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Türkiye's COVID-19 Pandemic Experience in the Framework of Community Resilience: A Mixed Methods Study

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ABSTRACT

Purpose: A pandemic caused by the COVID-19 virus spread throughout the world in December 2019. The COVID-19 pandemic forced governments to implement various public health policies. Countries have struggled with this new situation within the limits of their resilience. The aim of the study is to determine how the components of community resilience are affected by the COVID-19 pandemic in Türkiye.

Design: Mixed methods were used in the study, incorporating both qualitative and quantitative research approaches. In the qualitative phase of the mixed method, interviews were conducted with eight academics from different disciplines to identify these components. In the quantitative phase, a questionnaire based on the data obtained in the qualitative phase was administered to 453 participants in Türkiye. The objective of the quantitative research was to determine the comparability of the data obtained from the qualitative research. In the last part of the study, the qualitative and quantitative data were combined and visualized.

Findings: According to the results of the analysis, it was determined that the community was negatively affected by disaster management policies, there were inequalities in education, and trust in society was low. The health system, economy, and psychosocial factors were perceived as more resilient.

Originality: In the study, we contribute to disaster research by identifying the factors that reduce the resilience of the Turkish community, based on the experience gained during the pandemic. For this reason, this approach may make it easier to identify factors that weaken resilience against future pandemics.

1 | Introduction

The events that cause disasters tend to be unexpected and have affected communities throughout history (Bonanno et al. 2010). The ability of the community to recover quickly, respond effectively, and maintain continuity despite these events is

directly related to its capacity (Norris et al. 2008). No matter how much technology we have today, disasters still affect communities (Pearce 2003). In dealing with the effects of disasters, the concept of 'resilience' comes to the fore, which has been emphasized in the disaster management literature recently and is gradually gaining in importance

(A Mixed Methods Study on The Covid-19 Experience)

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(Bhamra et al. 2011; Lanlan et al. 2024; Rumpa et al. 2023; Camacho et al. 2023). The concept of resilience is used to express the ability of a community to return to its normal state as soon as possible after an external impact (Leykin et al. 2016).

Communities, like individuals, are seen as living organisms from a sociological perspective (Aburn et al. 2016). Communities fulfill their functions through complex systems, just as the human body is made up of many organs and systems (Norris et al. 2008). Disasters impact the functioning of communities and can even disrupt the functioning of society (Bakic and Ajdukovic 2019). The functions of communities in the lives of individuals, that is, the ability of individuals to interact with the social environment and fulfill their responsibilities in settings such as work, social and cultural activities and family relationships (Kaniasty 2020). In other words, resilient communities can continue to function after disasters have occurred (Longstaff et al. 2010). There are many studies that try to explain the components of community resilience (Scherzer et al. 2019; Pfefferbaum et al. 2013; Leykin et al. 2013). However, the resources that each community has access to and the risks it faces may differ. Therefore, it is very difficult to identify the components of community resilience as a single model (Longstaff et al. 2010). According to a study by Pfefferbaum et al. the components of community resilience to disasters are connectedness and caring, resources, transformative potential, and disaster management (Pfefferbaum et al. 2013). The model developed by Lahad to explain the community resilience in coping with disasters is expressed in terms of belief, affect, social, imaginative, cognitive, and physical components (Lahad 2017). In a review of 80 systematic reviews by Patel et al. defining community resilience, nine characteristics were identified. These are the level of knowledge of local people, the networks and relationships established within the community, the strength of established communications, the level of health, the status of governance and leadership, equal access of individuals to resources, economic investment, preparedness, and mental health status (Patel et al. 2017). It is very difficult to define a single definition of social resilience and its components. Changing cultural structures, geographical areas of residence, and other different socioeconomic conditions affect the resilience of communities (Frigotto et al. 2022: 3–15). This is why some regions and communities are more resilient than others.

Disasters also affect the lives of individuals by disrupting the structure and functioning of the community and eliminating its capacity to cope (Gündüz 2024). Pandemics still pose a threat to today's society, despite the great advances in health that have been made recently (Khan et al. 2020). The COVID-19 pandemic, which emerged as a type of disaster in December 2019, could not be stopped despite all the progress achieved by humanity rapidly spread around the world (Piret and Boivin 2021). The fear of losing health, which is one of the most basic human instincts, places people in this new situation. The COVID-19 pandemic caused a major health crisis worldwide because it is a disease that spreads rapidly and can be fatal (Zhang 2021). During the pandemic, many countries around the world have resorted to various measures such as social distancing to prevent the spread of the virus (Ciotti et al. 2020). In addition, efforts to develop vaccines have been rapid, and many countries have sought to make these vaccines available to their citizens. Governments have tried to protect the health of

societies by adopting various health policies (Tang et al. 2024; Lyu et al. 2023). Communities with a high level of resilience to the massive social disruption caused by pandemics are able to protect themselves culturally and socially as much as possible (Sauter et al. 2023).

The aim of this study was to identify the components of community resilience that were affected by the measures implemented during the COVID-19 pandemic in Türkiye. This study is the first in Türkiye to focus on and investigate in depth the components of community resilience specific to the COVID-19 pandemic.

2 | Methods

The research employed a mixed methods approach to incorporate the components of community resilience. According to Creswell and Clark, mixed methods research involves collecting and analyzing both qualitative and quantitative data, guided by philosophical and theoretical understandings, and purposefully integrating the results to gain a comprehensive understanding of a subject or research phenomenon (Creswell and Clark 2017, 1–10). The exploratory sequential method, which enables the acquisition of quantitative data from qualitative data, was chosen as the design of the mixed methods study (Toraman 2021). The primary objective of selecting this method, is to identify the factors that influence resilience in Türkiye on the basis of firsthand accounts of individuals who have experienced the COVID-19 pandemic, rather than relying solely on theoretical approaches.

Exploratory research design was preferred for the qualitative phase. This method was adopted to identify unique problems related to the subject to be investigated (Mansourian 2008). In the first stage, eight academics from various disciplines were interviewed using qualitative methods. In the second stage of the study, a quantitative survey was conducted with 453 volunteers from all regions of the country using a convenience sampling method. This was based on a questionnaire developed from qualitative findings. Finally, the qualitative and quantitative findings were combined and presented visually. During the qualitative phase of the study, eight academics from various fields, including public administration, sociology, epidemiology, disaster risk management, urban planning, public health, and health management, were interviewed. We aimed to reach participants who have carried out academic studies on disaster and disaster management, health policy, and resilience. The qualitative phase of the research was analyzed within the framework of the following questions. These are:

- *What aspects of the decisions taken and policies implemented during the COVID-19 pandemic need to be improved?*
- *Based on your observations and experiences during the COVID-19 pandemic, what are the most important factors that decrease and increase individual and community resilience?*
- *What are the most important factors that decreased and increased the resilience of the health care system during the COVID-19 pandemic?*

- *How would you assess the administrative problems experienced during the COVID-19 pandemic?*

Table 1 includes the title of the participants and the discipline in which they work. After the interview, the conversations were transcribed one by one. Then, the theme of the study was created using MAXQDA 2020. The ethics committee-approved interview form was emailed to participants in advance, and interviews were conducted on online platforms, by making an appointment with participants who agreed to be interviewed. The interviews occurred over different durations, depending on the participant's ratings. It started on 26/10/2022 and was completed on 18/11/2022. With the permission and knowledge of the participants, the interview was recorded as an audio recording only. The interviews stopped when the data started to repeat, that is, data saturation was accepted as a criterion for stopping the sample (Hennink and Kaiser 2022). To ensure validity in the qualitative stage, confirmations were obtained from the participants and direct quotes were included in the findings section. To ensure reliability in the research, the data collection, analysis, and interpretation stages were clearly outlined. The "Consolidation Criteria for Reporting Qualitative Research" (COREQ) developed by Tong et al. (2007).

In the quantitative phase, the participants were approached with a questionnaire form based on the codes established in these categories. The data obtained in the quantitative phase were analyzed using SPSS (Statistical Package for Social Sciences) for Windows 25.0. Descriptive statistical methods (number, percentage) were used to evaluate the data. Significant differences between the variables of age, gender, educational level, employment status, sector of work, COVID-19 exposure, and region of residence, as defined by the research questions, were determined using χ^2 tests.

The distribution of the demographic characteristics of the participants is shown in Table 2.

3 | Results

In the qualitative phase of the study, the components of community resilience during the COVID-19 pandemic were analyzed under six themes: economy, psychosocial factors, education, health system resilience, disaster management policies and risk communication, as can be seen in Table 3 below. The researcher

created the figure using data obtained through interviews. Each main theme is explained with subthemes.

4 | Resilience Components

4.1 | Economy Theme

Under the theme of economy, sub-themes such as loss of income, unemployment, and supply of critical products were identified.

4.1.1 | Loss of Income Subtheme

During the pandemic, participants highlighted the difficulties individuals had in protecting their income. K7 expressed her views on the loss of income: "In my opinion, lack of education, lack of proper information, social prejudices, and economic problems were the most important problem areas for our country." K1 expressed her views in terms of loss of income: "If you look at the first places that closed down, small traders closed down and lost their income. There was a very serious economic vulnerability, and you could see how vulnerable urban economies are."

4.1.2 | Unemployment Subtheme

K3 expressed his opinion on unemployment as follows: "In general, people with a low level of education who are involved in manual labor are more affected by the pandemic. They cannot quit their jobs. There are thousands of people who live on daily income."

4.1.3 | Supply of the Critical Products Subtheme

Critical hygiene supplies, such as masks, disinfectants, and gloves, have become essential to prevent the spread of the pandemic, but there have been supply problems. K2 expressed her opinion about this situation as follows: "But here you could see the importance of local production, especially for all the critical goods and services. If it was not evident in the vaccine, it was seen in the mask. If it was not noticeable in the mask, it appeared in the medical equipment. It was evident to all the countries of the world that many products related to disinfection could not be supplied immediately."

TABLE 1 | Information about participants in the qualitative interview.

Code of participant	Participant's academic title	Academic discipline
K1	Assistant Professor	Public administration
K2	Assistant Professor	Epidemiology and disaster risk management
K3	Associate Professor	Urban planning
K4	Assistant Professor	Health management
K5	Assistant Professor	Sociology
K6	Professor Doctorate	Health management
K7	Professor Doctorate	Public health
K8	Associate Professor	Public health

TABLE 2 | Demographic characteristics of the respondents.

		Number	Percentage
Age	18–30	157	34.7
	30–45	198	43.7
	45–65	88	19.4
	65 and over	10	2.2
Gender	Male	203	44.8
	Female	250	55.2
Educational level	Primary school	4	0.9
	Secondary school (high school)	34	7.5
	Associate degree	110	24.3
	Bachelor	110	24.3
	Postgraduate	195	43.0
Employment status	Working	378	83.4
	Not working	21	4.6
	Student	54	11.9
Sector of work	Private sector	79	20.9
	Public sector	256	67.7
	My own enterprise	43	11.4
COVID-19 exposure	Yes	216	47.7
	No	237	52.3
Region of residence	Mediterranean region	21	4.6
	Eastern Anatolia region	38	8.4
	Aegean region	54	11.9
	South-Eastern Anatolia region	25	5.5
	Central Anatolia region	92	20.3
	Black Sea region	121	26.7
	Marmara region	102	22.5

4.2 | Psychosocial Factors Theme

The psychosocial factors assessed were mental well-being, social trust, the importance of public sphere, and collective behavior.

4.2.1 | Mental Well-Being Subtheme

Regarding the mental well-being code, K2 expressed her views as follows: “Secondarily, the mental health of the society has been affected at a very serious level, which is a factor that reduces resilience. Social trust and the strength of communication between individuals are critical for resilience.”

4.2.2 | Social Trust Subtheme

On the issue of social trust, K2 said: “Social trust and the strength of communication between individuals are critical in terms of resilience”. Another participant in this code, K7, said: “Lack of education, lack of proper information, social

prejudices, and economic problems were the most important problem areas for our country.

4.2.3 | Importance of the Public Sphere Subtheme

K8’s assessment of the significance of the public sphere is as follows: “Common public areas such as parks and gardens are crucial. The lack of such areas can lead to stress and limited breathing space. It is important to balance the measures taken to address one issue with the potential negative impact on another, such as balancing environmental pollution mitigation with the need for wearing a mask.”

4.2.4 | Collective Behavior Subtheme

The assessment of K4 regarding collective behavior is as follows: “Of course, the scope of these awareness-raising activities should not be very limited; they should definitely have a social impact. All efforts are wasted if society remains unaware.”

TABLE 3 | Türkiye's COVID-19 pandemic experience in the framework of community.

Themes	Sub-themes
Theme 1: Economy	• Loss of income • Unemployment • Supply of the critical products
Theme 2: Psychosocial factors	• Mental well-being • Social trust • Importance of the public sphere • Collective behavior
Theme 3: Education	• Inequalities in the education • Ensuring continuity of the education
Theme 4: Health system resilience	• Infodemic • Sustainable health services • Access to health services and capacity • Infected patient follow-up system
Theme 5: Disaster management policies	• Conflicts between the central and local governments • Governance issues • Measures taken during the pandemic
Theme 6: Risk communication	• Provision of accurate information to the public • Transparency • Lack of risk communication

4.3 | Education Theme

Education theme assessed were inequalities in the education and ensuring continuity of the education.

4.3.1 | Inequalities in the Education Subtheme

The assessment of K8 in terms of inequality in school education is as follows: "Individuals with higher incomes had access to technological resources such as laptops, tablet computers, and private tutoring, while students in public schools without sufficient means were left behind, resulting in increased educational inequalities."

4.3.2 | Ensuring Continuity of the Education Subtheme

In relation to the continuity of education, K5 expressed her views as follows: "Education should have been continued in areas with low case density, and more alternative solutions should have been considered. In many countries around the world, distance education was used only in the early stages of the pandemic, but face-to-face education continued for a short time."

4.4 | Health System Resilience Theme

Under the theme of health system resilience, we identified sub-themes of infodemic, sustainable health services, access to

health services, capacity, and infected patient follow-up systems.

4.4.1 | Infodemic Subtheme

The evaluations of K8 regarding the infodemic are as follows: "I think the infodemic was crucial, very important here, which made the struggle difficult. There were many people who did not want to be vaccinated, even among health workers, because there was not enough explanation. Correct information should have been provided here, but this could not be done adequately."

4.4.2 | Sustainable Health Services Subtheme

Regarding the subtheme of sustainable health services, K6 states: "I think there are problems in the provision of other health services in terms of the continuity of the system. The demand for healthcare services decreased because of the fear of getting sick."

4.4.3 | Access to Health Services and Capacity Subtheme

The evaluations of K2 regarding access to health services and capacity are as follows: "In the battle against the pandemic, the swift establishment of new hospitals and the increase in the number of intensive care beds facilitated a smooth process."

Simultaneously, there was a decrease in the number of patients arriving during the usual period, a situation that was well managed. During the fight against the pandemic, the issue of trained personnel has become more prominent than the shortage of medical equipment.”

4.4.4 | Infected Patient Follow-Up System Subtheme

The evaluations of K5 regarding the infected patient follow-up systems are as follows: “The filiation teams have been successful in their formation and functioning. The Ministry of Health has established a filiation system to determine the spread rate of the pandemic and the locations where the source of transmission is intense. This system tracks contacts of people who have contracted the disease and works effectively.”

4.5 | Disaster Management Policies Subtheme

The disaster management policies assessed included conflicts between central and local governments, governance issues, and measures taken during the pandemic.

4.5.1 | Conflicts between the Central and Local Governments Subtheme

In relation to the subtheme of conflict between the central and local governments, K1 says that “During the COVID-19 pandemic, all processes were handled solely by the central administration and the Ministry of Health. Subsequently, more issues became apparent, such as the central government confiscating aid collected by the municipality. These situations are believed to have arisen because of political differences.”

4.5.2 | Governance Issues Subtheme

The views of K3 on the governance subtheme are as follows: “I can say this in general terms. In general, there has been a global trend towards decentralization. However, the pandemic has highlighted the importance of a strong central government. In federative or unitary states, it has become clear that the state is necessary. Unfortunately, local governments and non-governmental organizations were not adequately involved in the pandemic response.”

4.5.3 | Measures Taken During the Pandemic Subtheme

The opinion of K5 on the subtheme of measures taken during the pandemic is as follows: “I think of the practices that were used at the time, and the reason for them is very unclear. For example, issuing a fine for wearing a mask when you are alone in a car could be considered excessive. I think that those who make these practices in the public sector or decision makers are intimidating and harassing people who are trying to adapt to these strange decisions.”

4.6 | Risk Communication Theme

Under the theme of risk communication, the provision of accurate information to the public and transparency were identified.

4.6.1 | Provision of Accurate Information to the Public Subtheme

According to K3: “There were many people who did not want to be vaccinated, even among the health workers, because there wasn't enough explanation. The right information should have been given, but it was not given enough.”

4.6.2 | Transparency Subtheme

Regarding the subtheme of transparency, K6 said, “It is necessary to convince society with the right tools and the right information.” Also K7 said: “The fact that the public was not informed in a timely and transparent manner made it difficult to comply with the measures taken.”

4.6.3 | Lack of Risk Communication Subtheme

Regarding the failure to ensure risk communication, K2 states the following: “There was a problem in terms of risk communication; there could have been better communication with the community.

In the final section of the study, the qualitative and quantitative findings were analyzed with respect to the variables of age, gender, educational status, employment status, labor sector, COVID-19 experience status, and region of residence. Cronbach's α value, which indicates the reliability of the questionnaire used, was calculated as 0.968. Presenting the findings from the exploratory mixed-method study through comparison facilitates their evaluation. The left column of the combined visuals displays the qualitative themes and sub-themes obtained during the qualitative phase. The middle column shows the questions that were derived from the sub-themes, and directed toward the participants. The block on the right displays the intersections of significant differences obtained through χ^2 analyses with variables such as age, gender, educational status, employment status, labor sector, COVID-19 experience status, and region of residence. Significant differences are shown in the table below (Table 4). Positive or undecided opinions are shown in the dark colors, and negative opinions in light colors.

As illustrated in Table 4, our study presents the significant relationship between the dimensions of community resilience identified and those observed in the field study. These findings indicate that resilience is higher in the economic, psychosocial, and health system dimensions. However, it can be interpreted that community resilience is lower in the dimensions of education, disaster management policies, and risk communication. Positive or undecided opinions are shown in the dark colors, and negative opinions in light colors.

TABLE 4 | Significant differences between variables and quantitative questions.

Qualitative themes and subthemes	Questions derived from the subtheme	Age	Gender	Educational status	Employment status	Labor sector	COVID-19	
							experience	Region of residence
<i>Economy (Loss of income, unemployment, supply of critical products)</i>	I was able to earn my living during the pandemic.	●	●	●	●	●	●	●
	I will be able to keep my job during the pandemic.	●	●	●	●	●	●	●
	I will be able to buy essential hygiene products such masks, disinfectants, gloves, etc. that may be needed in the event of a pandemic.	●	●	●	●	●	●	●
<i>Psychosocial factors (Mental well-being, social trust, importance of public sphere, collective behavior)</i>	I have no fears that I will become ill because of the pandemic.	●		●		●		●
	I have confidence in the ability of the community in which I live to deal with the pandemic.			●			●	
	During the pandemic, we need social spaces	●		●	●	●		●
<i>Education (Inequalities in education, Ensuring continuity of education)</i>	Like parks and gardens.							
	I will comply with the rules on the wearing of masks in public places.	●		●	●	●		●
	During the pandemic, all students should have equal opportunities in education.		○	○	○	○	○	○
<i>Health system resilience (Infodemic, sustainable health services, access to health services and capacity, infected patient follow-up systems)</i>	During a pandemic, it is important to ensure that the education process continues without interruption.		○	○	○	○	○	○
	The information provided and the vaccines produced are reliable measures to prevent the spread of the pandemic.	●	●	●				
	Health institutions continue to provide uninterrupted services across all units during the pandemic.			●		●		
	There are sufficient hospitals in case of illness.		●		●	●		

(Continues)

TABLE 4 | (Continued)

Qualitative themes and subthemes	Questions derived from the subtheme	Age	Gender	Educational status	Employment status	Labor sector	COVID-19	
							experience	Status
Disaster management policies (Conflicts between central and local governments, governance issues, measures taken during the pandemic)	Follow-up practices for suspected COVID-19 patients are valuable in managing the pandemic.			●	●	●		
	Municipalities can play an important role in managing the pandemic by collaborating closely with the central government.	○	○	○	○			○
	Public opinion is taken into account when addressing the challenges posed by the measures taken to deal with the pandemic.	○		○		○		
	The government implements measures to prevent the spread of the pandemic.	○						
Risk communication (Provision of accurate information to the public, transparency, lack of risk communication)	The information on the pandemic provided by the Department of Health is accurate.	○	○	○	○			
	During the pandemic, the Ministry of Health transparently publicized all information.			○			○	
	The instructions given by the Ministry of Health on what to do if you fall ill are sufficient.		○					

5 | Discussion

The COVID-19 pandemic has had an economic impact on people's lives and their concerns about their health. In a study of agricultural workers by Olson et al. workers infected with COVID-19 who could not work reported a greater loss of income than those who were not infected (Olson et al. 2023). A study of the general population in the United States found that middle-income people in particular had significantly higher levels of anxiety about experiencing economic loss (Piltch-Loeb et al. 2021). Many companies stopped operating during the pandemic, leading to unemployment (Tetlow et al. 2020: 2–10). A study by Paterson and Young in the UK found that the lack of social security due to the increase in unemployment during the COVID-19 period increased inequalities and that families were adversely affected by this situation (Paterson-Young 2021). In studies conducted in countries and regions with different income levels during the pandemic period, individuals were most concerned about experiencing economic losses.

One of the most important determinants of individual attitudes toward the COVID-19 pandemic are psychosocial factors. In a study of the general population in the USA, Latkin et al. found that most of the population doubted the existence of the virus. At the same time, most skeptics indicated that they did not feel that measures such as wearing masks, social distancing, and attention to personal hygiene were necessary to prevent the spread of the pandemic (Latkin et al. 2022). In a study conducted in the USA by Batty et al. 90% of those who were reluctant to receive the COVID-19 vaccine said that they were more afraid of the side effects of the vaccine than of receiving COVID-19 (Batty et al. 2020). A further study conducted in Chile revealed that women were more concerned and fearful of being infected with the novel coronavirus than men. It was also found that women were the least likely to trust the authorities (Bronfman et al. 2021). As far as Türkiye is concerned, it can be said that there are no major difficulties in terms of society's adaptation to the measures taken.

The disruption of social life and the measures taken during the COVID-19 pandemic have had a significant impact on education at all levels. In a qualitative study conducted with medical students, the main difficulties experienced in the distance learning process were identified as noncompliance with virtual classroom rules, insufficient interaction, time constraints, and infrastructure problems (Hayat et al. 2021). Another study conducted in India highlighted that the biggest problem with online continuing education is that not all students have access to the internet and electronic devices (Nur Agung and Surtikanti 2020). In a study conducted by Hoofman and Secord, it was found that children from low socioeconomic families and children with special needs were the most negatively affected by distance learning (Hoofman and Secord 2021). Our findings show similarities with the results of the other studies mentioned above.

In the fight against COVID-19, the resilience of countries' health systems was crucial in determining mortality rates. Haldane et al. examined the resilience of the health systems of 28 countries from all continents during the COVID-19 pandemic and found that some health policies were adopted by

countries with high resilience (Haldane et al. 2021). The health policy analysis in Singapore, one of the Asian countries that first encountered the COVID-19 virus, emphasizes that management is transparent, mass communication is effectively managed, primary health services are robust, other health services are maintained, and the resilience of the system is ensured by contingency funds and a strong legal foundation for these policies (Chua et al. 2020). A study to assess the resilience of the Spanish health system in the event of a COVID-19 pandemic identified several problem areas. The issues include: financial shortcomings of regional health systems; insufficient long-term investment in health services; inadequate supply of health workers, intensive care beds, protective equipment, diagnostic test kits, and mechanical ventilators to meet the increased demand for health services; problems of social adjustment to the measures taken to prevent the spread of the epidemic; and possible political problems between local and central governments (Legido-Quigley et al. 2020). Although there are some shortcomings and problematic areas in our research, the public perception is that Türkiye's health system remains functional and strong.

During the COVID-19 pandemic, a type of biological disaster, countries and their governments adopted different disaster management policies. While Asian countries generally adopted stricter policies to combat the pandemic, Western countries remained relatively restrained in implementing policies that restricted individual freedom and independence (Hu and Liu 2022). Lazarus et al. examined public trust in national government crisis management during a pandemic, (Covid-19), 19 countries from different geographical regions. They found that trust in governments was higher in Asian countries than in Europe and the Americas (Lazarus et al. 2020). Studies conducted in countries in two different geographical regions such as South Korea and the Philippines highlight the indispensable role of local governments in the fight against the COVID-19 pandemic. These studies have found that local governments play an effective role in solving problems by identifying needs in their region more quickly than central governments (Kim and Jeong 2023). In this context, the results of our study show that there is a social perception that measures to slow the spread of the pandemic are insufficient, that local governments should be active in this process, and that the needs of the public should be identified directly.

According to Quintero, it is of undeniable importance for governments to adopt a policy of sharing pharmacovigilance studies, which investigate the causes of unexpected effects of vaccines and medicines, in a transparent and reliable manner to reducing problems related to risk communication, especially anti-vaccination (Quintero 2022). A study investigating the level of hesitancy among healthcare workers toward vaccines against COVID-19 found that male, older, and doctorally trained healthcare workers were less hesitant toward vaccines. On the other hand, the low level of vaccine refusal, even among healthcare workers, may be due to inadequate risk communication (Biswas et al. 2021). Another study on risk communication in the COVID-19 pandemic highlighted that misinformation, particularly through social media, made it difficult to control the pandemic. It was emphasized that effective risk communication plays an important role in

protecting society from infodemics and building social trust in society (Safarpour et al. 2021). In the results of our study, we can see that the significant differences are negative according to the analyses within the framework of risk communication.

6 | Conclusion

All we experienced during the COVID-19 pandemic has affected societies in Türkiye and the world in different ways. Each society experienced this process by utilizing components that constitute resilience in the broadest sense, such as its economic power, social capital, the country's health infrastructure, and the success of its leaders in management processes. Communities with positive characteristics in all these components experienced fewer losses during the pandemic, owing to their resilience. Negative characteristics in the components that make up resilience weakened resilience, and as a result, it was observed that this society suffered more losses. If countries correctly defined and implemented the health policies in these processes, they could minimize their losses by increasing the resilience of their societies.

In the case of Türkiye, the policies in the COVID-19 pandemic process are designed within the framework of the country's management capacity. The results of our study confirm that various factors reduce resilience capacity during the pandemic process. Implementing policies that take a risk reduction approach to possible future pandemics will strengthen the resilience of Turkish society. Where community resilience is weak, invest in reducing educational inequalities. An economic environment that provides social security for all parts of society against possible losses from various pandemics that may occur in the future should be created. Ensuring a more effective, accountable management approach that strengthens risk communication and provides accurate information to the public will increase community resilience. A more consistent, fair, and accessible implementation of the policies adopted by the central government in the management of the COVID-19 pandemic will increase the community's resilience.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The authors have nothing to report.

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