are in conflict with privacy laws. Because the privacy-based information of individuals is legally protected by most legal systems (Thomas et al., 2021: 20-21). Compulsory passports also create legal problems regarding the freedom of conscience and past of the person. According to this view, people have the right to be free in places of worship, so the application of mandatory vaccination passports in places of worship should also be prevented. In other words, those who do not have a vaccination passport should also benefit from religious services, which is their constitutional right (Gostin et al., 2021: 1933-34).

Sustainability

Sustainability is related to continuity and stability. Efforts carried out today to exist in the future and protect the resources that will be needed are associated with sustainability activities. These activities are discussed in three dimensions economic, social, and environmental (Kuhlman and Farrington, 2010). The realization of activities in these three dimensions through commercial enterprises corresponds to the concept of corporate sustainability. In other words, businesses can achieve corporate sustainability by developing activities that will improve their economy, increase the welfare of the society, not harm the environment, and manage the risks that may arise in these areas (Lo and Sheu, 2007: 345). Sustainability activities carried out in these dimensions are adopted by commercial enterprises as a strategy, and if implemented in a systematic and integrated manner, they will provide them with a competitive advantage (Ioannou and Serafeim, 2019: 3; Asif, Searcy, Zutshi and Ahmad, 2011: 354). The economic, social, and environmental dimensions of sustainability activities that will provide a competitive advantage to businesses can be explained as follows (Linnenluecke, Russell and Griffiths, 2009: 434; Baumgartner and Ebner, 2010: 78-79; Saunila, Ukko and Rantala, 2019: 179):

Economic sustainability: It is based on protecting the business's capital and providing profit to the owner or shareholders by earning economic gain. It focuses on maximizing profits without disturbing the financial balance of the business, thus ensuring sustainability for the business in the future. In this approach, concepts such as efficiency, revenue management, performance evaluation, cost management, information management, technology, and innovation are at the forefront. Economic sustainability also guarantees businesses to carry out other sustainability activities because it becomes impossible for businesses that are not economically sustainable to engage in environmental or social sustainability activities.

Environmental sustainability: This dimension of sustainability; It is closely related to the efficient use of the world's resources, the protection of biological diversity, the protection of the natural environment, and the non-pollution of water and air. Businesses should also contribute to environmental

sustainability activities as a part of nature. For example, activities that implement recycling and waste management systems, follow afforestation policies, control the release of harmful emission gases, and focus on energy savings and green technologies mediate the protection of the physical and biological environment.

Social sustainability: According to this approach, businesses are not only responsible to their shareholders or the environment. The business must carry out activities that will contribute to the society in which it operates and to the different stakeholder groups that make up the society. For example, to support education, occupational health, and safety issues, non-governmental organizations; Struggling with problems such as discrimination and fraud are social sustainability activities. Crises threatening public health are also closely related to social sustainability (Magis, 2010; Vuong, Vuong, Ho and Nguyen, 2017). Therefore, the measures taken for the current COVID-19 crisis can also be evaluated within the scope of social sustainability.

Method

The Twitter analysis is used in this research. Studies based on Twitter analysis are frequently encountered in the literature (Kumar and Sebastian, 2012; Go, Huang and Bhayani, 2009; Bruns and Stieglitz, 2013; Terpstra, Stronkman, Vries and Paradies, 2012; Linvill, McGee and Hicks, 2012). In this research, it was deemed necessary to use Twitter data to access many people's perceptions and comments simultaneously. For this purpose, firstly, hashtags related to the COVID-19 vaccine and vaccine passport were accessed by a purposeful sampling method. Other hashtags were discovered by the snowball sampling method by using the contents of these hashtags. All data of the relevant hashtags were collected with the NCapture feature of the NVivo program. One hundred four thousand three hundred fifty-nine tweets and retweets from 56 different hashtags were accessed via NCapture. The collection dates of these data, the hashtags from which they were obtained, and their quantities are shown in Table 1:

Table 1: Data Collection Schedule

Number	Hashtag Name	Date ranges	Number of tweets and retweets
1	#airlines	14-06.09.2021	2800
2	#antivax	14-10.09.2021	7919
3	#Authoritarianism	14-06.09.2021	575
4	#businesstravel	14-06.09.2021	1419
5	#coercivecontrol	14-06.09.2021	902
6	#COVIDIOTS	14.09.2021	1400
7	#COVISHIELD	14-06.09.2021	4874
8	#covidpass	14-06.09.2021	1278
9	#covidpasstech	05-01.09.2021	17
10	#covidtourism	13-08.09.2021	2
11	#DeepThoughtsFromUnvaccinated	14-08.09.2021	5500
12	#DnaNudge	14-07.09.2021	6
13	#EconomicRecovery	14-06.09.2021	435
14	#EQUITY	14-06.09.2021	11324
15	#Fascism -	14-06.09.2021	3313
16	#FightAgainstCOVID19	14-06.09.2021	109
17	#FreedomOfAssembly	14-06.09.2021	283
18	#GovernmentControl	12-06.09.2021	17
19	#healthpassport	09-01.09.2021	31
20	#hospitality	14-07.09.2021	6999
21	#HumanRightsViolation	14-06.09.2021	155
22	#IChooseVaccination	14-06.09.2021	2448
23	#ID2020	14-06.09.2021	351
24	#IGotMyVaccine	14-06.09.2021	80
25	#internationaltravel	14-06.09.2021	189
26	#JustSayNo	14-06.09.2021	3919
27	#LeaveOurKidsAlone	14-12.09.2021	8571

28	#Liberty	14-09.09.2021	2870
29	#Mandate	14-06.09.2021	1470
30	#MindControl	14-06.09.2021	444
31	#mybodymychoice	14-10.09.2021	5245
32	#nhscovidpass	11-06.09.2021	22
33	#NoVaccinePassportAnywhere	14-06.09.2021	8559
34	#NoVaccinePassports	14-13.09.2021	4838
35	#Oligarchy	14-06.09.2021	193
36	#ProfitsOverPeople	14-06.09.2021	39
37	#RestartTourism	14-06.09.2021	216
38	#Segregation	14-06.09.2021	761
39	#SimpingForPharma	09.09.2021	2
40	#stupidity	14-06.09.2021	826
41	#sustainabletourism	14-06.09.2021	367
42	#tickettofreedom	08.09.2021	1
43	#tourismindustry	14-06.09.2021	90
44	#tourismmatters	13-06.09.2021	21
45	#tourismrecovery	14-06.09.2021	193
46	#traveltrend	14-07.09.2021	9
47	#UniteForFreedom	14-06.09.2021	98
48	#VaccineCertificates	13-06.09.2021	171
49	#vaccineequality	14-07.09.2021	77
50	#vaccinemandates	14-12.09.2021	4564
51	#VaccinePassports	14.09.2021	994
52	#vaccineRegret	14.09.2021	185
53	#VaccineSideEffects	14-06.09.2021	3628
54	#VaccinesSavesLives	14-06.09.2021	1270
55	#Vaxxed	14-06.09.2021	2120
56	#VaxxHoles	14-06.09.2021	170
Total Number of Tweets and Retweets			104.359

Source: Prepared by the author.

All tweets and retweets sent in English to the hashtags shown in Table 1, related to the purpose of the research, were analyzed with an inductive approach until data saturation was reached. Examples and direct quotations of related tweets and retweets are also reflected in the findings section to increase the trustworthiness of the research.

Findings and interpretations

In this section, the research findings are discussed in order of the research questions.

Twitter users' approaches to COVID-19 vaccination passports

According to the research findings, Twitter users show three basic approaches in this regard. These are classified as fully supporting vaccines and vaccination passports, being against vaccinations and vaccination passports and being against making these applications compulsory. These findings were reached as a result of examining Twitter users' tweets, retweets, and hashtags. To better understand the relevant groups, tweets and retweets exemplifying the relevant classifications are given in Table 2.

Table 2: Approaches to Vaccination Passports

Groups	Examples of tweets and retweets
Those who fully support	Ok I'm just gonna say it…..YOUR RIGHT TO BE STUPID AND RECKLESS WITH YOUR LIFE ENDS WHEN YOU PUT MINE AND MY KIDS LIVES AT RISK!!!! GET VACCINATED OR GET TESTED!!!!! In the real world this means you chose ONE…not a mandate!!!! #VaccinesSavesLives
	We are going to have cases rise in schools. We want to prevent serious illness, hospitalization or death and transmitting this virus to others. Our way out is vaccines for kiddos. Hoping that FDA approval comes soon.#VaccinesSavesLives https://t.co/J1TBzgZjdP
	@danielkotzin #GetVaccinated or take a weekly test to protect others. Yep, that's #fascism alright. You got us. #VaccinesWork #vaccinesaveslives
	PLEASE get vaccinated! Help end the madness! This could be behind us ALL fast if EVERYONE would get vaccinated! You have everything to lose if you don't! Also remember this isn't just about you ... it's about EVERYONE! #COVID19 #GetVaccinatedNow #VaccinesWork #VaccinesSavesLives https://t.co/xOSEaD6BS4
Those who are totally against	I will never let someone put a covid vaxx in my body. PERIOD. I will never wear a mask again. PERIOD #DeepThoughtsFromUnvaccinated https://t.co/cNMGXX8Bqb
	They are killing the unborn with their experimental vaccines. Rip #VaccineSideEffects #vaccinedeaths https://t.co/9zTV6yGZZq
	What are the current known side effects of the vaccine and what are the 'percieved' long term side effects of it? If you don't know, STOP PUMPING THIS VILE INTO INNOCENT PEOPLE, you are killing us @HealthZA @GovernmentZA #vaccineSideEffects
	Sorry not sorry but, I'm not taking a "vaccine" that doesn't protect me from the unvaccinated. #Employers #Biden #DictatorBiden #vaxxholes #VaccinesWork ?? #COVIDIOT #NaturalImmunity #MandatoryVaccination #Unconstitutional
Those who oppose the compulsory	4 those asking people 4 information about their own bodies: Yes I'm vaccinated. But no I'm not in favour of vaccine passports in places like Europe/California. I've spent years living in the great state of Florida for a reason, and its not to do with the virus. #VaccinePassports
	Lies. If people want the vaccine they can get it. I fail to see how forcing others who don't want a medical treatment helps them. Vaccinated people are already protected. So this is really about dictatorial power. #Resist #Resistance #BidenAdministration #Fascism #BashTheFasc https://t.co/yjRQOGFXmZ
	@raybrewer21 @Boxingego @AllegiantStadm This is Bullshit, I'm not against Vaccines but forcing people to get vaccinated for being allowed somewhere is fucking Ridiculous. If one wants to get vaccinated great, those that don't shouldn't be penalized for not wanting to get it. Smh #VaccinePassports
	@Thewolf04283402 GOOD for Him. #CHOICE Stop⛔ trying to Force the #MandateVaccines on #WeThePeople who don't want them. If you want to get #vaccinated GO for it. But I don't. If #Vaxxed work why are you trying to force me to get it. What are the #vaxxedsquad worry about.

Source: Prepared by the author.

When Table 2 is examined, it can be seen that people who believe in the vaccine to end the pandemic and want everyone to be vaccinated, people who are entirely against the vaccine, and people who oppose the mandatory vaccination, not the vaccine itself. The primary relationship between the hashtags where the tweets were collected and the attitudes of the users are shown in Table 3:

Table 3: The Relationship between Hashtags and Vaccine Passport Approaches Used in the Research

Groups	Hashtags that groups mostly meet
All groups	#covidpass #covidpasstech #healthpassport #ID2020 #nhscovidpass #stupidity #VaccineCertificates #VaccinePassports
Those who fully support	#FightAgainstCOVID19 #IChooseVaccination #IGotMyVaccine #tickettofreedom #VaccinesSavesLives #Vaxxed #COVIDIOTS #COVISHIELD
Those who are totally against And Those who oppose the compulsory	#antivax #Authoritarianism #coercivecontrol #DeepThoughtsFromUnvaccinated #DnaNudge #EQUITY #Fascism #FreedomOfAssembly #GovernmentControl #HumanRightsViolation #JustSayNo #LeaveOurKidsAlone #Liberty #Mandate #MindControl #mybodymychoice #NoVaccinePassportAnywhere #NoVaccinePassports #Oligarchy #ProfitsOverPeople #Segregation #SimpingForPharma #UniteForFreedom #vaccineequality #vaccinemandates #vaccineRegret #VaccineSideEffects #VaxxHoles

Source: Prepared by the author.

Table 3 shows common hashtags shared by all groups, as well as hashtags where supporters and non-supporters meet. The names of the hashtags also give an idea about the reasons for the approaches.

Reasons for twitter Users' approach to COVID-19 vaccination passports

This section explains the reasons for these approaches of Twitter users under two sub-headings.

Reasons for supporting vaccination passports

Research findings show that people support vaccinations and vaccination passports for three reasons.; The belief that vaccines contribute to human health is related to the desire to return to normal life and revive the economy. In Table 4, the opinions of different users supporting these findings are exemplified:

Table 4: Reasons Why Vaccination Passports are Supported

Reasons for the approach	Tweet and Retweet examples
Contribution to human health	#FightAgainstCOVID19 Ultimately one of the best ways to protect against COVID-19 is to encourage people to get vaccinated. Govt should initiate quick effective steps to safeguard its citizens from mortality, morbidity and complications of Covid-19.
	We have a civic and human responsibility towards our communities, loved ones and the colleagues with whom we work. Please get vaccinated. So many lives lost and destroyed because of #COVID19 Do the right thing: #GetVaccinated #VaccinesSaveLives #IChooseVaccination #VacciNation https://t.co/EIlvqIRSeO
	If people were smart or responsible enough to #GetVaccinated on their own, we wouldn't need a mandate. This is not political. This is about not giving safe harbor to a deadly virus that has already killed at least 560,000 Americans. #COVID #VaccinesSavesLives
	Tell me again how this isn't a problem?? Get vaccinated to help protect those who can't! #TrustTheScience #VaccinesSavesLives https://t.co/hrQ4m2x7Rn
Desire to return to normal life	WATCH: Mama Joy is encouraging all eligible persons for vaccination and SA football supporters to get vaccinated so that we can go back to "normal life" and enjoy soccer at stadiums once more #IChooseVaccination #VaccinesSavesLives https://t.co/TfmZuxat3O
	Returning to theatre, concerts, stadiums is indeed in our hands. It's to protect yourself and your loved ones. It's for the love of sport and the arts. It's for the love of your country and community. It's for the love of your family. #ReturnToPlay #IChooseVaccination https://t.co/Ta3mj38C5W
	Tonight I enjoyed two movies in a row at #TIFF21. I'll be back for more on the weekend. I felt nice and safe wearing my mask, and knowing that everyone in the theatre was #FullyVaccinated. I showed my certificate at the door and had a nice time. #VaccineCertificates are useful! https://t.co/PQzBQbddpg
	I don't get it. Just get vaccinated. It will make a return to normal life sooner. It will save your dad when you go to a motorcycle rally and bring back COVID to your immunocompromised dad who is now in the hospital fighting for his life. #stupidity
Desire to revive the economy	@realShawNshawN If we can keep this #antimask and #antivax stuff going, the economy won't improve and if the economy doesn't improve, guess what we get to do in 2022? We get to blame the Democrats and the Biden Administration. Now that's what is going and ain't nothing paranoid about it.
	Our message is that vaccines save lives. The full reopening & recovery of our economy will depend on our ability to accelerate our vaccination programme. It is possible if we all work together, driven by a sense of unity and patriotism. @DDMabuza #IChooseVaccination https://t.co/UZtlyeNQmd
	Today is a good day to go and get vaccinated. We need to work together for a shared future where we can build our economy &begin to recover from the past 18 months. None of us are protected until we're all protected. #GetVaccinated #VaccinesSaveLives ❤ #IChooseVaccination https://t.co/0H6lbL9CiT
	Southeast Asian countries choose to reopen, balancing virus with economy #southeastasia #covid19 #covid19news #asia #covid #tourism #tourismrecovery #restarttourism #singapore #malaysia #thailand #laos #coronaviruspandemic https://t.co/MMkECbpUc0

Source: Prepared by the author.

As supported by various examples in Table 4, people's vaccinations and vaccination passports decrease the death rate due to this disease; It supports them to return to the normal life and social life they had in the past and revitalize the economies. If vaccines can contribute to human life, social life, and economies, why do many people oppose these practices? The answer to this question is discussed in the next section.

Reasons why vaccination and vaccination passports are not supported

People who are against vaccines and vaccination passports or oppose their mandatory enforcement take such approaches for various reasons or concerns. According to the research findings, the most important ones are vaccine hesitancy, finding vaccines against the principle of equality, and believing that vaccines are restrictive of freedom. Other reasons are the lack of trust in politicians-government and authorities, the illegality of practices, and the belief that new world order has been created.

Vaccine hesitancy has emerged as a finding with many adherents. Various reasons have been identified for Twitter users to hesitate about vaccination.; The side effects of the vaccine are based on reasons such

as not believing in the vaccine's effectiveness, not believing in the pandemic, uncertainties about the vaccine, and not wanting it to be administered to children. Table 5 contains the opinions supporting these findings:

Table 5: Opinions on Vaccine Hesitancy

Reasons for vaccine hesitation	Tweet and Retweet examples
Vaccine side effects	I know a lot of people who recovered from Covid but have not recovered from the vaccine, even after 6 months. Deep pain in the bones. Chronic fatigue. Migraines. Abnormal blood changes. These times make me really appreciate my reclusive nature... #COVID19 #vaccineRegret https://t.co/kgUHDH9Hco
Not believing in the efficacy of the vaccine	3 deaths in Scotland during August 2020 (no). 176 deaths in Scotland during August 2021, with 91.1% of the adult population vaccinated. Why then is @ScotGov enforcing vaccine passports ?? #NoVaccinePassports https://t.co/YfeodCNfpD
Don't believe in the pandemic	In a real pandemic people would be fighting to get the vax, not getting fired or ridiculed for not taking it. Wake up people. #id2020
Uncertainties	You can be vaxxed, think people should get the COVID vaccines and still not agree with MANDATES. We don't know all risks, we don't know long term effects and it doesn't provide immunity. This is a personal decision. #VaxXed #mandate #COVID19
Being hesitant about children	Every single parent who allows their child to have this vaccine has failed in their duty of care. Your child deserves better. #COVID19 #LeaveOurKidsAlone @CMO_England @nadhimzahaw

Source: Prepared by the author.

Another issue that draws attention as much as hesitations about vaccination is the belief that vaccination creates inequalities and causes discrimination. According to the findings, inequality is mainly due to three different reasons. First, users stated that there is discrimination between countries regarding access and distribution of the vaccine; He has opinions that racial discrimination is experienced and, finally, inequalities are created in social life between those who are vaccinated and those who are not. This view is summarized in Table 6.

Table 6: Opinions on Equality and Discrimination Issues

Equality and discrimination concerns	Tweet and Retweet examples
Inequality in access to vaccines	All of us should not stay silent together with @DrTedros: "I will not stay silent when companies and countries that control the global supply of vaccines think the world's poor should be satisfied with leftovers" #equity #COVID19vaccines https://t.co/gAYP9iH7tI
Racial discrimination	@bouldercohealth You are showing your privilege by vaccinating people in affluent #Boulder when there are all sorts of black and brown people around the world that have never had a first shot of these vaccines. Check your privilege. #covid19 #equity
Inequalities between the vaccinated and the unvaccinated	I am Henk Jan. I live in the Netherlands. From September 25th I will be banned from restaurants, ceremonies, cultural events, traveling and otherwise participating in society, because I refuse to convert to the new ideology. #coronapas #NewNormal #covidpass #covid19 #Schwab https://t.co/prISveqp6o

Source: Prepared by the author.

Besides the equality and discrimination concerns, there is another crucial reason why Twitter users are against vaccination passports. According to users, mandatory vaccination passports act as a restriction of freedom rather than bringing freedom to individuals. According to users with this view, vaccination passports are bullying against the individual's body and freedom of movement, and the government and politicians should not be trusted in this process. According to the participants, He is against freedom and independence and wants to gain power with an autocratic approach. Therefore, the main reason for having a vaccination passport is to keep people under control and to monitor movements. The views supporting these findings are exemplified in Table 7.

Table 7: Views on Freedom Issues

Liberty Concerns	Tweet and Retweet examples
Body freedom	This is it. The defining struggle of the Twenty-First Century. Do our bodies belong to ourselves, or to the pharmaceutical industry? #VaxxHoles #COVIDIOTS
Freedom of the movement	It's really sad to see people forced to show proof of vax and ID to enter a premise while still forced to distance and wear a mask. They have less freedom than before and still don't realize. Delusional! Wait until they come for the 3rd shot. #vaxpass #Vaxxed #GetVaccinated
Not trusting politicians	It's not that people don't think #covid19 is real. It's not about masks and vaccines. It's that politicians have proven time and again they can't be trusted. That's why we're here. So blame them. #coronavirus #corona #vaccine #vaxxed #covid @gwpro
Coercive control	If we stop vaccine passports, we stop this coercive authoritarianism. That's their holy grail and end game. Stop vaccine passports and the whole thing falls like a house of cards. #NoVaccinePassportAnywhere #NoVaccinePassport #NoVaccinePassports https://t.co/tg1BeZqq9L
Monitoring of Personal Medical Information	The government wants YOU to give businesses your medical status & check in with a "vaccine passport ? "...But they will not tell you if they move in a convicted peodophile next door to you ? Double standards . Hypocrites. #auspol #VaccinePassport #NoVaccinePassportAnywhere https://t.co/bifUvwGdnd
Legal liberties	The Mills administration is facing a 2nd #lawsuit – this time filed in state court – from #healthcare workers opposed to #Maine's #COVID19 #vaccine #mandate for their industry. @PressHerald https://t.co/8i8u812Zpk

Source: Prepared by the author.

Due to various concerns exemplified in Table 7, people who believe their freedom has been violated interpret the opposition to vaccination as a struggle for freedom and use Twitter to announce this struggle.

Table 8: Calls for Freedom Struggle

Tweet and Retweet examples
Please retweet. We need to show the Government we are the many not few, across the UK. Join us in Gloucester, to say #NoVaccinePassportsAnywhere and to say loudly #LeaveOurKidsAlone and #UniteForFreedom
The world is rising up. Our brothers and Sisters in Austria have had massive protests today. Please support them in there fight for freedom and liberty. #NoMandatoryVaccines #NoVaccinePassports #FreedomofChoice #Freedom #Liberty #Austria https://t.co/PXn3ORJbPQ
Read this. Please sign & support fairness, freedom for all. Look forward to life. Say no to vaccine passports. Never outlaw nature. Never outlaw natural immunity. https://t.co/vUBKaG41QY #TogetherDeclaration #together #StopTheVaxManiacs #NHScovidpass #NHS https://t.co/jWMwA1QVg2
Freedom independence protest Brazil. The people of Brazil are awake and demand #freedom #NoVaccinePassportsAnywhere #mybodymychoice #LeaveOurKidsAlone #brazil https://t.co/qh8HV8NkWw

Source: Prepared by the author.

As exemplified in Tables 7 and 8, findings such as associating mandatory vaccination passports with freedoms, believing that the authorities impose these impositions as a means of control, thinking that they are being watched and prevented, and distrusting politicians reveal another finding. Most participants with this belief associate their vaccinations and vaccination passports with the desire to establish a new world order. They believe a world order will be achieved, guided by strong hands in the background of necessity, where the cards are redistributed, and the game rules are redefined. Eventually, people can be kept under control. Some even believe it will mediate vaccines to be more controllable by affecting human DNA. Therefore, according to the participants, it is necessary to oppose vaccination passports to oppose this new normal imposition. Table 9 contains examples that support this view.

Tablo 9: Believing that New World Order has been Created

Tweet and Retweet examples
@HLMcLaughlin1 @CoinEnza @stacyherbert Good people cannot even begin to imagine the brutality of the New World Order. It's like being beaten over the head until you are not breathing and soaked in blood. #NoNewNormal #NoMasks #NoVaccinePassports
A new system is slowly surfaceing in the human civilization. I won't get the jab @CyrilRamaphosa u crazy my man #VaccinePassport #NoVaccinePassports #NoVaccinePassportsAnywhere #vaccine #VoetsekANC https://t.co/xG1y5JH8AU
The government wants to "manipulate" our DNA so they can easily patient it and own us in a way... The lockdowns are made to frustrate us and introduce us to the new world order #VaccineRollOutSA #NewWorldOrder #NoVaccinePassports
Super Thread: #NewNormal Part 1: #COVID19 #DnaNudge #HealthPassport #CovidPassTech #COVAX. Using behavioural science, society will be nudged towards routine DNA testing. To Get Back to the Things we Love. Let's Get Tested. https://t.co/fW33xE9Zz4

Source: Prepared by the author.

The relationship between Twitter users' approaches and sustainability

With the emergence and spread of COVID-19 vaccines, vaccine passports, which the authorities of most countries have enforced, contain meanings and processes that will relate to sustainability[1].

Mandatory application of vaccine passports is made to prevent people from getting COVID-19 disease, overcome this disease more mildly when caught, and reduce death rates. One of the primary reasons for those who support this practice in the research is the "positive contribution of the vaccine to human health". One of the other vital issues aimed at these practices is to re-normalize people believed to be protected by vaccines by getting rid of full quarantine practices, enabling them to travel, socialize and re-exist in society. These possibilities align with the "desire to return to normal life" of people who support vaccination and passport research findings. Ensuring the safety of individuals, protecting public health, and maintaining a healthy and normal social life are closely related to the concept of social sustainability. Therefore, implementing these practices by the government and authorities contributes to social sustainability. According to the research findings, supporters show such an approach to the need and search for social sustainability.

Another important reason for the mandatory application of vaccination passports is that individuals, small and large businesses, and even national economies experience significant economic losses. According to the research findings, one of the reasons for the supporters of vaccine mats to adopt this approach is the desire to revitalize the economy. Individuals want to return to their jobs and be economically liberated; on the other hand, businesses want to gain by interacting with their customers again. For this purpose, countries open their doors to vaccinated citizens; sectors such as airlines or tourism prefer to serve vaccinated customers with vaccinated employees and want to provide economic mobility. In the study, many tweets that established this relationship were found. Some of these are shown in Table 10.

[1] To reveal these relationships is one of the aims of the research. For this purpose, in this part of the study, in addition to the hastaghs shown in Table 2, different hastaghs that were found to show the relationships between Covid-19 vaccines, vaccine passports and sustainability were used as data collection tools. These hashtags are: #airlines #businesstravel #covidtourism #EconomicRecovery #healthpassport #hospitality #internationaltravel #ProfitsOverPeople #RestartTourism #sustainabletourism #tickettofreedom #tourismindustry #tourismmatters #tourismrecovery #traveltrend

Table 10: Desire to Achieve Economic Sustainability

Tweet and Retweet examples
@realShawNshawN If we can keep this #antimask and #antivax stuff going, the economy won't improve and if the economy doesn't improve, guess what we get to do in 2022? We get to blame the Democrats and the Biden Administration. Now that's what is going and ain't nothing paranoid about it.
@RepJeffries Economy dying thanks to ignorant #antivax
Reopening soon as a space for vaccinated guests! The Verandah Resort & Spa - https://t.co/ngtDJr2T50 #Vaxxed #VacationResponsibly #GetVaccinated #LoveAntiguaBarbuda #AntiguaNice https://t.co/H67e0C5SC2
"Vaccinations are the safest, most effective, and most powerful tool we have to achieve our goals, live up to our values, and move forward." ~@Delta CEO Ed Bastian @Newsweek #NatalieColarossi #Airlines #GetVaccinated https://t.co/UN5zXXfw1R
Festivities are firing up business for #travel and #tourism, as getaways claim packed weekends, thanks to #airlines adding routes and the #vaccine push. @RohitSinghNow @SaffronStays @deven_parulekar https://t.co/AGdiQKPwG6
Did you #Jab4Tourism? Andre Du Toit got his vaccine and can't wait to welcome tourists back to our country. What are you looking forward to? #SouthAfricaisTravelReady
Plan your vacation with us ✈️ We are having awe-inspiring properties with proper hygiene maintained and fully vaccinated staff ❤️ @countryholiday5
Innisfree Hotels requires COVID-19 vaccinations for all employees https://t.co/HwdYnTXotb #hotels #hospitality #lodging

Source: Prepared by the author.

As supported by many examples in Table 10, vaccination passports are a legitimate tool for the revival of economies and economic recovery, especially in sectors such as tourism and aviation. In addition to these discussions, those who do not support vaccination and mandatory vaccination passports develop discourses that reject the concept of social sustainability and emphasize the concepts of economic sustainability. Many of them state that vaccination passports do not protect public health. On the contrary, they threaten public health. Many people who reject their vaccination passports emphasise economic goals and gains. According to them, large commercial enterprises and governments place economic profitability above public health and force unsafe vaccines on people. In this process, while social and economic life is reopened to those with a passport, businesses vaccinate all their employees, while some employees who refuse to be vaccinated are dismissed. In this process, customers who refuse to be vaccinated live with bans. The tweets and retweets exemplifying these discussions are shown in Table 11:

Table 11: Believing that economic sustainability is prioritized above all else

Tweet and Retweet examples
I'll never fly @UnitedAirlines_ @UnltedAirlines again knowing they mandate their employees to get vaccinated. What about all the employees that have had the virus. Their natural immunity is far superior to that of a vaccine. #FlyDelta #Delta #Airlines
34 lives lost after vaccine.. too "coincidental" if u ask me. And we know there' are more cases unreported. nonetheless, it's important to get vaccinated, we need to help the economy here. #COVID19 #VaccineSideEffects #VaccinePassports
Revealed - Russian Aeroflot has suspended several pilots for refusing to vaccinate against the coronavirus ! More : https://t.co/xOh6Wh67F3 #aviation #avgeek #airlines #aircraft #pilots #vaccination
Any pub or club that even attempts to enforce these covid passports deserves to go under. #NoVaccinePassportAnywhere
You need to take a stand. Any businesses, shops, malls or venues, concerts that require your ' you know what' status.... do not give them your money. Do not give them your custom. It's the only way to win this. #NoVaccinePassportAnywhere #mybodymychoice
I will never spend a single penny at any establishment that enforces a vax passport.. I urge you all to do the same! The Jabbed also spread covid! #NoVaccinePassports #NoVaccinePassportAnywhere THIS IS ABOUT CONTROL, WAKE THE FUCK UP BEFORE IT'S TOO LATE! #NoMedicalApartheid
No job, Soccer game or night club is worth me taking a stupid trial vaccine made by ruthless, greedy capitalists who have never given a damn about anybodys health. Msunu we vaccine! #NoVaccine #NoVaccinePassports https://t.co/9XgMzTXupx
When are people going to wise-up to this CORPORATE SHILL #Fauci? It's only about corporate profits & political power. His greed and power trip know no end They will NOT stop on their own #NoVaccinePassportAnywhere #NoVaccineApartheid #NoVaccineMandate https://t.co/s8HMPXjoS0

Source: Prepared by the author.

Table 10 discusses the positive relationship between vaccination passports and economic sustainability, while Table 11 discusses the negative aspects of this relationship. While some emphasize that vaccination passports will mediate social and economic sustainability and should be implemented, some argue that vaccination passports are made purely for economic sustainability. Public health is endangered for this purpose, and the application for compulsory vaccination passports is rejected. All the findings discussed in this section are also supported by NVivo word cloud analysis. The results of the analysis of the tweets of those who support mandatory vaccination and those who are against this view as a word cloud are shown in Figures 1 and 2:



Figure 1: Supporters of Vaccination Passports

Source: Prepared by the author.

As seen in Figure 1, the economy is at the centre of supporting vaccination passports. This finding is one of the most critical indicators that economic sustainability concerns trigger vaccination passports. At the same time, the inclusion of words such as aviation, travel, tourism recovery, future, recover, sustainability, improve, balancing, restart Europe, and reopen also supports these findings.

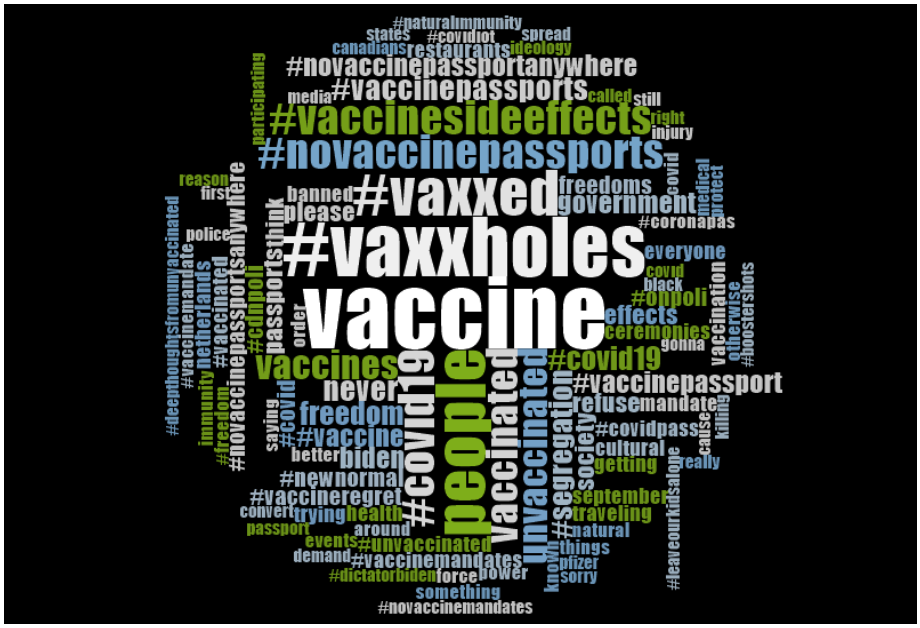


Figure 2: Those Who do not Support Vaccination Passports

Source: Prepared by the author.

In Figure 2, the keywords that show why people oppose this view can be seen. These are words like vaxxholes (depth-black hole), freedoms, government, segregation, vaccine side effects, saving, new normal, force, power, vaccine mandates, killing, refuse, health, banned.

Conclusion and recommendations

In the study, three different approaches have been identified for vaccinations and mandatory vaccination passport applications. The first is to support vaccination passports fully, the second to reject them altogether, and the third to reject mandatory vaccination passports.

Those who fully support these practices support this view with the belief that the vaccine benefits human health, contributes to returning to normal life and social life, and that economies can be revived. These results also support some studies in the literature (Cope et al., 2021; Jecker, 2021; Gostin, et al., 2021; Pavli and Maltezou, 2021; Schlagenhauf et al., 2021; Davidson, 2021).

Those who reject these practices entirely and those who reject the necessity of these practices defend this view due to various concerns. The first of these is vaccine hesitancy. The second cause of concern for this group is discrimination and anti-equality practices. According to the research results, another reason for opposing these practices is freedom concerns. Finally, some believe the new world order is created through vaccination passports. In this new order, individuals' DNA is manipulated through vaccines and made easier to control. These concerns reveal results in parallel with the literature (Pavli and Maltezou, 2021; Davidson, 2021; Cope et al., 2021; Schlagenhauf et al., 2021; Guidi et al., 2021; Gostin et al., 2021; 2 Thomas et al., 2021)).

According to these results, those adopting vaccination passports support these practices to ensure social and economic sustainability. According to them, there is no other way to protect public health and revitalize economies. According to those against these practices, compulsory vaccination passports are carried out purely due to economic concerns. Countries and large business enterprises seeking profit maximization are forcing society to unsafe vaccines, and profitability is prioritized over public health.

According to the results of the study, conflicting opinions and beliefs emerge. Mandatory vaccination passports raise several paradoxical questions because of these different proponents. Why do some people believe vaccines protect them while others believe it kills them? Why do some vaccinate their children to keep them alive, while others choose not to vaccinate their children to protect them? Why do some people think they will be freed by vaccination, while others believe they have lost their freedom because of their vaccination passports? Why do some believe that they will return to normal with the mandatory vaccination passports, while others believe that the new world order has been established? Why do some find it normal that these practices are mandatory, while others find it anti-egalitarian and discriminatory? To better understand the current pandemic period, it is essential to conduct research that seeks answers to these debates. Future research to discuss the positive and negative effects of vaccines and mandatory vaccination passports on human health, social life, and economic life will reveal results that will bring solutions to these paradoxical problems. In addition, this study is limited to the comments of Twitter users and the descriptive analysis method. Other studies based on different methods to overcome these limitations and reach more in-depth results on the subject will also contribute to the literature.

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