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Culture and global societal threats: COVID-19 as a pathogen threat to humanity

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Abstract

The COVID-19 global pandemic has brought into sharp focus the urgency of tackling the question of how globalized humanity responds to a global societal threat, which can adversely affect a large portion of the human population. Changing geospatial distribution of COVID-19 morbidity paints a gloomy picture of cross-national differences in human vulnerabilities across the globe. We describe the dynamic nexus among societal – particularly pathogen – threat, social institutions, and culture, and discuss collectivism (ingroup favouritism and outgroup avoidance) and tightness (narrow prescription of behaviours and severe punishment of norm violations) as potential cultural adaptations to prevalent pathogen threats. We then sketch out a theoretical framework for cultural dynamics of collective adaptation to pathogen threats, outline a large number of theory- and policy-relevant research questions and what answers we have at present, and end with a call for renewed efforts to investigate collective human responses to societal threats.

Keywords

collectivism, COVID-19, cultural dynamics, cultural tightness, institution, societal threat

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SARS-CoV-2 is a global societal threat. By societal threat, we mean a natural or human-caused threat that can adversely affect a large portion of a human population (see Kruglanski et al., 2021, for discussion of COVID-19-induced threats to self). Infecting more than 46 million in 235 countries and regions worldwide according to the World Health Organization (2020; as of November 4, 2020), the COVID-19 pandemic is truly global in scale, and its impact is not limited to the health of the current human generation. The World Bank (2020) estimates that it will increase the number of extreme poor (defined as living on less than US$1.90 a day) by 150 million by 2021. Extreme poverty stifles human development and the thriving of future generations in years to come. COVID-19's aggregate human cost is staggering.

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Nevertheless, to adapt to the natural and human-made environments over our species' history, human populations have collectively coped with diverse societal threats, including climactic extremes and intergroup conflict, but also infectious diseases (Fincher & Thornhill, 2012). Arguably, the global pandemic is another of these challenges that now globalized humanity needs to overcome. Because culture is one of the most important means with which humans can meet societal challenges (for a review, see Kashima, 2019), it is critical to consider cultural implications of pandemics and contemplate our ways forward into the future of humanity as a whole.

Pathogen Threats, Culture, and Institutions

Human populations that have been under pathogen threats tend to have two major cultural characteristics: collectivism (e.g., Fincher & Thornhill, 2012) and cultural tightness (e.g., Gelfand et al., 2011; Jackson et al., 2020). Collectivism is here understood as a combination of tendencies (a) to favour one's ingroup and maintain a close social network within one's ingroup (i.e., ingroup favouritism), and (b) to avoid strangers (i.e., outgroup avoidance). Cultural tightness is a combination of tendencies (c) to define a narrow range of behaviours as appropriate in a wide range of situations (i.e., tight norms), and (d) to punish norm violations severely (i.e., severe punishment). Cultural tightness is a *meta-norm*, namely, a norm about how norms are defined, and how their violations are dealt with. In sum, people living under constant pathogen threats are likely to adopt well-defined and tightly sanctioned cultural practices, including those that maintain a relatively narrow, particularly kinship-based, ingroup with a clear group boundary (see also Templeton, 2021, for a discussion of social connectedness during the COVID-19 pandemic).

These cultural practices have been retained and passed down across generations, presumably because they are likely to bring about better outcomes for the population. Indeed, people are likely to be able to avoid diseases by avoiding strangers with infectious pathogens to which one has no immunity (Schaller & Park, 2011), by tightly adhering to the cultural practices that have kept their ancestors and themselves safe from invisible pathogens and by severely punishing those who fail to observe them. Consistent with this reasoning, collectivist countries tend to experience fewer disease outbreaks (Morand & Walther, 2018) presumably thanks to cultural practices of outgroup avoidance.

Furthermore, the cultural practices of cultural tightness may have been legitimated by beliefs in supernatural forces (Douglas, 1986). In pre-industrial societies when scientific information about pathogenic processes was unavailable, the disease caused by invisible pathogens may have been explained in terms of a supernatural evil force, and such traditional beliefs can persist and coexist with scientific knowledge in contemporary societies. Indeed, historical pathogen prevalence is associated with beliefs in evil forces across countries (Bastian et al., 2019; see also Douglas, 2021, for a discussion of conspiracy theories during the COVID-19 pandemic).

Despite the adaptational advantage of tight collectivism in pathogenic environments, it is important to note that these same cultural practices can have societal costs. As Gelfand (2018) noted, cultural tightness can help maintain social order by strong adherence to cultural norms, but may have a drawback of socially closing the group boundary to new talents and experts, and also culturally closing the ideational boundary, stifling creativity and openness to new ideas and practices.

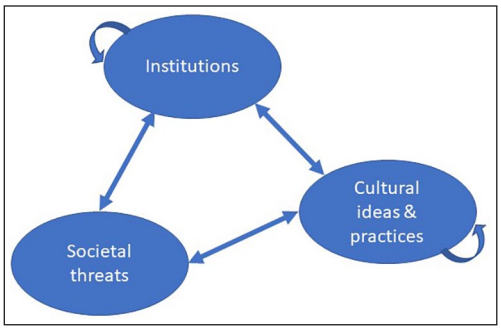
It is important to note that tight collectivist practices are not inevitable cultural consequences of pathogenic societal threats. *Institutions* can soften potentially negative consequences of pathogen threats. Douglass North (1990), a Nobel laureate in economics, described institutions as "the rules of the game in a society or . . . the humanly devised constraints that shape human interaction" (North, 1990, p. 3). They can include informal conventions, but also formal rules, which are backed up by the infrastructure of governance, including legislature, government, and jurisprudence. When the whole of humanity is

taken as a human population, there is a great spatial variability in institutional arrangement. Although there are international organizations such as the United Nations and the World Health Organization, the Westphalian system of nation-states is a current global institution that defines national borders, geospatially dividing the human population into national populations. In most national populations today, government, public administration, and associated organizations – the system of a nation-state – would be the front-line actors that enact the formal "rules of the game". There is evidence to suggest that an effective government and administrative system can reduce the need for a kin-based ingroup and traditionalism, and potentially soften the negative effects of societal threats. This is presumably because effective government organizations can substitute kin-based and other close-knit ingroups when it comes to providing tangible material support (e.g., social welfare). For instance, Hruschka et al. (2014) reported that the presence of effective institutions, as measured by the World Bank's effective government index, can reduce ingroup favouritism, while cancelling out the effect of pathogen prevalence.

Theorizing about Societal Threats and Cultural Dynamics: The Case of COVID-19

At the macro-level of human populations, the relations among societal (especially pathogen) threats, cultural ideas and practices (e.g., collectivism and tightness), and institutions may be theorized as a dynamical causal nexus (Figure 1). Recurrent and persistent societal threats can give rise to adaptive cultural patterns such as collectivism and tightness, but may also prepare social institutions for future recurrence of societal threats by making the need for institutional responses obvious. However, certain cultural ideas and practices may be able to reduce the adverse impact of societal threats, and also motivate the establishment of effective social institutions, which can then reduce the recurrence of societal threats and the need for the cultural patterns.

Figure 1. Societal threats, cultural patterns, and social institutions.



Note. Bidirectional arrows indicate bidirectional causality, and the curved arrows indicate autocorrelations.

Cultural ideas and practices can be routinized and habituated, and taught to the next generation if societal threats are recurrent; thus, social institutions tend to be stable and long-lasting. This means there is a strong tendency for temporal autocorrelation in cultural patterns and institutions: that is, cultural patterns and institutions at one point in time tend to influence their future state. Note that temporal autocorrelations can differ between institutions and cultural patterns, and that the causal relations may be nonlinear. Theoretical and empirical investigations of these dynamic relations are needed.

Macro-Level Institutional and Cultural Responses to a Threat Event

Nevertheless, how different nation-states and their citizens respond to a specific threat event needs to be investigated more fully to gain further insights into this nexus. Faced with a threat event such as the COVID-19 pandemic, institutions – especially formal institutions – can have a strong and immediate influence (e.g., legal lockdown or curfew) on government and administrative responses as well as on people's behaviours. For instance, governments in a tighter culture may be more willing to impose stricter rules about mask wearing and social distancing, and citizens in those countries may be more willing to follow the rules and norms (i.e., autocorrelation). Consequently, tighter countries

may be able to curtail the spread of SARS-CoV-2 more effectively. Indeed, there is empirical support for this prediction (Cao et al., 2020). Further, an effective public health system and police force may be able to amplify people's adherence to these practices even further. In other words, the role of institutions in the causal nexus of threat, culture, and institution can be interactive.

It is useful to investigate how different nation-states and their citizens have responded to the COVID-19 pandemic and how effective these responses may have been in reducing health and other societal impacts. However, such investigations need to examine not only the macro-level relations between relevant constructs, but also micro-level cultural dynamics; namely, how individuals respond to a societal threat event and how such individual behaviours interact to generate macro-level trends. In the absence of relevant cultural psychological theories, we need to piece together our conjecture based on the existing literature.

Threat Event and Micro-Level Cultural Dynamics

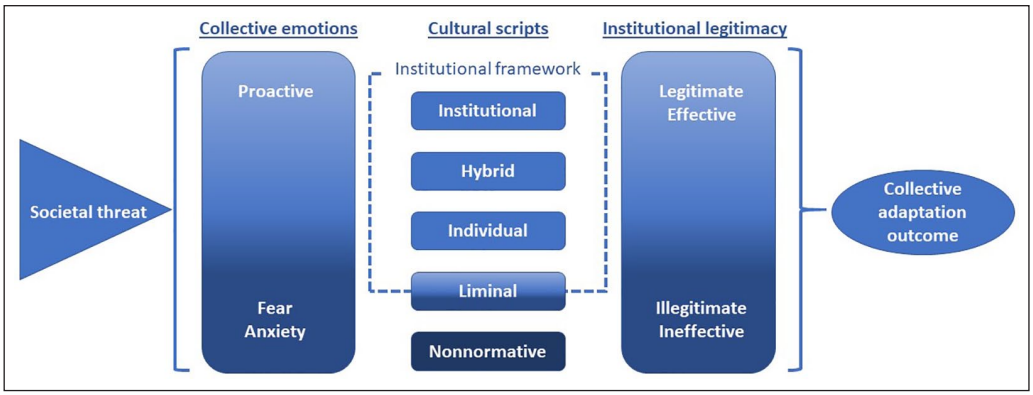
Let us start with the onset of a societal threat event, e.g., an outbreak of viral infections, which then spread around the world, directly impacting those who catch the virus and affecting others who learn about it indirectly through traditional mass media or other online or offline channels. Although an international institution such as the World Health Organization exists and plays a significant role in coordinating between national responses, it is fair to say much of the institutional response is carried out by nation-states in the early 21st Century. At the same time, however, the globalized human population begins to respond cognitively, affectively, and behaviourally. We suggest that collective emotion, cultural scripts, and institutional legitimacy interact to effect micro-level cultural dynamics at the global scale.

Collective emotion. Whether directly affected or indirectly learning about the virus and its effects from others, a societal threat event is a perturbation in a complex social-ecological system, of which a human population is a part. Emotion is likely to accompany human responses to such a disruption to daily routines (e.g., Kashima et al., 2019). Provided that emotive experiences are likely socially shared (Rimé, 2009), emotions may diffuse through the population (Peters & Kashima, 2015) and become *collective emotions*, i.e., emotions widely shared within a population (von Scheve & Salmella, 2014). For example, as the threat of the COVID-19 global pandemic spread, collective anxiety might have also begun to spread.

Nevertheless, populations differ in how they respond to a threatening event, likely as a function of its *perceived risk* (i.e., how likely and how badly it affects themselves and their lives) and their *perceived capabilities* (i.e., how capable they are in dealing with the risk) (e.g., Lazarus, 1991). To borrow Blascovich's (2008) terminology, if the event is appraised as "challenge" (i.e., capabilities are greater than risks), even large-scale societal threats may motivate proactive responses (e.g., Jonas et al., 2014) in a population; however, if regarded as a "threat" (i.e., risks are greater than capabilities), people may suffer from fear and anxiety. Whether proactive or stifling emotions predominate in the population would depend on the population distribution of perceived risk–capability balance. If a majority of the population consider their coping capabilities to be greater than the risk, proactive emotions and action orientations may prevail. If many are uncertain about their abilities to handle the risk, collective fear and anxiety may stifle the process of societal adaptation to the threat event (Figure 2).

Cultural scripts inside and outside the institutional framework. We suggest that *cultural scripts* provide alternative courses of action individuals can take in response to a societal threat event. Schanck and Abelson (1977) theorized a script as a cognitive representation, but we construe a cultural script as a configuration of cultural ideas and practices, which describe who (i.e., roles) does what (i.e., behaviours) when and where to what end (i.e., goals). They are shared in a population, and inform people how to coordinate their actions to reach certain ends.

Figure 2. Societal threats, cultural dynamics, and collective adaptation.



In the context of a societal threat like the COVID-19 pandemic, there are various cultural scripts. Many cultural scripts sit within an *institutional framework*, namely, a framework of appropriateness and prudence within a broad society at a given time and place. They include purely *institutional* responses, in which citizens do not participate, but governments and specialists may act, e.g., public agencies funding medical research establishments to develop medical treatments and vaccines. In *individual* responses, citizens take action largely on their own, e.g., wearing masks, physically distancing, and generally being hygienic. However, many are *hybrid* responses that require a coordination between institutional and individual actions, e.g., the government (e.g., minister, emergency department) deploying relevant resources (e.g., paramedics, public hospitals, public health facilities), and citizens turning up for virus testing. Outside the institutional framework, there are clearly *nonnormative* responses (e.g., Tausch et al., 2011), e.g., plainly ignoring any public health regulations, or even violently rallying against a lockdown. Nonetheless, people may innovate *liminal* cultural scripts, which sit in the grey zone between the inside and the outside of the institutional framework (e.g., wearing a mask of Zorro and marching through streets defying police).

Cultural scripts can include not only information about how to act individually or in coordination with others and institutions, but also contain or are associated with other information. For example, there appears to be a cultural script to flaunt government mandated mask wearing in the state of Victoria, Australia (Blakkarly, 2020). This script contained the action of "not wearing a mask in public", contravening the government regulation. However, it also included a range of other associations, such as an emotive reaction of "defiance", and the appraisal of the government's institutional response as illegitimate. Those anti-maskers who were caught by police called themselves "sovereign citizens", suggesting that this script included a social identity of "sovereign citizen" and presumably the appraisal of SARS-CoV-2 as low risk, but the government's institutional response as a threat to civil rights.

Institutional legitimacy. Institutional legitimacy as perceived by people can influence both collective emotion and selection of cultural scripts. First, to individual citizens of a nation-state, their perceptions of capabilities to handle a global societal threat are likely linked to their country's institutional capabilities. The more effective their institutions are seen to be, the greater are their perceived adaptational capabilities. Given that effectiveness of an institution is an important part of the institution's perceived legitimacy (Tost, 2011), legitimate institutions are likely to increase individual citizens' perceived capabilities to adapt to the societal threat.

Second, institutional legitimacy can encourage the selection of different types of cultural scripts. Legitimate institutions are likely to encourage the adoption of those inside the institutional framework. On the one hand, institutions seen to be effective may inspire institutional trust in people, which can motivate more proactive participation in hybrid cultural scripts (e.g., COVID-19 testing at a public testing centre). On the other hand, excessive reliance on institutions may incline people to offload the cost and burden of enacting individual cultural scripts (*institutional offloading*; e.g., not handwashing or sanitizing), resulting in a potential problem of freeriding. However, illegitimate institutions may trigger collective contempt, which may then tempt people to opt for nonnormative cultural scripts (Tausch et al., 2011; e.g., illegal demonstration).

Institutions, policy instruments, and cultural dynamics. The question, "Who adopts which cultural scripts where and when?", is significant not only for a social psychology of cultural dynamics, but also to policy makers and public administration. Although these institutional actors can construct and implement a range of policy instruments to manage a societal threat such as the COVID-19 pandemic (Patherick et al., 2020), the deployment of a particular instrument depends on its public acceptance, i.e., whether citizens are able and willing to do their part in hybrid cultural scripts.

One policy instrument that many governments have adopted around the world is a contact-tracing technology (O'Neill et al., 2020). It uses a variety of information technologies to track people's social contacts to trace the person-to-person spread of SARS-CoV-2. A cross-national investigation of public acceptance of contact-tracing technologies in which we are involved (Dennis et al., 2020) has shown large cross-national variability in respondents' willingness to accept a potentially privacy-encroaching technology across eight countries (Australia, Germany, Italy, Japan, Spain, Taiwan, the United Kingdom, and the United States). We plan to approach this case using the theoretical framework sketched out in this article.

Concluding Comments

The COVID-19 pandemic has highlighted one of the most pressing issues for culture and psychology. How does humanity – the globalized human population – respond to a global societal threat? Although other global societal threats (e.g., climate change, extreme poverty) loom large in the background, the availability of worldwide COVID-19 morbidity statistics has brought into sharp focus the geospatial distribution of human vulnerabilities around the world. To be sure, many issues and questions are concerned with institutional responses, which tend to have fallen outside the traditional research area of social psychology. Nonetheless, social psychology can play its part by investigating what institutional responses citizens would see as legitimate and acceptable.

Furthermore, there are many questions that social psychology can and should try to answer, perhaps in collaboration with other subdisciplines of psychology and other disciplines in social science. They pertain to collective responses to societal threats (e.g., collective emotion, collective action), and psychological relationships with social institutions. For example, how would people respond to diverse policy instruments that their government deploys? Do they respond proactively by cooperating with government initiatives or do they institutionally offload and freeride? Under what circumstances are they inclined to push the institutional boundary to invent liminal cultural scripts and out into nonnormative collective action? What may be the longer-term implications of the COVID-19 pandemic for institutions and cultures? Will our cultures close cultural borders, become culturally tighter, and less open (i.e., collectivist and tight)? Does this mean intergroup relationships will become less open and more fraught?

These are both theoretically and humanly significant questions, which await further investigation. We hope our framework may help facilitate future research.

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