





“Initiatives, public trust, and citizen engagement during crises: A comparative analysis across Baltic states”

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INITIATIVES, PUBLIC TRUST, AND CITIZEN ENGAGEMENT DURING CRISES: A COMPARATIVE ANALYSIS ACROSS BALTIC STATES

Abstract

The purpose of this study is to investigate the interplay between government initiatives, public trust in government, and citizen engagement within the context of two distinct crisis scenarios: a global health crisis caused by the COVID-19 pandemic and an international security crisis caused by Russian aggression against Ukraine. A two-stage biennial survey methodology is used to collect quantitative data. In the first phase, which took place in the context of a global health crisis, an omnibus survey was conducted, involving a randomly selected sample of 3,175 respondents from three Baltic countries: Estonia (n = 1002), Latvia (n = 1017), and Lithuania (n = 1006). In the second stage, which took place in the context of an international security crisis, a random sample was carried out of 2026 respondents from two Baltic countries: Estonia (n = 1002) and Lithuania (n = 1024). The analysis examined causal relationships in political, rational, and social trust.

The findings reveal that the relationship between trust in the government and government initiatives that foster political, rational, or emotional trust is stronger during international security crises than during health crises. This means that citizens perceive government behavior as more credible in the context of external security threats. Research on the interaction between government behavior and citizen participation is more nuanced than on public trust. In general, government initiatives have a greater impact on citizen participation than public trust in both crises. This highlights the positive impact of government initiatives in cooperation with the population.

Keywords

public trust in government, citizen participation, crisis management

JEL Classification

H11, H12

INTRODUCTION

Fostering public trust is an important objective for governments and public institutions alike, as it leads to citizen participation, the most important prerequisite for functioning democratic societies. This objective is even more challenging in times of crisis, regardless of its origin. Crises such as the global health crisis caused by the COVID-19 pandemic and the international security crisis caused by Russia's war against Ukraine, which disrupted the global supply system and fundamentally altered the global security environment, require complex public decisions and extraordinary citizen participation. For the countries directly bordering Russia, i.e., Lithuania, Latvia, and Estonia, collectively known as the Baltic states, the impact of the global health crisis and subsequent external threats to national security due to Russian aggression against Ukraine were particularly acute and perceived as critical crises. In the face of such kind of crisis, citizen trust in government and citizen participation becomes critically important for the legacy of the government decisions and political stability.

Public authorities are actively striving to enhance citizens' trust in government and citizen participation through various actions. Despite a range of approaches employed for this purpose, they often lack differentiation based on the intended outcome – whether it is a rise in trust or an increase in engagement. Although the assumption is that similar measures could achieve both outcomes, this premise requires empirical validation due to the lack of substantial research support. Therefore, it is crucial to explore whether government initiatives in the Baltics influence public trust in government and the level of citizen participation in two different types of crises.

The first, the global health crisis caused by the COVID-19 pandemic, challenged governments to make tough decisions in the interest of public health and safety. The effectiveness of governments' social distancing, testing, and vaccination policies depended heavily on citizens' trust in government decisions.

Second, the international security crisis resulting from Russia's war in Ukraine has significantly impacted civic activism, especially in the context of support for Ukraine, and has also affected citizen-government interaction in the Baltic countries bordering Russia. This unique crisis dynamic creates an environment that shapes the development of trust in government and civic engagement that is very different from other types of crises.

1. LITERATURE REVIEW

1.1. The concept of citizen trust in government

Citizen trust in government is a widely explored research topic in politics, sociology, public administration, and other directions of social sciences examining individual elements of public governance. Blind (2007) emphasizes that citizen trust plays a central role in effective governance and is a key component of the legitimacy and durability of political structures. Citizen trust helps the government more easily implement public policy, respond to and overcome crises, reduce inequality and ensure human rights, deal with social issues, maintain public safety and law enforcement, even reduce transaction costs, and foster public support and investment in challenging reforms and program (Clark & Lee, 2001; OECD, 2022). According to Kumagai and Iorio (2020), countries with high levels of public trust in government experience less corruption, better government quality, lower crime rates, higher political engagement, greater compliance with legal standards, and faster economic growth, i.e., citizens in those countries are more satisfied with the government. In addition, it is observed that crises can lead to a widening of the gap between satisfied and dissatisfied citizens concerning govern-

ment decisions and policies (Ejrnæs & Harrebye, 2022). This dynamic highlights the complex interplay between government behavior (decisions, policies, and actions) and citizens' trust in government.

It should be noted that the concepts of 'confidence' and 'trust' are often used in the scientific literature. Blind (2007) emphasizes that 'confidence' is usually associated with passive emotions attributed to the general sociopolitical system, while 'trust' is perceived as beliefs and commitments to citizens. Trust in government depends on citizens' belief that the government fulfills its obligations to citizens, public institutions act in the public interest, and the results meet public expectations (Hardin, 1998; Levi, 1998). Thus, trusting the government, citizens expect that the government will be trustworthy (Levi, 1998). According to Brezzi et al. (2021), trust in government is related to such values as loyalty, commitment, and confidence and fosters such citizen behavior as obedience, compassionate appreciation, and participation.

Following Blind (2007) and Kumagai and Iorio (2020), three types of trust in government could be identified. First, political trust depends on credible policymaking. It is built on (1) organizational (macro-level) trust that includes system-based trust (pointed at the entire political system and the activities of all regimes) and institution-based

trust (directed at certain political institutions) as well as (2) individual (micro-level) trust – directed toward individual political leaders. Political trust is about trusting the morals and values of political institutions and their representatives; citizens look for sincerity and truth in the speech and behavior of political leaders.

Second, rational trust is based on the citizen's motivation to trust political forces or their leaders (for example, taking care of citizen interests). It is manifested that citizens appreciate the government, its institutions, the overall policymaking process, and individual political leaders based on their effectiveness, fairness, and ability to fulfill promises (Blind, 2007, p. 3-4).

Third, social trust is directed at citizens trusting each other. It cannot be separated from political trust, as civic engagement within the community and the mutual trust among its members play a vital role in enhancing overall social trust within a society, e.g., encouraging new social movements and protests. Additionally, these factors significantly influence trust in the government, e.g., increases political participation, especially in voting.

The basis of all three forms of trust is closely linked to the competences and values that citizens perceive or, conversely, feel lacking in their government's decision-making processes. Following Brezzi et al. (2021) and the OECD (2022), competences include responsiveness, exemplified by efficient, quality, and affordable public services, as well as innovative public services that meet citizens' needs. In addition, competences include credibility, which involves reducing uncertainty through effective and forward-looking policy instruments. Values such as openness, integrity, and fairness also play an essential role in building citizen trust. Openness includes transparent and accessible information, active consultation, stakeholder participation, and emphasizing equality in representative democracy. Integrity involves a delicate balance between ethical values and the public interest, supported by anticorruption policies and the priority of the common good. Finally, fairness is about improving all individuals' living conditions, regardless of their gender, socioeconomic status, or racial/ethnic origin.

1.2. Participation of citizens in managing crisis

The active involvement of citizens is fundamental and serves as a crucial gauge of a thriving democracy. Activities such as political engagement, which includes participating in elections, signing petitions, communicating with government representatives, and joining political parties, have a dual impact on democracies. They foster the growth of democratic values and civic abilities at the individual level while simultaneously conferring legitimacy upon the entire system (Brezzi et al., 2021; Putnam, 2000). Decision-making (giving innovative initiatives and ideas, attending multi-actor workshops, engaging in experiments) refines problems and public needs, helps to reframe the policy planning discourse, forms a consensus between citizens and public authorities, reduces resistance and opposition to reforms, and promotes social innovation (Nyseth et al., 2019). The role of citizen participation during a crisis is even more critical.

Citizen participation in various public forums empowers citizens to influence policy and policy decisions (Fishkin, 2011). This is a form of bottom-up participation. In different countries, this participation is different. It depends on various factors, such as the level of development of civil society, the cultural attitude of the society, and social factors such as age or income. Research shows that citizen participation is vital in crisis management, contributing to more successful crisis management, saving public funds, and increasing transparency and openness (Giedraitytė et al., 2022).

Furthermore, citizen participation contributes to more successful communication, which is necessary between state institutions and society in times of crisis. Citizen groups typically emerge when citizens feel that existing organizations are inadequate (Auf der Heide, 1989). As an example, Smith et al. (2018) feature the citizen volunteer response of Houston (Texas, USA) during the flooding caused by Hurricane Harvey. According to Smith et al. (2018), Houston city officials and the Federal Emergency Management Agency contacted local boat owners. In cooperation with the citizens, it was possible to successfully rescue the residents trapped in their places of residence. Research in-

icates that citizens, as volunteers, usually take on the role of initial responders during any crisis or disaster.

Consequently, in times of emergencies, citizens often spring into action without formal summons of public authorities (Díaz et al., 2014; Linnell, 2014; Whittaker et al., 2015). Giedraitytė et al. (2022), referring to Díaz et al. (2014), indicate that citizen participation encompasses three primary roles: citizens serving as informants or ‘sensors,’ citizens reacting to an event while being guided by authorities or ‘reactive sensors,’ and citizens assuming a leading role in crisis management or ‘active sensors.’ It is stated that citizens often act as whistle-blowers when they warn of a threat and track information about a crisis. The second role becomes apparent during crisis response and recovery procedures, typically upon the invitation or demand of state institutions, and the third role is a rarely occurring factor (Giedraitytė et al., 2022).

1.3. Government initiatives in fostering public trust and enhancing citizen participation

As mentioned earlier, research shows a close relationship between citizens’ trust in government and citizen participation. Therefore, practice and theory provide a set of government-led initiatives designed to foster these two variables. There are multiple perspectives on the interplay between citizen participation and trust in government, as noted by Blind (2007). Kumagai and Iorio (2020) argue that trust in government and citizen participation mutually reinforce each other. According to Soares da Silva et al. (2018), citizen engagement facilitates interaction between the state and its citizens in the realm of politics to enable citizens to actively participate in the decision-making process. When citizens are involved, it allows the government to foster citizen trust in public decisions and service delivery.

Government initiatives to foster public trust and enhance citizen participation are top-down initiatives. They generally refer to the concept of government being actively involved

in involving citizens or stakeholders in decision-making processes and public policy development. This approach aims to strengthen democracy, transparency, and accountability by giving people a voice on issues that affect their lives. Governments employ both direct and indirect strategies within societies to involve citizens, particularly during times of crisis. Diverse crowdsourcing methods are also used to identify the most qualified individuals to address public policy issues. One significant approach involves allocating time and resources to representatives who engage with experts and interested parties, collaboratively formulating recommendations. This method enables citizens to actively participate in tackling challenges and implementing public decisions (Giedraitytė et al., 2022). Public participation in political life, not only in times of crisis, is shaped by the general public’s awareness, which leads to a wide debate between an elite approach and a direct participation approach to democracy. Government initiatives aim to ensure that policies and decisions are well-informed, inclusive, and responsive to the needs and preferences of the people they affect. Governments can draw on a broader range of knowledge by involving citizens, ensuring better representation of diverse viewpoints, and building citizen trust. To facilitate dependable and efficient citizen involvement in crisis management, authorities enhance communication channels connecting citizens with experts, provide citizens with training on responding to crisis situations, and ensure the accuracy and reliability of information from both citizens and governmental institutions (Díaz et al., 2014). The success of government initiatives depends on factors such as governments’ willingness to genuinely consider citizen input, the effectiveness of communication channels, the extent of citizen involvement, and the resources available to facilitate participation.

This theoretical overview dilutes that the government initiates tangible activities that, according to citizens’ perception, can be divided into three groups. First, initiatives that inspire political trust. Public authorities respond to public criticism. As the literature on regulatory governance points out, reacting to public criticism and behaving reactively rather than

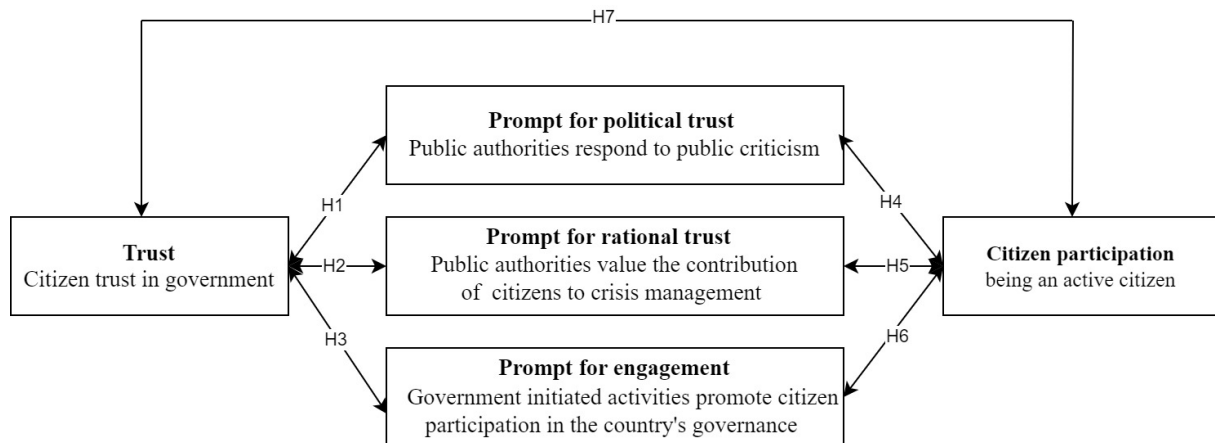


Figure 1. Research model

responsibly is a common characteristic of government in democratic societies. It is often criticized for lack of transparency, disconnection from society, and lack of direct accountability (Bunea & Nørbech, 2023).

Second, initiatives that inspire rational trust. Public authorities recognize the vital role of citizens in crisis management. Citizens see that the government values their efforts and impact. The most challenging aspect of integrating citizen input into public institutions is the smooth incorporation of individual actions into a broader governance framework (Knodt et al., 2023). For society to truly understand the importance of citizens' efforts in crisis management, it is necessary to effectively channel each individual's contribution. This requires the development of early mechanisms, which are often missing during crises, that can skillfully use this input.

Third, initiatives that stimulate engagement. Initiatives launched by the government to actively encourage citizen engagement in the governance of their nation are essential. Contemporary technologies can be harnessed to influence or modify political conversations, fostering dynamic citizen involvement in crisis management. Information technology serves a dual purpose, as a medium for delivering information to citizens and as a platform for engaging citizens in roles (Díaz et al., 2014; Giedraitytė et al., 2022).

Considering the insights identified in the theory, this study aims to examine the interplay between government initiatives, public trust, and citizen

participation in two different crisis scenarios: a global health crisis caused by the COVID-19 pandemic and an international security crisis caused by Russian aggression against Ukraine. Based on the theoretical framework, a research model (Figure 1) and hypotheses are developed:

- H1: A positive correlation exists between the responsiveness of authorities to public criticism (prompt for political trust) and the degree of public trust in government.*
- H2: A positive correlation exists between public authorities valuing citizens' contributions to crisis management (prompt for rational trust) and the degree of public trust in government.*
- H3: A positive correlation exists between the responsiveness of government-initiated activities designed to improve citizen participation (prompt for engagement) and the degree of public trust in government.*
- H4: A positive correlation exists between the responsiveness of authorities to public criticism (prompt for political trust) and the extent of citizen participation.*
- H5: A positive correlation exists between public authorities valuing citizens' contributions to crisis management (prompt for rational trust) and the extent of citizen participation.*
- H6: There is a positive correlation between the responsiveness of government-initiated activi-*

ties designed to improve citizen participation (prompt for engagement) and the extent of citizen participation.

H7: A positive correlation exists between the degree of public trust in government and the degree of citizen participation.

2. METHOD

2.1. Participants and procedures

Data were collected using quantitative methods, employing a two-stage biannual study approach. The first stage of the study took place in November 2021, a period coinciding with the global health crisis. At that time, November 2021 witnessed the onset of the fourth wave of the COVID-19 pandemic, marked by an upsurge in hospitalizations and fatalities. In response, the government implemented stringent measures, including restrictions and penalties for those who resisted vaccination against the virus. This phase was marked by a challenging atmosphere characterized by societal polarization and the implementation of stringent governmental measures in response to the crisis. The results of the first phase of the survey in the Baltic countries are quite controversial. However, they show how much citizens' trust is related both to citizen engagement and the government's behavior. The first stage of the survey involved a randomly selected sample of 3,175 respondents from three Baltic nations: Estonia (n = 1002), Latvia (n = 1017), and Lithuania (n = 1006). Under data quality standards, some questionnaires were rejected due to data exclusions. 985 Lithuanian respondents, 959 Estonian respondents, and 931 Latvian respondents are analyzed, exceeding the minimum required sample size threshold. In the study, the statistical significance of the variables was calculated, the relationships between the variables were evaluated, and the statistical difference between the variables was calculated, taking into account the demographic data. To mitigate potential spurious associations, stratification was used in the results.

The second stage of the study was conducted in September 2022, approximately six months after Russia's military intervention in Ukraine. This

period is also characterized by a notable increase in cyberattacks targeting the Baltic states, further contributing to the delicate nature of international and regional security. Given the geographic proximity of the Baltic states to Russia, the active engagement of citizens in decision-making, along with their provision of physical assistance to state institutions during the Russian aggression, significantly shapes the broader perception of state security and government-citizen relationship. The second study used a random sample of respondents from two Baltic countries (2026). 1002 Estonian citizens and 1024 Lithuanian citizens were interviewed. The sample size exceeded the minimum requisite threshold. Since the results obtained in Lithuania and Latvia during the first study were relatively similar, during the second study, in order to save time and financial resources, the study was conducted only in Lithuania and Estonia. As in the first stage of the study, the implementation of stringent data quality standards led to the exclusion of some questionnaires due to data inadequacy.

The analysis incorporated eight main questions. A five-point Likert scale was used to measure the variables: totally disagree (1), partially disagree (2), neither agree nor disagree (3), partially agree (4), and totally agree (5).

Both surveys covered various social and demographic groups. Respondents were selected on geographical distribution, nationality, age, profession, financial, and social aspects. For two years, the study encompassed a total of 5,201 respondents from all three Baltic countries. Respondents include unemployed and employed, pensioners and young citizens, cohabiting and single, urban and rural residents, and residents with different incomes. Each respondent has an equal opportunity to be included in the sample; therefore, probability sampling was chosen (Table 1).

Larger sample sizes yield more accurate and reliable results as they reduce the potential for random variation to dominate the outcomes. On the other hand, smaller sample sizes might lead to less accurate results. However, they can be more manageable and less resource-intensive. Power analysis, confidence interval estimation, and margin of error calculations are commonly employed to

Table 1. Demographic characteristics of the Baltic countries

Country (years)	General	Of the State	Ethnic minorities	Age 18-29	Age 30-64	Age >65+	Big cities	Small town	Male	Female
Estonia (2021)	100% (1003)	68%	32%	18%	59%	23%	50%	50%	46%	54%
Estonia (2022)	100% (1002)	68%	32%	17%	58%	25%	33%	67%	47%	53%
Latvia (2021)	100% (1017)	59%	41%	16%	68%	16%	69%	31%	48%	52%
Lithuania (2021)	100% (1006)	89%	11%	17%	59%	24%	67%	33%	46%	54%
Lithuania (2022)	100% (1024)	87%	13%	15%	60%	25%	42%	58%	46%	54%

balance accuracy and feasibility. Selecting an appropriate sample size is a crucial aspect of research design that requires careful consideration of various factors to ensure that the results are meaningful and reliable. Correlational analysis was performed to make the research valid. Based on the methods of Green (1991), a minimum of 450 respondents took part in the survey, which number was increased by the total number of independent variables (Chua et al., 2020). Two formulas are distinguished: $N > 450 + 8p$, where p is the general independent variable, N – the number of respondents, and $N > 905 + p$, using beta weights for correlation analysis (Table 2).

Table 2. Optimal sample size for the study

Green model (1991)	Sample of respondents
(Multiple R2) $N > 450 + 8p$	$450 + 8 \times 3 = 474$
(Beta weights) $N > 104 + p$	$905 + 3 = 908$

2.2. Statistical analysis and data processing

Descriptive analysis was performed in IBM SPSS Statistics (version 29.0). The Kolmogorov-Smirnov test was used to assess the normality of data distribution. The p -value determines the outcome, indicating conformity to a normal distribution. The relationship between variables is explored through a linear model. Poisson regression is used to model the dependence and frequency of rare events. All dependent variables used for the assumptions have a Poisson distribution. Correlation shows whether there is a direct relationship between variables.

Before confirming the hypotheses, frequency calculation analysis, correlation analysis, and demographic characteristics were evaluated, and the relationship between variables was determined. The study uses confirmatory factor analysis to calcu-

late Cronbach's alpha coefficient. This established the validity and reliability of the study.

3. RESULTS

The primary analysis of the data revealed some trends (Table 3). When analyzing the distribution of public trust in government by age, Estonians aged 30-64 had slightly more trust in government than young people under 29 during the health crisis. Young Estonians are generally more likely than other groups to have a positive perception and trust in the government than Estonians over 65. There were no significant differences between age groups in other Baltic countries, such as Lithuania and Latvia. All age groups – young people under 29, middle-aged people aged 30-64, and pensioners aged 65 and over – have similar attitudes to trust. In all three Baltic countries, higher earners (income per family member > 650 euros) have relatively less trust in the government than lower earners (income per family member < 650 euros). This ratio is the highest and most significant in Estonia and has been particularly pronounced since the international security crisis. In Lithuania, the ratio was very similar between the periods. It can be argued that the military aggression of the neighboring country, Russia, did not affect Lithuanian citizens' trust in their government. In Latvia, the survey was only carried out during the health crisis (2021). When analyzed from an income perspective, all three Baltic countries show similar trends: trust in government is linked to income level.

Examining trust based on place of residence reveals no significant disparities between the residents of the capital city and those of other Estonian cities. Only in Lithuania, a certain significant distinction emerges: residents of the capital city exhibit greater trust in the government than

Table 3. Deviations in trust means across socio-demographic characteristics in 2021 and 2022

Unit of measure	Estonia (EE)	Latvia (LV)	Lithuania (LT)	Baltic (B)
Age <29 and Age 30–64	-0.07* (2021) +0.09* (2022)	+0.19* (2021) N/D (2022)	+0.02* (2021) +0.01* (2022)	+0.05* (2021) +0.05* (2022)
Age 30–64 and Age >65	-0.07* (2021) -0.25* (2022)	-0.07* (2021) N/D (2022)	-0.06* (2021) +0.05* (2022)	-0.07* (2021) -0.10* (2022)
Age <29 and Age >65	+0.14* (2021) +0.16* (2022)	-0.12* (2021) N/D (2022)	+0.04* (2021) -0.06* (2022)	+0.02* (2021) -0.05* (2022)
Income for 1 family member <650€ and Income for 1 family member >650€	-0.20* (2021) -0.37* (2022)	-0.16* (2021) N/D (2022)	-0.12* (2021) -0.03* (2022)	-0.16* (2021) -0.20* (2022)
Single (no partner) and Married (with partner)	N/D N/D	-0.15* (2021) N/D (2022)	+0.09** (2021) +0.05** (2022)	-0.03** (2021) N/D
Capital and Other Cities	-0.03* (2021) -0.09* (2022)	+0.16* (2021) N/D (2022)	+0.21* (2021) +0.41* (2022)	+0.12* (2021) +0.16* (2022)
Male and Female	+0.04** (2021) -0.11* (2022)	-0.03* (2021) N/D (2022)	+0.06** (2021) +0.06** (2022)	+0.02** (2021) +0.06** (2022)

Note: ±SD = standard deviations (years); 0.00 – no deviation differences, -0.20 to +0.20 – not relevant deviation differences, < -0.20 or > +0.20 – relevant deviation differences; statistical significance of the result *p < 0.01 (or 1 percent) and **p < 0.05 (or 5 percent); N/D – no data available.

their counterparts in other places, particularly during the international security crisis (+0.41 in 2022). The analysis of trust did not reveal any gender-based differences, indicating that gender does not exert an influence on trust in government.

3.1. Reliability

Cronbach’s alpha shows the reliability of the variables. The results show that the variables have reliability, Cronbach’s alpha between 0.612 and 0.767. In 2022, all independent variables are reli-

able as they exceed an alpha value of 0.7, so no variables were rejected. The consistency and reliability of variables are higher the closer the alpha value is to 1 (Nunnally, 1978). To measure the independent variables, the study provides a statement of the independent variables and a statement of the dependent variables. A five-point scale was used to record answers: completely disagree (1), partially disagree (2), neither agree nor disagree (3), partially agree (4), and completely agree (5). The internal consistency of all independent variables measured by Cronbach’s alpha was 0.723 (2022) and 0.701 (2021).

Table 4. Variables reliability

Country	Variables	No. of items 2021	No. of items 2022	Cronbach’s alpha 2021	Cronbach’s alpha 2022
Estonia (EE)	Ad hoc reacting	1	1	0.741	0.732
	Accepting contribution	1	1	0.767	0.767
	Engaging	1	1	0.687	0.702
	Trust	2	2	0.655	0.644
	Being an active citizen	1	1	0.674	0.689
Latvia (LV)	Ad hoc reacting	1	1	0.621	N/D
	Accepting contribution	1	1	0.664	N/D
	Engaging	1	1	0.612	N/D
	Trust	2	2	0.654	N/D
	Being an active citizen	1	1	0.623	N/D
Lithuania (LT)	Ad hoc reacting	1	1	0.725	0.734
	Accepting contribution	1	1	0.744	0.701
	Engaging	1	1	0.752	0.705
	Trust	2	2	0.624	0.721
	Being an active citizen	1	1	0.699	0.701
Baltic (B)	Ad hoc reacting	1	1	0.695	0.733
	Accepting contribution	1	1	0.710	0.734
	Engaging	1	1	0.683	0.703
	Trust	2	2	0.644	0.682
	Being an active citizen	1	1	0.665	0.695

3.2. Main research findings

A correlation test determined the strength and relationships between variables (Chua et al., 2020). The analysis showed (in 2022) a correlation between trust and how authorities respond to public criticism (EE $r = 0.466$, LT $r = 0.501$, $p < 0.01$), between trust and how public institutions value citizens contribution to crisis management (EE $r = 0.566$, LT $r = 0.622$, $p < 0.01$), and between trust and how government-initiated activities encourage citizens' participation in the governance of the country (EE $r = 0.621$, LT $r = 0.723$, $p < 0.01$) (Table 5). When examining trust and government action, all correlations in 2022 strengthened compared to 2021. In both Lithuania and Estonia, the correlation between government-initiated activities that encourage citizens' participation in the country's governance and trust has changed from moderate to strong compared to 2021 (EE $r = 0.470$, LT $r = 0.524$, $p < 0.01$). The smallest change in the correlation between the measured period 2021 (global health crisis) and 2022 (international security crisis) is recorded between trust and how authorities respond to public criticism, but the correlation was still increasing.

Positive relationships are found between variables such as ad hoc responsiveness and being an active citizen (EE $r = 0.503$, LT $r = 0.733$, $p < 0.01$), between accepting contribution and being an active citizen (EE $r = 0.699$, LT $r = 0.660$, $p < 0.01$), between engaged and being an active citizen (EE

$r = 0.553$, LT $r = 0.649$, $p < 0.01$). It is noted that all correlations here also increased (in 2022) from moderate to strong, except in Estonia between the ad hoc reaction and being an active citizen, compared to 2021 (EE $r = 0.708$, $p < 0.01$). In Lithuania, this correlation increased (2022) compared to 2021 (EE $r = 0.580$, $p < 0.01$) and became strong. When analyzing trust and citizen activity, a small increase in correlation can be observed before the war (2021) (EE $r = 0.499$, LT $r = 0.554$, $p < 0.01$) and during the war (EE $r = 0.624$, LT $r = 0.663$, $p < 0.01$). In Latvia (2021), an average correlation is recorded between trust and public authorities value of the contribution of citizens to crisis management (LV $r = 0.505$, $p < 0.01$) and between an active citizen and the public authorities value of the contribution of citizens to crisis management (LV $r = 0.554$, $p < 0.01$) (Giedraitytė et al., 2022). All other correlations are weak. In the context of all the Baltic countries, there are strong correlations between trust and government activities that would encourage citizens' participation in the governance of the country (B $r = 0.672$, $p < 0.01$), between an active citizen and how public authorities respond to public criticism (B $r = 0.618$, $p < 0.01$), and between an active citizen and how public authorities assess citizens' contribution to crisis management (B $r = 0.679$, $p < 0.01$).

Independent variables such as government-initiated activities promote citizen participation in the country's governance shows a moderate positive relation with being an active citizen ($r = 0.601$, p

Table 5. Correlation matrix

Condition	Variables	Estonia (EE)	Latvia (LV)	Lithuania (LT)	Baltic (B)
Trust	Being an active citizen	0.499* (2021)	0.402* (2021)	0.554* (2021)	0.485* (2021)
		0.624* (2022)	N/D	0.663* (2022)	0.701* (2022)
Trust	Public authorities respond to public criticism	0.362* (2021)	0.317* (2021)	0.394* (2021)	0.399* (2021)
		0.466* (2022)	N/D	0.501* (2022)	0.517* (2022)
	Public authorities value the contribution of citizens to crisis management	0.351* (2021)	0.505* (2021)	0.479* (2021)	0.445* (2021)
		0.566* (2022)	N/D	0.622* (2022)	0.330** (2022)
Government-initiated activities promote citizen participation in the country's governance	0.470* (2021)	0.464** (2021)	0.524* (2021)	0.497* (2021)	
	0.621* (2022)	N/D	0.723* (2022)	0.672* (2022)	
Being an active citizen	Public authorities respond to public criticism	0.708* (2021)	0.468* (2021)	0.580** (2021)	0.585* (2021)
		0.503* (2022)	N/D	0.733* (2022)	0.618* (2022)
	Public authorities value the contribution of citizens to crisis management	0.439* (2021)	0.554* (2021)	0.570* (2021)	0.504* (2021)
		0.699* (2022)	N/D	0.660* (2022)	0.679* (2022)
Government-initiated activities promote citizen participation in the country's governance	0.399** (2021)	0.414** (2021)	0.545* (2021)	0.472* (2021)	
	0.553* (2022)	N/D	0.649* (2022)	0.601* (2022)	

Note: * $p < 0.01$ or ** $p < 0.05$ – Pearson's correlation is significant at the (2-tailed), N/D – no data available.

< 0.01) in general in the Baltic states, while trust shows strong positive correlation with being an active citizen ($r = 0.701$, $p < 0.01$).

The study confirmed all hypotheses (H1-H7). However, it should be noted that although a statistically significant relationship was observed between government initiatives and public trust in government as well as citizen engagement, the strength of this relationship varies across countries and crisis contexts. When comparing the results obtained during different types of crises, it is worth noting that trust and active citizenship are more closely related during a national security crisis than during a global health crisis. The government's activities, which promote citizens' participation in the country's governance, have the greatest influence on trust. This government behavior was particularly influential during the national security crisis. The 'being an active citizen' factor is different among countries: during the health crisis in Estonia, the authorities responding to public criticism had the greatest impact on this factor, while during a security crisis, the authorities valuing the public's contribution to crisis management had the greatest impact on this factor. In Lithuania, the authorities respond sufficiently to criticism from the public, relationships with trust had the greatest importance when the international security crisis occurred, and the impact of other factors also increased.

4. DISCUSSION

The findings reveal that the relationship between trust in government and all types of governmental initiatives that prompt for political, rational, or emotional trust increases during security crises compared to health crises. This means that citizens perceive government behavior as trustworthy when the crisis is external and threatens the national security of the country as a whole. During the global health crisis, government behavior had only a low or moderate correlation with public trust. This result is in line with previous studies. The global health crisis has had a negative impact on citizens' trust in government in many countries (World Bank Group, 2020). According to OECD studies, this crisis has done less damage to trust than the previous financial crisis. However, it has

eroded citizens' trust, with an equal split between trusting and distrusting governments in most countries (OECD, 2022, 2023a, 2023b). Strict, often autocratic, instructions from the government to citizens have reduced trust in the government. As this investigation shows, the largest differences between trusting and distrusting citizens during the health crisis were due to income differences. As for trust during the international security crisis, the relationship between government initiatives and trust has increased compared to the period of the global health crisis. This means that government behavior in response to external security threats was perceived by citizens as trustworthy. An exceptionally elastic relationship has been identified between trust and government-initiated activities that promote citizen participation in governance.

Research findings on the interaction between government behavior and citizen participation are more mixed than those on public trust. In general, government initiatives have a greater impact on citizen participation than on public trust in both crises. This means that government proactivity toward the population is a positive factor. However, there are differences between the types of crises. In Estonia, citizen participation was highly correlated with the authorities' response to public criticism during the global health crisis. In Lithuania, on the other hand, this high correlation was observed during the international security crisis. In both cases, responding to public criticism is a government behavior closely related to citizen participation. The relationship between other factors of government behavior and public participation increased after an international security crisis compared to a global health crisis.

There are several limitations to this study. First, the research instrument was limited in that all domains were measured with one statement at a time. This limitation arose from the need to minimize calluses in an omnibus survey, which is one of the disadvantages of this type of survey. Another drawback of the omnibus used in this study is that hidden differences between social groups, particularly in relation to inequality, are revealed outside society. This may have had some, albeit insignificant, effect on the interpretation of findings. Second, the collection of the omnibus

data was outsourced to an external public survey company, giving the researchers limited control over the data collection process. Thirdly, the study relied on the self-reports of the respondents. This means that other objective sources did not confirm a characteristic such as being an active citizen. This may have introduced some

bias. In addition, the limitations of the current findings make them a potential subject for future research. In the future, a similar investigation could be carried out in other countries to gain new insights about the influence of other countries on active citizens. In addition, future studies could cover post-crisis periods.

CONCLUSION

The purpose of this study was to test a relationship between government initiatives, public trust in government, and citizen engagement within the context of two distinct crisis scenarios: the global health crisis caused by the COVID-19 pandemic and the international security crisis posed by Russia's war in Ukraine. Analyzing aspects of political, rational, and emotional trust, the study showed that the link between trust in government and various initiatives became more pronounced in the face of external security threats than in the face of global health crises. It should be noted that government initiatives increased trust during emerging external crises that threaten national security. In the context of external security threats, the link between government initiatives and trust becomes even stronger, suggesting that citizens increasingly trust the government's response in such crises.

Depending on the country and the type of crisis, the strength of the link between government initiatives and citizen participation varied. However, the results of the study confirmed the positive impact of proactive government behavior on level of public participation. Although the impact of government initiatives on civic participation was more nuanced than their impact on public trust, the study highlighted the general impact of government initiatives on civic participation, regardless of crisis scenarios. This means that government proactivity toward the population is a positive factor.

The findings provide valuable insights for governments on crisis management strategies. First, in the face of external security threats, governments must prioritize building citizens' trust, as proactive measures taken in such situations can significantly strengthen public trust in governance. Secondly, regardless of the type of crisis, governments should continuously focus on strengthening citizen participation as such government activities have been found to encourage greater citizen engagement.

AUTHOR CONTRIBUTIONS

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