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A Theory of the COVID-19 Pandemic's Impact on the Government-Citizen Relationship

Abstract: This paper explores how crises, such as the COV-ID-19 pandemic, can impact political behavior amid restrictions. Specifically, this paper builds a theoretical model suggesting the pandemic promoted restriction-oriented policies from the government in response to the crisis while promoting populist tendencies among citizens who disagree with those policies. Moreover, through a formal two-player extensive form game, the model promoted in this paper suggests restrictions are unpopular enough that citizens may push back on such policies regardless of crisis severity. The theoretical outcomes here have significant implications on governance, given that politicians care about re-election.

Keywords: COVID-19 Pandemic, Democracy, Populism, Pluralism, Game Theory

Teorija vpliva pandemije COVID-19 na odnos med vlado in državljani

Izvleček: Članek raziskuje, kako lahko krize, kot je pandemija COVID-19, vplivajo na politično vedenje med omejitvami. Natančneje, članek gradi teoretični model, ki nakazuje, da je pandemija kot odgovor na krizo spodbudila politike vlade, usmerjene v omejitve, hkrati pa populistične težnje med državljani, ki se s temi politikami ne strinjajo. Poleg tega, predstavljen model v

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članku, s formalno igro ekstenzivne oblike za dva igralca nakazuje, da so omejitve dovolj nepriljubljene, da lahko državljani zavračajo takšne politike ne glede na resnost krize. Teoretični rezultati pomembno vplivajo na upravljanje, glede na to, da je politikom mar za ponovno izvolitev.

Ključne besede: pandemija COVID-19, demokracija, populizem, pluralizem, teorija iger

Introduction

What impact does a crisis have on democratic institutions? How will a government react in the face of a crisis? How will citizens react to government policies during crises? The recent COVID-19 pandemic uprooted and replaced standard social behavioral norms with fear-based sentiment in several countries to varying degrees. Some countries locked down, others did not, but in retrospect, the actual outcomes of government policies varied: massive hospitalizations and loss of life, protests, and some survivors suffering from 'long COVID'. As crises can significantly impact domestic politics, predominantly in how they shape government responses, they can also influence public opinion. While outcomes may vary relative to the context of a crisis, whether it is a natural disaster, a health emergency, an economic recession, or a form of political upheaval such as a coup, the COVID-19 pandemic crisis created significant challenges for policymakers and politicians given its dual impact at the institutional and social levels. This paper attempts to build two generalized formal models that can theoretically explain the potential behavioral outcomes associated with citizen-state relationships during a crisis like the COVID-19 pandemic.

This study explores how crises can impact politics. The author argues that the pandemic promoted a rejection of government policies akin to a more populist than a pluralist political approach. As this is driven by fear and uncertainty towards the severity of the COVID-19 pandemic, this paper presents a two-player extensive form game to model the situation across two possibilities: one in which the pandemic is likely severe and another in which there is an equal likelihood for the pandemic to be severe or not-severe. These games focus on the government and the citizen as rational players, suggesting the COVID-19 pandemic potentially promoted increased restrictions on the government's side while promoting a shift in the general public's opinion towards those restrictions. The pushback proposed by the models in this paper further suggests a potential increase in populist tendencies among citizens. This paper thus demonstrates how impactful fear made manifest through a crisis like the COVID-19 pandemic can deteriorate the principle of pluralism in modern democratic systems.

Pressure to Act: Reacting to the COVID-19 Pandemic

One of a crisis's most immediate, familiar, and ultimately crucial impacts is its pressure on politicians to act as quickly and decisively as possible. When a crisis strikes, governments must respond rapidly to mitigate its effects and protect their citizens. However, this is not necessarily because politicians are benevolent insomuch as they have an underlying motivation to be re-elected in a democratic system. By performing well during a crisis, politicians can maximize their prospects. Nevertheless, what performing well means is difficult to determine under a crisis, given that voter considerations matter.

Understanding how voters make decisions can explain how politicians decide. While the American voting literature has often been critical of citizens and their ability to make well-informed voting decisions (Campbell et al. 1960, 34-37; Converse 2006, 57; Dahl 1989, 332-341), the literature does suggest voters can pick up heuristics or cues to make reliable voting choices (Downs 1957, 267–268; Mondak 1993, 186–190; Popkin 1991, 16; Sniderman et al. 1993, 276). Partisanship is one cue voters can pick between representatives and referenda at the ballot box.

However, identifying and supporting a political party congruent with one's policy positions is not the only factor voters consider, as there are also instances when politicians are successful at establishing a 'personal vote' through position-taking, credit claiming, and advertising on the campaign trail (Mayhew 1974, 24). In these instances, politicians can, and have an incentive to, connect with their constituents based on their personal qualities rather than party affiliation or policy positions. Doing so can win voters over in what may otherwise be close, highly contested elections due to trust built between the representative and their constituents.

Trust and COVID-19

Trust between representatives and voters significantly impacts democracy not only at the electoral level but also at the institutional level. Bianco (1994, 148-167) suggests that the trust fostered between constituents and their representatives is essential to democracy and requires representative commitments to transparency, accountability, and responsiveness. Indeed, those who distrust government are more likely to be dissatisfied with political parties or their policy choices (Miller 1974a, 963; Miller 1974b, 989; Miller and Listhaug 1990, 382-383). In other words, trust effectively determines when, if at all, voters may be at least accepting policies they may not necessarily agree with completely. Within the context of a crisis, such as COVID-19, trust becomes an even more significant decision-making factor, given the variable restrictions governments adopted. Indeed, the COVID-19 pandemic was significant because it forced politicians into a corner: democratic regimes were forced to adopt strict measures to control the spread of the virus, which included the use of lockdowns, travel restrictions, and vaccination campaigns. Focusing on one predominantly popular strategy, such as lockdowns, provides a clear understanding of the dilemma with restrictive policies.

The use of lockdowns, which are measures put in place by governments to restrict the movement of people and activities, was meant to reduce COVID-19 infection rates by slowing the spread of the disease. However, the extent to which a state locks down can lead to disparities in that reduction. In other words, there are variations in the scope, duration, and strictness of lockdowns. Nevertheless, they typically involve closing non-essential businesses and services, restrictions on gatherings of people within and outside one's immediate family, and general limitations on travel for non-essential purposes.

As lockdowns represent a forced change in lifestyle through government policy, is it inherently an anti-democratic action? A study by Glasius (2018) suggests that some government practices may be considered authoritarian and others are not. The standard in Glasius (2018, 517) suggests authoritarian practices are an organized pattern of actions either sabotaging accountability to people ('the forum') over whom a political actor exerts control or sabotaging their representatives by restricting access to information and their capacity to voice. It is difficult to establish what this means during an emergency, as the circumstances behind invoking it and when precisely such measures extend beyond what is necessary to deal with it are not always clear. This is a problematic situation for politicians to navigate since, if it is not evident among constituents that a forced lifestyle change is essential, forced restrictions such as lockdowns may hurt politicians' re-election prospects. If some constituents do not feel forced restrictions are necessary, they may push back against restrictions.

Given the disadvantages, do politicians have incentives to lockdown? Examining partisanship and ideology may help explain why these behaviors occur under some governments since ruling parties make decisions based on their ideologies (Budde et al. 2018, 445-446; Potrafke 2017, 745-746; Schmitt and Zohlnhöfer 2019, 987-989). Indeed, a discussion in Jahn (2022, 582) reasonably suggests that the left-right dimension may matter in the context of the COVID-19 pandemic: right-wing governments may be more hesitant than left-wing governments to implement strict lockdowns in an effort to avoid economic collapse, while left-wing governments may be more willing to lockdown since workers and underprivileged groups have a higher risk of infection.

Although lockdowns may be a relatively unpopular behavior for governments to adopt, Bol et al. (2021, 502) suggested that incumbents and prime ministers both benefit from broad public support during a crisis as citizens look to leadership for guidance. While these effects transcend the traditional left-right dimension in the democratic literature, non-parliamentary governments like the United States may serve as evidence that two-party systems promote downplaying severity among right-wing parties while undermining expert warnings on the potential consequences associated with COVID-19 (Conway Iii et al. 2021, 8-9; Gadarian et al. 2021, 10; Painter and Qiu 2020; Pennycook et al. 2022, 700). Suppose we assume that left-wing parties are more likely to restrict while right-wing parties are less likely to. In that case, the issue at hand is whether a government can determine when a situation is indeed severe or not severe enough to merit restrictions while balancing out the ramifications of said restrictions on politicians' rational career prospects. Assuming politicians are rational, it would make sense that there may be incentives to avoid restrictions if politicians feel restrictions may be non-conducive to their re-election efforts later.

Perceptions of Governance

The gravity of a crisis and the restrictions implemented, such as lockdowns during COVID-19, may or may not lead to support from most of society. Whether politicians receive such support will depend predominantly upon whether voters perceive their government as adopting pluralist approaches to governance. When voters do not feel the government is considering their preferences, however, they may adopt increasingly populist approaches to government, which can be problematic for democracies.

Under the pluralist perspective, the government represents diverse interests among heterogeneous groups in society. This way, power is dispersed among different actors, including interest groups, political parties, and social movements. Since the diversity of interests complicates explanations of group cooperation and competition relating to policy decisions, pluralism assumes liberal democracy is best at explaining democratic governance while serving the interests of all members of society (Dahl 1989, 322). The principle of diverse interests in a participatory democracy directly contrasts with Schumpeter (1942, 243–245), who suggests that people define those who are and are not entitled to participate in the democratic process. Indeed, as power shifts among different actors, marginalized groups can have an impact on policy through democracy's cornerstone: public deliberation (Barber 1983, 267-278; Connolly 1993, 121-124; Dahl 1989, 312-325; Dewey 1927, 166-167; Fishkin 1992, 124-128; Fishkin 1995, 141-154; Habermas 1996, 298; Mansbridge 1983, 300-302). Dynamic shifts in power within the ideal form of pluralism are thus a staple of this perspective.

However dynamic this process may be, and however heterogeneous a society's makeup and interests, most democracies do not ascribe to deal forms of pluralism. Scholars such as Olson (1965, 14-16) suggest that collective action by significantly large but dispersed groups of individuals is, at best, defrayed and, at worst, prevented by free-riding or a collective lack of incentives to form or join an organized group personally. Schattschneider (1960, 35) suggests that free-riding harms society's 'heavenly chorus' by giving it an 'upper-class accent,' where elites are set to gain most and influence policies. Schlozman et al. (2012, 576) suggest this is more of an 'unheavenly chorus,' given that the governments can shift their policymaking powers towards benefitting corporate business interests over constituent interests. In other words, ideological benefits aside, elite or business influences can significantly harm pluralism.

Under the populist perspective, constituents adopt a contrasting position to the pluralist perspective. Populism is typically considered a thin-centered ideology consisting of a struggle between two homogeneous and antagonistic groups - 'the pure people' and 'the corrupt elite' - with a proposed preference for normatively promoting politics as an expression of the general 'will of the people' (Mudde 2004, 543). Thus, at the center of populism is the idea of popular sovereignty, or that the people authorize the establishment of the state (Yack 2001, 523). As such, the ordinary people under populism command politicians who represent the interests of those people as their elected officials. While at face value, it is not an immediate issue, since democracy by definition requires representation of constituents by politicians, it is problematic due to a common claim made by populists: Nothing should constrain the will of the people because the people are sovereign. In other words, populism goes beyond the need for a representative elected official, with Urbinati and Warren (2008, 391) suggesting this relationship takes the form of an imperative mandate: politicians are temporarily granted the power to take actions specified by the citizens, but the will to make decisions is not delegated as it is reserved for citizens.

Although populists support direct democratic mechanisms for decision-making, such an approach to decision-making is problematic due to a lack of clarity on the representation dimension: to whom are populist forms of decision-making representative? In the same way, group decision-making can yield non-transitive decisions when choosing between multiple alternatives (Arrow 1963, 120); individuals cannot unify their wills and agree upon one concrete policy representative of society. In other words, attempting to achieve a 'will of the people' presupposes the pre-existence of a 'people' that individuals must join (Ochoa Espejo 2011, 43). Indeed, in a collective form of assimilation into a nation with a dominant identity, those who have adjacent, disagreeing, or non-conforming identities or opinions are excluded or, in some societies, killed (Mann 2005, 2-9). For these reasons, some scholars propose populism is a 'democratic disease' or 'pathology' that necessitates treatment (Abts and Rummens 2007, 414; Alonso et al. 2011, 10-12; Rosanvallon and Goldhammer 2008, 265; Taggart 2002, 62-80; Urbinati 1998, 115). Others suggest populism is not anti-democratic but democracy's shadow (Arditi 2004, 140; Canovan 1999, 3); it is an inseparable consequence of democracy.

This suggests an exciting puzzle: There are two general approaches to reacting to a crisis in a democracy. Since a dominant identity through 'the people' should collectively control the policymaking process under the populist perspective, restrictions like those adopted during the COVID-19 pandemic could produce adverse reactions among voters if they do not feel represented or included in the democratic process. Indeed, a recent study on trust during COVID-19 by Bavel et al. (2020, 465-466) suggested that greater trust in government promotes increased compliance with health policies, including those restrictive policies promoted during the pandemic. If voters adopt an increasingly populist

perspective, they may lose trust in their government and refuse to comply with restrictive policies meant to save lives or improve health outcomes. However, a study by Jennings (2020) found that trust in political authorities increased following COVID-19 outbreaks due to the 'rally-round-the-flag' dynamic (Mueller 1970), as well as policy saliency and performance (Hetherington and Husser 2012, 322-323; Hetherington and Rudolph 2008, 510). If this is the case, trust in the government in some countries may have been higher than in others. If this is true, assuming politicians are rational and care about both saving lives and getting re-elected, what policies would they promote when facing a crisis? When would voter trust and, thus, acceptance of restrictive policies in the face of an uncertain crisis diminish? When would that trust and subsequent acceptance of restrictive policies flourish among voters?

In the following section, this paper makes several assumptions to provide a formal model to respond to these questions. First, given that crises require action by politicians, the severity of the crisis should determine the severity of the action. Governments should be incentivized to adopt restrictions to save constituent lives when the severity is high. This may be a moral imperative, but it is at least rational, given that a high number of deceased constituents would likely not bode well electorally for any politician. Politicians who care about getting re-elected must ensure their supporters are alive to vote. Alternatively, when the severity is low, the imperative to restrict should be lower, as politicians are less likely to lose their supporters to illness.

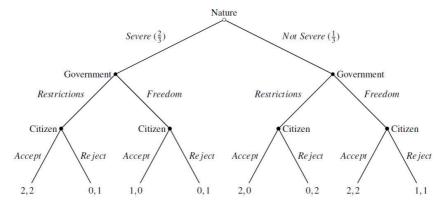
Second, the model assumes that citizens cannot determine precisely how deliberative their democracy is at any time. This is problematic for citizens, given both perceptions of the severity of the crisis and perceptions of deliberation condition that trust. When a crisis like the COVID-19 pandemic is perceived as severe, trust should be much higher among citizens in a liberal democracy with the understanding that restrictions save lives as opposed to non-restrictions (or 'freedom'). However, suppose citizens cannot perceive the accurate levels of deliberation within a democracy. In that case, they may begin to believe that the 'will of the people' is being violated by unilateral decisions (i.e., populism) and subsequently push back upon restrictive policies.

Modeling the COVID-19 Pandemic

Based on this information, the following section presents two forms of a formal two-player game featuring politicians who form the government (the 'Government') as one player and individual voters (a 'Citizen') as a second player. These games necessitate uncertainty at the top level, with 'Nature' representing the severity of the pandemic. The pandemic is either 'Severe' or 'Not Severe.' The government will either promote restrictions ('Restrictions') or advocate for no restrictions ('Freedom'). In contrast, voters fall into one of two camps: approval of government decisions ('Accept') or disapproval of government decisions ('Reject'). The first form of the game, where the crisis is more likely severe than not severe, is formalized in Figure 1.

The first point to note in Figure 1 is that there is incomplete information concerning the severity of the COVID-19 pandemic. In other words, the government is not aware of the actual severity of the COVID-19 pandemic in this model, although it is, in actuality, more likely severe than not severe. However, as the government notices that infections are spreading, they will be more likely to believe it is severe. Likewise, as other countries begin to adopt restrictions, they may further feel the pandemic is severe. As such, 'Nature' is provided a probability of 2/3 for the case in which the pandemic is *Severe* and 1/3 for the case in which the pandemic is *Not Severe*. In other words, it is only slightly more than 66 percent more likely for the game to take the pathway for *Severe* compared to *Not Severe* in the game.

Figure 1: Government vs Citizen Model: Severity More Likely



Given that severity among players is unknown, this study uses expected utility equations to determine what the government should do given its beliefs about its citizens when the perceived probability of the severity is 2/3. Following the *Severe* branch, if the government chooses *Restrictions*, then the expected utility for the government is:

$$EU_i(Action) = p\left[c(pay_j) + c(pay_k)\right] + \sim p\left[c(pay_l) + c(pay_m)\right]$$
(1)

Equation (1) calculates a player's EU_i 's utility for some Action. In the government's case, these are either Restrictions or Freedom, while the citizen can only choose Accept or Reject. This is equal to the probability p associated with the severity of the pandemic, multiplied by the sum of the choices made available to the player c. In the case of the government, this is equivalent to 1/2 as they only choose Restrictions or Freedom; the citizen, however, has 1/4 as they can either choose Accept under Restrictions, Accept under *Freedom, Reject* under *Restrictions,* or *Reject* under *Freedom.* This product is then added to the product of the opposite probability ~*p*, representing *Not Severe,* multiplied once more by the sum of the choices made available to the player *c*. Calculating and comparing expected utility function outcomes will provide insight into each player's best strategies.

Starting with the *Severe* branch, if the government chooses *Restrictions*, the expected utility for the government is:

$$EU_G(Restrictions_1) = \frac{2}{3} \left[\frac{1}{2}(2) + \frac{1}{2}(0) \right] + \frac{1}{3} \left[\frac{1}{2}(2) + \frac{1}{2}(0) \right] = 1$$
(2)

Repeating this for the situation when the government chooses *Freedom* under the *Severe* branch yields:

$$EU_G(Freedom_1) = \frac{2}{3} \left[\frac{1}{2}(1) + \frac{1}{2}(0) \right] + \frac{1}{3} \left[\frac{1}{2}(2) + \frac{1}{2}(1) \right] = \frac{5}{6}$$
(3)

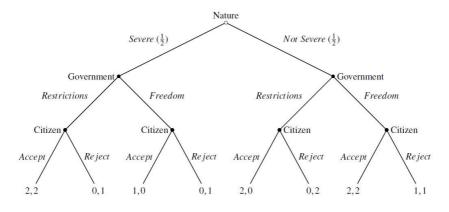
The utility functions thus far suggest that when the government believes the pandemic is more likely severe, it will be much more willing to adopt restrictions. However, things begin to look interesting when examining the citizen's behavior under this scenario. The citizen's expected utility when they opt to *Accept* restrictions is:

$$EU_C(Accept_1) = \frac{2}{3} \left[\frac{1}{4}(2) + \frac{1}{4}(0) \right] + \frac{1}{3} \left[\frac{1}{4}(0) + \frac{1}{4}(2) \right] = \frac{1}{2}$$
(4)

While the citizen's expected utility when they opt to *Reject* restrictions is:

$$EU_C(Reject_1) = \frac{2}{3} \left[\frac{1}{4}(1) + \frac{1}{4}(1) \right] + \frac{1}{3} \left[\frac{1}{4}(2) + \frac{1}{4}(1) \right] = \frac{7}{12}$$
(5)

These utility functions suggest that the government is seemingly better off restricting behavior under the assumption of *Severe* pandemic conditions. However, the citizen is incentivized to reject any restrictions the government may adopt. These outcomes have significant implications for the government as they suggest that it should be more likely to adopt restrictions whenever a crisis is likely severe. Figure 2: Government vs Citizen Model: Equal Likelihood of Severity



Given the model's suggestions, the next step consisted of testing a similar game under an extremely conservative model, specifically, one in which the government honestly does not know whether the pandemic is severe. This is achieved by changing the *Severe* and *Not Severe* probability to 1/2 each. The game theoretic model for an equal likelihood of severity is found in Figure 2. Note that this is the only difference between Figure 1 and Figure 2, so the payoffs for each player remain precisely the same values across both models.

Repeating the previous strategy with the updated severity probability yields new utility functions for the government and the citizen. In this iteration, both p and $\sim p$ are 1/2, given an equal likelihood of severity. Calculating the government's expected utility when choosing *Restrictions* versus *Freedom* yields the following:

$$EU_G(Restrictions_2) = \frac{1}{2} \left[\frac{1}{2}(2) + \frac{1}{2}(0) \right] + \frac{1}{2} \left[\frac{1}{2}(2) + \frac{1}{2}(0) \right] = 1$$
(6)

$$EU_G(Freedom_2) = \frac{1}{2} \left[\frac{1}{2} (1) + \frac{1}{2} (0) \right] + \frac{1}{2} \left[\frac{1}{2} (2) + \frac{1}{2} (1) \right] = 1$$
(7)

The following utility functions repeat this process for the citizen based on whether they are better off choosing *Accept* or *Reject*. As before, both p and $\sim p$ are 1/2, given an equal likelihood of severity. The equations are as follows:

$$EU_C(Accept_2) = \frac{1}{2} \left[\frac{1}{4}(2) + \frac{1}{4}(0) \right] + \frac{1}{2} \left[\frac{1}{4}(0) + \frac{1}{4}(2) \right] = \frac{1}{2}$$
(8)

$$EU_C(Reject_2) = \frac{1}{2} \left[\frac{1}{4}(1) + \frac{1}{4}(1) \right] + \frac{1}{2} \left[\frac{1}{4}(2) + \frac{1}{4}(1) \right] = \frac{5}{8}$$
(9)

These utility functions suggest another exciting scenario: when severity and non-severity is equally likely, the government has an equal incentive to adopt restrictions as it does to avoid adopting restrictions. However, the citizen is again better off when they reject government policies. As the citizen still has an incentive to reject government policies, even under the more conservative model, these findings have significant implications for democratic governance as they provide insights into the potential rational voters' perspective on restrictive policies.

Discussion

Given that most models simplify scenarios, so were the models in this study simplified to present the interactions between the government and the citizen. Those simplifications provide exciting implications. If a rational government can mix its strategy, then elite perceptions of severity may be based on two factors. The first is a within-game factor: whether the citizens perceive the pandemic as severe. A rational government actor would consider this before adopting restrictive policies, given the incentive to keep their citizens happy and get re-elected. The second potential factor is an external-game factor: whether infection and mortality rates are not significantly higher relative to non-pandemic instances. Since perceptions of emergencies among citizens are shaped by perceptions of the world as well as by the government itself, we can expect that the government would likely have a significant say in how citizens perceive the severity of the pandemic and, indeed, adopting less restrictive policies is a signal to citizens that the government at least does not perceive the pandemic as severe, whereas adopting more severe policies signals the opposite message. Nevertheless, if the government were to signal toward one level of severity while hospitals were being overrun, the outcome could suggest the government is potentially incompetent at dealing with the COVID-19 pandemic. While this game's theoretical outcome suggests the government can mix its strategy, its capacity is relative to real-world conditions.

Of course, the increased likelihood of the government adopting restrictions when they perceive the pandemic as severe, coupled with the partial impact the government would have on the citizen's perceptions of severity by either adopting or not adopting restrictions, does suggest the role of government in shaping perceptions is quite significant. However, it also suggests two potential outcomes relevant to democratic theorists. The first is the potential threats to pluralism. Restrictive policies across even the more conservative model presented in this paper are likely to be rejected by citizens. Restrictive policies, while necessary under severe conditions for obvious reasons (i.e., to save lives), are also non-conducive to pluralistic approaches towards democracy, given that they restrict the social decision-making narrative by shifting the pendulum towards an increasingly unilateral approach to policymaking. Granted, this is typically justified from a more normative lens under emergencies. However, it is nevertheless a democratically fragile perspective given how unwilling the citizens in the models presented are to accept those restrictions.

Furthermore, the government is interested in its own continued survival under the rationality assumption, potentially increasing a citizen's likelihood to adopt a populist perspective of govern-

ment. Indeed, in the second model presented, where it was unclear whether the pandemic was severe, the government had an equal incentive to restrict as it did to avoid restrictions. However, the citizens still preferred rejecting restrictions. If the game were further iterated and given the importance of re-election, common sense would suggest that the government in that game would simply adopt whatever position the citizen may have on the issue. In other words, we would encounter a more populist outcome, potentially hurting pluralism as the government would listen almost exclusively to their constituents' worries regarding the pandemic. While that is not to say the government ceases to listen to constituents under the pluralist model, the second game suggested the government could choose either strategy, so why would we expect it to avoid the direct democracy approach and listen to constituents who refuse restrictions? Indeed, the government's ability to mix its strategy suggests this outcome would take the form of adopting non-restrictive policies too early should the citizens no longer feel the need for them (i.e., the perception among the citizens is that the pandemic is no longer severe when it is still indeed severe). The danger, however, is that the government could adopt restrictive policies long after the need for those policies has passed (i.e., the perception among the citizens is that the pandemic is still very severe and concerning, even if it is no longer severe). In short, although politicians may have experienced difficulty in decision-making, restrictive measures can have real effects on citizens due to their direct and potentially harmful effect on pluralism.

Conclusion

What impact does a crisis have on democratic institutions? How will a government react in the face of a crisis? How will citizens react to government policies during crises? This paper has attempted to explore these questions in a theory-building manner to clarify the interactions between government and citizens in society during crisis. Specifically, this paper developed a two-player game based on the COVID-19 pandemic, with the 'government' and the 'citizen' as players attempting to determine what their best strategies are given the novelty of the COVID-19 pandemic. The model presented in this paper thus suggests that the COVID-19 pandemic promoted restrictive policies by governments and pushback from citizens who may have adopted increasingly populist perceptions of government.

The game findings suggested that the government will likely adopt restrictions when they believe the pandemic is severe. They may opt for increasing restrictions or promoting no restrictions when there is an equal likelihood of severity versus non-severity. However, the citizen always seems to be incentivized to reject government policy given the conditions in these games, regardless of the severity. More interesting is that this suggests a point wherein citizens may cease supporting the government's attempts at dealing with crises through restrictions.

The theoretical model established in this paper serves as a starting point for more empirical-oriented studies and further theory-building. In the case of the former, studies may seek to empirically test public opinion towards restrictive policies during the COV-ID-19 pandemic and other crises to determine if there are unique factors to the COVID-19 pandemic. Similarly, such studies may seek out single or comparative cases. In the latter's case, this study did not examine the turning points where potential 'rally-round-the-flag' flags diminish in favor of negative sentiment. In other words, do citizens continuously emanate negative feelings towards restrictions, even during crises? Or was there some unique theoretical characteristic associated with the COVID-19 pandemic? Alternatively, is it possible for politicians to reverse their fortunes when faced with crises? Indeed, if politicians are rational, they have incentives to get re-elected. However, they cannot be re-elected if their constituent supporters die in a crisis. The grand political balancing act at the heart of politics during crises may thus be more complicated.

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