



Behavioral economics in the time of coronavirus: rebellion or “willful ignorance” in the face of “grand challenges”

Pritika Rao¹

Published online: 27 May 2020

© European Association for Evolutionary Political Economy 2020

Abstract

This article considers the curious case of human behavior in the context of the coronavirus pandemic. We have observed that individuals, societies, and nations are exhibiting various irrationalities that are worth studying more closely. Applying the insights and research of reputed behavioral economists to these unprecedented circumstances, we explore possible explanations for individual and collective actions that appear, in many cases, to be highly counterintuitive. In the face of large-scale global issues, that Lazaric (2020) refers to as “grand challenges,” fraught with uncertainties and informational asymmetries, we delve deeper into the complexities of the factors that influence decision-making at various levels as we try to make sense of behavior. We wonder if reasons include the outright rejection of facts or perhaps the unwillingness to even receive information that has the potential adversely affect one’s welfare or self-interests—a tendency that Grossman and Van Der Weele (2017) term “willful ignorance.” We conclude with a few lessons and recommendations that can help understand and motivate behavior.

Keywords Behavior · Institutions · Economics · Information · Decision-making · Signaling

JEL classification D82 Information, knowledge, and uncertainty: asymmetric and private information, mechanism design · D83 Information, knowledge, and uncertainty: search, learning, information and knowledge, communication, belief, unawareness · D70 Analysis of Collective Decision-Making: General · D91 Micro-based behavioral economics: role and effects of psychological, emotional, social, and cognitive factors on decision-making

✉ Pritika Rao
pritzanne@gmail.com; pritikarao@ncbs.res.in

¹ Research Fellow, Innovation for Cancer Care in Africa (ICCA) project, National Centre for Biological Sciences (NCBS), Bengaluru, India

Why is it that the very same people who longed for days when they could be paid to do nothing but Netflix the day away do not seem to want to do so? Why is it that it is so much harder to convince individuals to comply with rules that are intended to protect them? Why are we determined to see things the way we want to, despite very grim facts and statistics staring us in the face? In light of the coronavirus, we consider the behavior of individuals and arrive at some interesting conclusions.

There is the obvious discounting, a term economists and psychologists are very familiar with—the tendency to trade off present benefits for future ones. It seems that for some, the present value of exercising the freedom to walk free in the streets, visit a local supermarket or attend a party is much higher than the future benefit of protection from a contagious disease. Some persons discount future payoffs because the uncertainty of a future is much higher, particularly those who are naïve, or those who are much older and have lived through other epidemics such as the swine flu, Ebola, HIV, and SARS, and therefore see no reason for this virus to disrupt their lives.

Others may even believe that contracting the disease is inevitable and in fact better for herd immunity (a stance initially adopted by the UK government), creating little incentive for them to stay indoors and isolate. There are also those who believe very strongly in conspiracy theories. There are numerous articles, messages, and videos that have been circulating that endorse these diverse opinions, generating informational inconsistencies. But behavioral economics suggests that access to the right information may not be the only factor that influences socially responsible behavior.

Grossman and Van Der Weele (2017) cite an important behavioral trait that they term “willful ignorance,” or the act of “avoiding information about adverse welfare consequences of self-interested decisions” (p.1). Their study focuses on self-image and indulgent behavior even at the cost of social harm. Most often cited in research pertaining to climate change; this attribute also explains why many believe that environmental harm is not man-made, and in fact barely even real. What’s more, people are reluctant to receive information on the topic (Stoll-Kleemann et al. 2001; Norgaard 2006), even if it is free to do so.

Numerous researchers, economists, and psychologists have found that this ignorance acts as a safeguard against the person’s reputation, protecting their self-image (e.g., Dana et al. 2007; Benabou and Tirole 2006; Bem 1972; Baumeister 1998; Fiske 2013). Norgaard (2006) has stated in her research that this “fear of being a bad person” is a motivation for individuals to avoid learning and engaging with the facts on climate change.

This may explain the behavior of persons who are wandering outdoors despite recommendations, guidelines, and laws that prohibit this type of activity in such dangerous times. This is not a criticism of those workers who are risking their lives to perform essential services or blue-collar workers who have no choice but to report to work during this time. This piece concerns those who (counter-intuitively) gather *in groups* in the midst of a nationwide lockdown (to clap loudly and clang pans to thank health workers), or those who confidently venture out of their homes, citing cynicism, misplaced optimism, and displaying outright rebellion. Those who are bombarded with information at workspaces, on social media and in peer groups, cannot claim “ignorance,” and are therefore more likely to practice social distancing and self-isolation since they do not want the negative perception it may attract. Social proof theory also suggests that individuals are hugely influenced by their perception of what others around them are doing.

Those who are retired or those who work in more laissez-faire settings have limited access to this level and volume of information (usually traditional media such as the

television or newspapers) that they can comfortably claim to have never seen. This may also explain why in the past few months with the furor surrounding the passing of the contentious [Citizenship \(Amendment\) Act 2019 \(CAA\)](#) that sought to amend the definition of an illegal immigrant, and grant fast-track citizenship to minority groups who have fled from persecution in Muslim-majority nations. Coupled with the implementation of the [National Register of Citizens \(NRC\)](#), young members of intergenerational families found it extremely hard to debate with older generations and express their views on their perceived discrimination and the resultant communal violence and angst that this sparked across the nation. Of course, there is also a whole lot of confirmation bias in there but there is also what Dan Galai and Orly Sade call the Ostrich Effect (2006), which they define as the tendency to “avoid apparently risky financial situations by pretending they do not exist” (pp. 2743, 2744). In situations like the present, when the risk of community transmission is high, seeing people congregate in groups right in the middle of a government imposed *Janata* curfew (enforced across India in an effort to encourage social distancing and prevent exactly this type of behavior) is absolutely illogical. While this seems a lot like a blatant rejection of facts and an act of rebellion, it might actually point to something much deeper. Individuals do not act in isolation—they consider the context of their larger environment and assess their response in light of external circumstances.

Lazaric (2020), in a chapter titled “Cognition and routines dynamics in times of Grand Challenges,” argues that agency is the real game-changer in the face of global problems such as climate change or widespread technological or societal transformation that she refers to “grand challenges.” Agency is key to the tackling of big problems and driving new patterns or courses of action that influence routines. She references the work of Margaret Archer who highlights the notion of “self-talk” or internal dialogue that individuals engage in while designing actions, thereby suggesting differences in mental operation across individual personality types (2003). Archer defines these groups of agents—“communicative reflexive” or those who are distrustful of their internal dialogue and are mostly socially immobile, “autonomous reflexives” who rely on judgment and past contextual experience: “meta reflexive” similar to the previous group but with strong ideals that govern their thinking, making them critical of structures, constraints, and situations that are inconsistent with these lofty visions. A consideration of individual thought processes certainly influence behavior in the event of “grand challenges.” These “ill-structured problems” are difficult to reconcile since there are numerous unknowns with undefined goals, multiple solutions, and paths or none at all without consensual agreement on the appropriate solution (Jonassen 1997). In the absence of well-defined general rules, heuristics and the uncertainty, learners devise solutions based on personal opinions or beliefs by evaluating, dismantling, and rebuilding existing practices. These existing patterns in an organization and by extension, society is sometimes so widespread that creating new routines and patterns become much harder. Amid these constraints, the interactions between different learners help frame new solutions and practices for the collective. As Lazaric (2020) states, “Archer’s work on diverse types of self-talk at the individual level may help to rethink the ostensive and performative co-constitution of routines.”

The anchoring principle also seems to explain why the current pandemic is not being taken as seriously as it should. The first piece of information that emerged was a rather

optimistic half-truth “Coronavirus is nothing more than a really bad flu” or some version of this statement. As a result, most reject anything that suggests that it is more severe than that—dismissing it as panic, paranoia, or speculation. Deliberate action during the early onset of the spread of the virus in the form of stern factual statements by experts and governments would have been extremely beneficial.

Although it is much easier to sit at home and avoid a painful commute, research shows that people rarely like to disturb the status quo. Banks and other marketing agencies have cleverly factored this into their communication in the form of default options, knowing that our innate humanness will cause us to fall back into familiar patterns, no matter how detrimental they may be to us and those around us (think, addictive behaviors). “Fast thinking” as opposed to Kahneman’s slow thinking, relies on automatic processing and mental shortcuts while in this situation, a more deliberate, analytical thinking is required.

What can actually get people to stay at home and practice self-isolation and/or social distancing?

In retrospect, what would have helped immensely was rapid response. If officials were quick to recognize the scale of disruption this could cause (learning from China’s attempt to tackle the matter privately internally leading to an unchecked proliferation of cases), and communicated the severity top-level down, the anchoring principle would have kicked into effect, and a cascading of errors could have been prevented at the group/society level.

Challenging currently held beliefs within intergenerational families by presenting facts through videos for instance may work, albeit only to a limited degree. Disseminating responsibilities at a local level, on the other hand, tends to work very well. Giving residential layouts, apartments, office complexes, districts, etc., the ability to enforce stringent measures has worked because it places individual behavior under the lens of someone in authority, where an individual’s need to protect self-image will come into play. Simple, direct communication such as the rate of transmission (1 person can infect 2–3 persons who in turn can go on to infect 2–3 persons each) is highly effective since it puts the focus on individual action and counters misplaced overconfidence.

Achieving a fine balance between providing just enough information and enforcing the law to prevent social interaction, while simultaneously exercising precaution and care not to induce panic is a delicate, yet important consideration in the present time.

Grossman and Van Der Weele (2017) make an important distinction in terms of a signaling model where preferences are studied against material payoffs with either an intrinsic concern for social welfare or a preference for a self-image as pro-social actor. These preference-signaling models suggest two interpretations:

1. A social-signaling interpretation with an external observer.
2. A self-signaling interpretation with an internal observer (this is a dual self-signaling model introduced by Prelec and Bodner (2003), and widely adopted thereafter, wherein the decision-maker and observer are two aspects of a divided self, where for instance, the decision-maker is an informed actor who is aware of preferences and the observer may be a future self who lacks introspective knowledge or awareness of past motivations (Grossman and Van der Weele 2017).

As explained above, groups of persons with access to information tend to largely fall in either one of the categories above—where they are subject to either an external observer’s

judgment (through the wider network of social media or highly engaged peer groups) or at the very least have a highly elevated social self that values collective welfare.

In the absence of an external observer and with the observer in the self-signaling interpretation, we find ourselves in the baffling social situation that we are in now, with willfully ignorant persons “looking the other way” and creating an environment for collective social catastrophe.

Policy that focuses only on disseminating information may not be optimal. Instead, enforcing accountability with an added emphasis on self-image can be used to benefit the common good.

Diminishing the possibility of ignorance (willful or otherwise) will require targeted measures in the form of outright questioning or challenging of beliefs or establishing an external agent that uses the self-image aspect of behavior to their advantage.

As stated previously, decisions are not made in isolation. This is the subject of research of many behavioral economists who have stated that in every type of organization, there are relationships or behavior that lie between custom and tradition (formal or informal rules). Routines are defined as patterns of behavior that are motivated by a set of rules that comprise of past capabilities, memories, information, knowledge, and habits (Becker et al. 2005). Routines involve both cognitive and political dynamics that inform collective learning, just as habits also take knowledge, social, and institutional structure considerations into account (Lazaric 2000). Routines are adopted by individuals, but in the context of larger society. Lazaric and Denis (2001) have found that changing existing practices may lead individuals to adopt a defensive posture that extends beyond their cognitive level. A political level of motivation arises that may lead to conflict, despite an obvious opportunity for better learning and elevated social status. People flocked to beaches around the world in recent weeks from the USA to Australia, declaring rather proudly that Corona wasn’t going to stop them from going about their lives. It seems that years of societal conditioning whether in the form of mantras such as “This too shall pass,” “business as usual,” or “not giving in to fear” have created large institutional biases.

A Review in The Lancet¹ reported numerous negative effects of the quarantine ranging from confusion and anger to post-traumatic stress. It appears that democracies such as America, Italy, and India are struggling in particular (compared to say, China) because they are accustomed to a certain level of freedom and agency that is suddenly revoked in a crisis of this kind.

Situations of uncertainty and unpredictability, no doubt, affect organizations and their ability to learn. Furthermore, groups, teams, or “communities of practice” play a vital role in the creation of knowledge (Cohendet and Llerena 2003; Lazaric and Raybaut 2004). Within these communities, the presence of heterogeneity in the form of multiple aims and goals among members can hinder the ability to quickly resolve issues (March and Simon 1958). Contradictory messaging from world leaders have left people confused, causing them to revert to long-held beliefs. In the case of the virus, the UK adopted a relatively more ad hoc approach and severely delayed testing and provision of care, as Boris Johnson with his classic British “carry on” rhetoric, was reluctant to enforce stringent containment measures.

¹ The psychological impact of quarantine and how to reduce it: rapid review of the evidence, Volume 395, Issue 10227, p912-920, March 14, 2020 [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30460-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30460-8/fulltext)

Simon (1991) believes that the existence of some members who possess loyalty or an open mind give rise to a selection mechanism that may help convergence towards the larger organization's goal. In the healthcare industry, the Innovation for Cancer Care in Africa² project has noted that a unified goal on healthcare is critical to ensuring better outcomes. Policy recommendations that read like a wish list are rarely implemented effectively because they are too vague. Within markets too, great variety and heterogeneity is not necessarily a success. Despite an increased amount of products, diagnostic firms, information, and healthcare providers, numerous cases of cancer are still reported in countries such as India and Africa, because there exist issues some of which are societal stigma, habits, and beliefs that hinder a patients' ability to access quality, timely care.

It is evident from the literature that merely an overload of information does not motivate individual behavior, routine, or collective change in the event of a "grand challenge." There are important considerations to be made regarding individual decision-making, routines, and signaling issues that are largely ignored when countries and organizations attempt to motivate behavior.

Funding information Economic and Social Research Council (ESRC)-funded project, Innovation for Cancer Care in Africa (ICCA), under ES/S000658/1 "GCRF Inclusive societies: How to link industrial and social innovation for inclusive development: lessons from tackling cancer care in Africa." The National Centre for Biological Sciences, India (NCBS) provided institutional support of the ICCA Project.

Compliance with ethical standards

Conflicts of interest The author declares that there is no conflict of interest.

References

- Archer M (2003) *Structure, agency and the internal conversation*. Cambridge University Press, Cambridge
- Baumeister R (1998) The self. In: Gilbert D, Fiske S, Lindzey G (eds) *The handbook of social psychology*. McGraw-Hill
- Becker MC, Salvatore P, Zirpoli F (2005) The impact of virtual simulation tools on problem-solving and new product development organization. *Res Policy* 34(9):1305–1321
- Bem DJ (1972) Self-perception theory. In: Berkowitz L (ed) *Advances in experimental social psychology*, vol 6. McGraw-Hill, pp 1–62
- Benabou R, Tirole J (2006) Incentives and prosocial behavior. *Am Econ Rev* 96(5):1652–1678
- Cohendet P, Llerena P (2003) Routines and incentives: the role of communities in the firm. *Ind Corp Chang* 12(1):271–297
- Dana J, Weber R, Kuang JX (2007) Exploiting moral wiggle room: experiments demonstrating an illusory preference for fairness. *Economic Theory* 33(1):67–80
- Fiske S (2013) *Social beings: a core motives approach to social psychology*. Wiley, New York
- Galai D, Sade O (2006) The 'Ostrich Effect' and the relationship between the liquidity and the yields of financial assets. *J Bus* 79(5):2741–2759
- Grossman Z, Van der Weele JJ (2017) Self-image and willful ignorance in social decisions. *J Eur Econ Assoc* 15(1):173–217
- Jonassen DH (1997) Instructional design models for well-structured and III-structured problem-solving learning outcomes. *Educ Technol Res Dev* 45:65–94

² The Innovation for Cancer Care in Africa (ICCA) is an East Africa-India-UK research collaboration, funded by the Economic and Social Research Council (ESRC), and led by The Open University <https://www.open.ac.uk/researchprojects/innovation-cancer-care-africa/>

- Lazaric N (2000) The role of routines, rules and habits in collective learning: some epistemological and ontological considerations. *Eur J Econ Soc Syst* 14(2):157–171
- Lazaric N (2020 forthcoming) Cognition and routines dynamics in times of Grand Challenges. In: D'Adderio L, Dittrich K, Feldman M, Pentland B, Rerup C, Seidl D (eds) *Handbook of Routines Dynamics*. Cambridge University of Press, Cambridge
- Lazaric N, Denis B (2001) How and why routines change: some lessons from the articulation of knowledge with ISO 9002 implementation in the food industry. *Econ Soc* 6:585–611
- Lazaric N, Raybaut A (2004) Knowledge creation facing hierarchy: the dynamics of groups inside the firm. *J Artif Soc Soc Simul* 7
- March J, Simon H (1958) *Organizations*, NY: Wiley, 2nd edn. Blackwell Publishers, Oxford, p 1993
- Norgaard K (2006) People to protect themselves a little bit: emotions, denial, and social movement nonparticipation. *Sociol Inq* 76(3):372–396
- Prelec D, Bodner R (2003) Self-signaling and self-control. In: Loewenstein G, Read D, Baumeister R (eds) *Time and decision: economic and psychological perspectives on intertemporal choice*. Russell Sage Foundation, pp 277–298
- Simon HA (1991) Theories of bounded rationality. In: McGuire CB, Radner R (eds) *Decision and Organization*. North-Holland Publishing, Amsterdam, pp 161–176
- Stoll-Kleemann S, O'Riordan T, Jaeger CC (2001) The psychology of denial concerning climate mitigation measures: evidence from Swiss focus groups. *Glob Environ Chang* 11(2):107–117