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# Nudge Policies in COVID-19 Context: A Necessary Action or Ethical Dilemma?

Políticas Nudge no Contexto da COVID-19: Uma Ação Necessária ou Dilema Ético?



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## ABSTRACT

**Objective:** the aim of this study is to discuss nudges in the SARS-CoV-2 pandemic context, bringing back some reflections on ethics and revising them in the light of the new setting imposed by the pandemic. **Theoretical approach:** the theoretical framework of Behavioral Economics was the basis for nudges' analysis, while utilitarianism, deontology, and virtue ethics were the classic moral theories used to reflect on ethical aspects. **Methods:** we undertook a literature review about nudges searched through the latest studies about this subject applied to COVID-19 mitigation. In the ethical discussion section, we used classical references to articulate the nudge theory with the following moral theories: utilitarianism, deontology, and virtue ethics. **Results:** our findings indicate that the trend intervention during the pandemic is 'nudging messages' and 'increase people's commitment,' mainly to nudge people toward the desired behavior and increase policy adherence. Many experiments did not show significant results, and some drawbacks in policies' applications indicate that nudges might be revised in crisis scenarios, such as a pandemic outbreak. The ethical discussion section relates three moral theories that justify some of the nudge's aspects. **Conclusions:** this paper showed some flaws and inconsistencies in nudge theory and its application during the pandemic that can be solved by discussing ethical aspects. We suggest that connecting these problems with moral views might be a solution for some deadlocks found in the nudge theory.

**Keywords:** nudge; COVID-19; public policy; ethics.

## RESUMO

**Objetivo:** o objetivo deste estudo é discutir os *nudges* no contexto pandêmico do SARS-CoV-2, retomando algumas reflexões sobre a ética e revisando-as sob o novo cenário imposto pela pandemia. **Marco teórico:** o arcabouço teórico da Economia Comportamental fundamentou a análise dos nudges, enquanto o utilitarismo, a deontologia e a ética das virtudes foram as teorias morais clássicas utilizadas para a reflexão dos aspectos éticos. **Métodos:** fizemos uma revisão da literatura sobre *nudges* e pesquisamos os últimos estudos sobre este assunto aplicados à mitigação da COVID-19. Na seção de discussão ética, referências clássicas são utilizadas para articular *nudges* com as seguintes teorias morais: utilitarismo, deontologia e ética das virtudes. **Resultados:** os resultados indicam que a tendência em termos de intervenção é enviar mensagens de *nudge* e aumentar o comprometimento, principalmente para direcionar um comportamento desejado e aumentar a adesão a políticas. Muitos experimentos não mostraram resultados significativos e alguns inconvenientes na aplicação de políticas indicam que os *nudges* devem ser revistos em cenários de crise, como em pandemias. Na discussão ética, três teorias morais podem justificar alguns aspectos dos *nudges*. **Conclusões:** este artigo mostrou algumas falhas e inconsistências tanto na teoria do *nudge* quanto na sua aplicação durante a pandemia, as quais podem ser resolvidas através da discussão de aspectos éticos. Sugere-se que conectar estes problemas com as teorias morais pode ser uma solução para alguns impasses encontrados.

**Palavras-chave:** *nudge*; COVID-19; política pública; ética.

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## INTRODUCTION

Mainstream economics states that rational individuals consider costs and benefits on transactions, are self-interested, and maximize utility. This assumption may be helpful in contexts free of psychological and social influences on behavior. However, it makes much more sense to public policy studies to consider flexible and emotional actors whose decision-making is influenced by shared mental models, contextual cues, and local social networks. In this regard, the knowledge about cognitive processes has been helping policymakers, and the emerging new approaches are proving to be low cost since they depend on small changes in policy design and implementation (World Bank Group, 2015).

Behavioral economics is one of the emergent sciences of choice developed over the past four decades, improving theory to overcome the biased and flawed human forecast. In a similar fashion, the model proposed by Thaler and Sunstein (2009) nudges people in directions that could make their lives better, initiating a new movement called libertarian paternalism. These self-conscious attempts to influence choice are paternalistic, but the authors idealized liberty-preserving policies by permitting choosers to be the judges. In other words, a nudge policy is not mandatory, and the interventions must be easy and cheap to explain and justify.

This soft kind of paternalism has proved helpful for policies aiming at certain selection decisions, for example, when the long-term preferences for health can take over the short-term choices for pleasure (Fateh-Moghadam & Gutmann, 2014). By the year 2008, libertarian paternalism was the most modern idea in policy debates (Hausman & Welch, 2010), and one might see how nudges have its momentum in public health by improving policies and gaining expressively group-level results because of influences on individual health behavior (Saghai, 2013).

Nudges thoroughly influenced public policy theory, but not without critics and opposition regarding ethical and political concerns. The discussion has been opened again since mitigation on coronavirus SARS-CoV-2 pandemic (also known as COVID-19 disease) asks for changes in human's behavior (Yan, Zhang, Wu, Zhu, & Chen, 2020), and nudge interventions are known as complements to standard policy instruments due to interferences on choice architecture (Hume, John, Sanders, & Stockdale, 2020).

In the present study, we question nudge's efficiency on the COVID-19 pandemic context by mentioning some setbacks presented in the field's latest literature. To achieve that, we recollect some reflections on nudge policies' ethics based on most essential authors, revising them on the new setting imposed by the COVID-19 pandemic. We also

extend earlier discussion through ethics philosophy from three normative moral theories: utilitarianism, deontology, and virtue ethics. Our aim is not to report on all policies implemented during the pandemic under the foundations of nudge theory and, on this subject, we undertook a literature review.

Our findings indicate that the current trend intervention is nudging messages, mostly to nudge people toward the desired behavior and increase policy adherence. Many experiments did not show significant results, and some drawbacks on policies' application indicate that nudges might be revised in crisis scenarios, like a pandemic outbreak. Regarding the ethical aspects, we suggest that utilitarianism, deontology, and virtue ethics are moral theories that can help solve some of the inconsistencies in nudge theory.

## A GLIMPSE OF NUDGES AND ITS CRITICISM

### What is nudge?

The nudge theory is quite simple: "any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives" (Thaler & Sunstein, 2009, p. 6). Assuming that everything matters and there is no neutral design, these changes in choice architecture could lead people to make better decisions. The following evidence justifies the nudge's premises: people make good choices when they know what they are doing and have good information and quick feedback; otherwise, they choose like novices (Thaler & Sunstein, 2009).

Nudge is a theory within behavioral economics, whose foundations apply empirical models of systematic imperfections of rationality to learn about its implications on decision-making (Camerer, 2005), offering a more realistic perspective. Its origin can be traced back mainly to the studies of Daniel Kahneman and Amos Tversky, who view the *homo economicus* not as much like the real and not always rational *homo sapiens*. These responses contrast with the current groundwork of mainstream economics, which is increasingly mathematical and abstract and considers rational actors and maximization (Thaler, 2015).

### Nudges applied to public policy

Thaler and Sunstein's nudges' design relies on the dual-system theory of Kahneman (2012). People have a fast and inconsistent automatic system that goes over the slow and lazy reflexive system in many domains where this last one is needed. However, much earlier, Herbert Simon had already stated that human beings often use rules of thumb

on many decision processes without realizing it (Heukelom, 2014). Nudges are not new, but their justification based on irrationality is (Gigerenzer, 2015). Thus, along with the conclusions on imperfections on decision-making theory, this set of findings was just a step in creating a new branch of behavioral economics in which government interventions are justified on the social development argument (Camerer, Issacharoff, Loewenstein, Donoghue, & Rabin, 2003).

However, respecting individual choices or acting in a paternalistic way is a long-term dilemma for policymakers. Economists tend to understand paternalism as a state intrusion, albeit it can be a way of defending individual long-term interests. An example is to correct the status quo bias perceived in procrastination, such as when the government provides retirement subsidies, charges taxes on tobacco, or regulates gambling (Tirole, 2017).

Hereupon, the context in which the libertarian paternalism movement of Thaler and Sunstein (2009) arose becomes clear. Nevertheless, nudges should not be narrowed to it: even though nudges have diverse ways to steer people's behavior by the nature of the interventional mechanism, different aiming can also distinguish them. The advocacy of governmental use of pro-self interventions is the so-called libertarian paternalism in which the target is private welfare-promoting direction while the prosocial intervention seeks to promote public goods. Either way, pro-self and prosocial nudges are nothing like the usual tools used by other forms of paternalism, as commands and incentives (Barton & Grüne-Yanoff, 2015).

In a broader context, libertarian paternalism is described as the fourth scenario of soft paternalism. This one is supposedly the most liberal solution among the four, with interferences based on the view of bounded rationality, but ensuring the liberty of choice, according to Fateh-Moghadam and Gutmann (2014). These authors explain that the soft versions of paternalism differentiate themselves from the hard ones on their liberal aspects, respecting autonomy and ensuring the liberty of action. The other three scenarios are the classic soft paternalism, to prevent involuntary and self-imposed harm; the procedural paternalism, limiting interventions temporarily to achieve necessary objectives; and, endangerment-paternalism, to avoid possible harm in specific contexts where there is the risk of some individuals not acting autonomously, such as establishing cognitive faculty and limiting age.

The four non-hard types are designed for autonomy orientation. However, Thaler and Sunstein (2009) adopted the most libertarian option in the nudge theory to ensure that people should be free to choose, and in addition, they also could neutralize paternalism and outwitted ethical and political concerns. It means that the interferences must be easy to opt out, cheap to avoid, and must not impose

significant material incentives (Sunstein, 2015). Since the nature of the interventional mechanism creates different types of nudges, altering people's behavior toward a private welfare-promoting direction is considered the most ethical way (Barton & Grüne-Yanoff, 2015).

Regarding health, nudges and libertarian paternalism have offered many prospects since they illustrate perfectly the biased tradeoff between long-term preferences for health instead of short-term pleasure (Fateh-Moghadam & Gutmann, 2014). In addition, social influence has a substantial role, given that (un)healthy habits can be contagious. For example, one is more likely to be obese if one knows an obese person, the same way people will avoid unhealthy food and promote exercise if the group does it (Thaler & Sunstein, 2009). Equally important, Thaler and Sunstein (2009) specify three matters that can benefit from nudge policies: complex questions of choices architecture related to health issues, opportunities for governments to save money, and enact programs to protect the environment and human resources health. As a matter of fact, in health, optimistic bias and irrational discounting cost billions of dollars annually in uninsured treatment and needy services (Trout, 2005).

As an example of practical experience, Thaler and Sunstein (2009) debated how better choice architecture could improve Part D, a health plan for prescription drug coverage created during the Bush administration, suggesting that intelligent assignments and RECAP (record, evaluate, and compare alternative prices) are solutions for complex choices. The purpose of Part D was to offer a significant number of options to fit every person's needs, but the program was not user-friendly, the defaults were random, and the abundance of choices overwhelmed people who struggled to sign in. The default option was also the alternative recommended to increase organ donations, since, in this case, some biases and heuristics tend to maintain the status quo.

Dan Ariely (2008) explains how giving up long-term objectives for immediate gratification is procrastination. This author theorizes that humans are predictably irrational and have the right to be so. Nonetheless, a better comprehension of our nature can bring many practical benefits, such as understanding the status quo bias that causes discrepancy among organ donation rates across countries. Ariely (2008) exposed with numbers the recommendation brought by Thaler and Sunstein (2009) by noting that the donation rates are over 90% in Austria and France, while in the UK and Germany they are between 10% and 20%. The difference is that the default option is "check if you do not want to donate organs" where the rates are higher, showing that the minimal effort to check a box might be too much for irrational human beings.



For further models of the nudge's applications, see the report "Mind, society, and behavior" from the [World Bank Group \(2015\)](#), where more cases are exposed, like HIV/AIDS reminders used in Kenya to increase adherence to health regimens, social support used in a program in Lebanon to increase breastfeeding, and deposit contracts made between physicians and patients in programs to lose weight or quitting smoking.

## The rise of ethical questioning

Ethical questioning starts with the problem of manipulation, which is wrong, due to the intrusion on autonomy, dignity, and the power to reduce welfare ([Sunstein, 2016](#)). One might say that the logic behind the government's interferences carried out for good motives works the same way as marketers' and advertisers' infamous behavior control. Coming from a bad government, nudging out people may be manipulative and violate autonomy for promoting decisions in directions different from those that individuals would do rationally. Nonetheless, it is challenging to elucidate if a nudge is manipulative ([Wilkinson, 2013](#)). To solve this problem, [Thaler and Sunstein \(2009\)](#) secure that publicity and transparency can avoid evil nudges since manipulations are objectionable due to obstacles in monitoring. Therefore, the nudge's ethical dilemmas rely mostly on whether nudges endorse or erode autonomy, dignity, and welfare, as exposed in the following sections.

## Ethical questions regarding autonomy

With regard to all the questions concerning autonomy, we focus on health-promoting measures. They can be justified by nudge premises, but anomalies can be found when focusing on individual choices. Autonomy in individual health decisions might be seen in the ethical inquiry of informed consent. It happens because policies are not the same as interpersonal relations, which are standard in medical contexts. For example, nudges are helpful in campaigns to change behavior, but in a face-to-face interaction between doctor and patient, influences on choice architecture are not so welcome and can be misinterpreted as manipulation ([Cohen, 2013](#)).

In the libertarian version, soft paternalism is an excuse for allowing interventions to get back to the scene. In some areas, as medico-ethical and medical-legal, soft paternalism is the new feature of paternalism in the 21<sup>st</sup> century. The problem is that the very concept of autonomy might be reinterpreted as the updated hard paternalism by changing its gradation. Among soft paternalism types, the libertarian one transitioned from autonomy to rationality, but, even then, it could not overcome the legal definition of autonomy in which the individuals must be free to act

even unreasonably if they wish to do so ([Fateh-Moghadam & Gutmann, 2014](#)).

## Ethical questions regarding dignity

Freedom of choice, liberty, autonomy, and dignity have multiple conceptions, and nudge's moral work depends on selecting the adequate one for each situation. Concerning public policy, the moral role is to avoid concerns about decision-making interventions according to its context ([Saghai, 2013](#)). In this respect, if the opposite of autonomy is coercion, regarding dignity, we have humiliation. Therefore, nudges are non-coercive interventions that secure dignity as well as respect people's agency. [Sunstein \(2016\)](#) speaks about avoiding treating people as children or inferior persons and gives special attention to the combination with manipulative action. Furthermore, in addition to the insults of dignity by disrespecting people, the author discusses welfare losses stating that it is not just about money, since 'welfarists' consider the opportunity and emotional losses as well.

## Ethical questions regarding the welfare

We discussed how nudges end in paradox for promoting option-freedom all the while violating autonomy and dignity, due to their capacity to ending up in manipulation. Those criticisms regard paternalistic nudges, which seek to protect people from themselves. When nudges respond to market failures and are not necessarily related to individual errors in decision-making, increasing welfare must be the goal ([Sunstein, 2016](#)). [Guala and Mittone \(2015\)](#) use the term 'welfaristic' to characterize the nudges approach since they preach about helping people get what they want. However, they may be considered an ally of the neoclassical welfare state in some senses. For example, they explain how the organ donors program mentioned by [Thaler and Sunstein \(2009\)](#) and [Dan Ariely \(2008\)](#) benefits recipients rather than nudged donors.

[Sunstein \(2016\)](#) supports that market failure nudges are not controversial, yet effectiveness should be considered. In addition, coercion is widely spread in this domain, standing as a much worse solution. Therefore, nudges are emerging as useful complementary tools and, maybe, a forthcoming substitute. To the extent of individual welfare, soft and means-oriented paternalism seeks to avoid the very own disrespect regarding liberty choosing. Therefore, rejecting traditional paternalism in the nudge theory comes from believing that people are the best judges to increase their personal welfare from a private perspective.

Nevertheless, nudges are liberty-preserving, given that we cannot consider all kinds of human interaction as an attack on autonomy, freedom, and dignity ([Saghai,](#)

2013). Thus, the biggest argument defending nudges is their inevitability. Choice architectures and invisible hands surround us, and we could not live without them. In this framework, nudges promote people's agency, not undermine it. They also promote autonomy and dignity that counteract biased plans and permit people to see what they could not do alone, with the increase of welfare as the goal of the theory. Hence, it is not just ethically acceptable but also required (Sunstein, 2016).

## COVID-19 and the get back of nudges

December 2019 was a turning point globally due to coronavirus disease instantly spreading around more than 200 countries (Hale et al., 2020). Since then, governments have responded differently to the pandemic, and the variations are seen on scale and scope, namely in policies about containment and closure (Yan et al., 2020). This section consists of the narrative review focused on studies that exemplify some aspects of nudge's approach now applied to the pandemic context and seeks to find a trend or pattern in this pioneering literature to rekindle ethical aspects regarding nudges as a public policy instrument.

## METHODS

We opted for a literature review because it helps synthesize a specific topic, formulate questions for subsequent research, explore evidence, and find literature gaps (Bolderston, 2008). The strategy was to look for nudge policies applied during the pandemic to analyze possible challenges that could improve current discussions about its ethical aspects. We chose this method because prominent publications outlets are just beginning to publish consistent papers on this subject, except for medical-related studies. Despite criticism about subjectivity, lack of systematic

criteria, and inductive bias, the narrative review can be irreplaceable to pursue the beginning of a new scientific principle or development of an argument (Mendes-Da-Silva, 2019).

In December 2020, we explored on Google Scholar the query 'nudging in COVID-19 context' in a stage we called exploratory research. As shown in Table 1, we read the 51 most relevant articles published in the current year aiming for papers about nudges in public policies during the pandemic. After identifying 27 studies within the scope, we located seven others by upward and downward citation, resulting in a sample of 34 papers. The number of studies mentioning nudge messages (25 of 34) motivated the validation of this research using systematic methods. In April 2021, we followed up with a systematic search using the query (nudge\*) AND (COVID-19) OR (coronavirus) on Web of Science, Emerald, and Scopus, resulting in 50 papers, which ended in a sample of 19 papers selected after reading, of which nine were also found in our previous exploratory research sample. Inclusion criteria were papers exploring the same subject targeted on exploratory research. This systematic research validated the pattern in the exploratory stage since around 80% of papers on both samples explored sending messages to nudge people toward a behavior. The sample ended up in 44 papers analyzed in the narrative review (exploratory review sample + systematic review sample), as shown in Table 1. The software Mendeley was used for data control and labeling the articles.

## RESULTS

To understand the nudges applied to the COVID-19 pandemic context, we classified the policies' strategies and goals aiming, respectively, at how nudges acted or were delivered, and the behavior intended to change. We ended up with nine strategies and 12 goals, as exposed in Table 2.

**Table 1.** Paper's search and selection steps summary.

Steps			Number of papers
Exploratory research	Search	Google Scholar most relevant papers	51
	Filters	Papers selected after removal of those out of the scope	27
		Upward and downward citation	7
	Total	Sample in the exploratory research	34
Systematic research	Search	Scientific bases sample (Web of Science, Emerald, Scopus)	50
	Filters	Papers selected after removal of those out of the scope	19
		Papers found on both samples	(-9)
	Total	Sample in the systematic research	10
Total of papers analyzed in the article			44

**Table 2.** Paper's topics.

	Strategy										Goal									
	Change behavior	Convenience	Digital contact tracing	Emotions	Focus the attention	Geothics	Herd effect	Nudge messages	Social pressure		Avoid fake news	Avoid stockpiling intention	Avoid unethical behavior	Increase commitment	Hands hygiene	Induce pro-social behavior	Physical activity	Plastic re-use	Reduce substance abuse	Self-isolation
	Number of papers										Number of papers									
Papers found on both samples	0	0	0	0	3	1	1	6	0		1	1	0	3	2	0	1	0	0	1
Exploratory research sample	0	1	3	1	2	0	0	19	1		7	1	0	7	1	0	0	0	1	6
Systematic research sample	0	0	0	1	3	0	0	8	0		1	0	1	4	2	2	0	1	0	1
<b>Total <sup>a</sup></b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>33</b>	<b>1</b>		<b>9</b>	<b>2</b>	<b>1</b>	<b>14</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>8</b>

Note. <sup>a</sup> Some papers explored more than one strategy or goal.

## Trend topics

The 'strategy' in Table 2 represents the nudge's operation aspects, and the trend is sending nudge messages. The 'goal' introduces the nudges' purpose, and the trend found was to increase the commitment to policies. Some references from the sample are used to exemplify these trends. Although the result is not a solid basis, since relevant studies are just beginning to be published, it suggests an intriguing pattern to explore.

### Trend strategy: Nudge messages

Sending messages is a way of nudging people toward a behavior. Regarding this subject, containing coronavirus in India is the most successful case. [Debnath and Bardhan \(2020\)](#) extracted topic models mapping nudges made by policymakers. Their findings included enforcing lockdown, surveillance, and preventive habits such as wearing masks and washing hands. The nudges included prime minister's messages, digital hashtags, nostalgia through television shows to help people stay home, herd effect to motivate donations, and social pressure to maintain 1.3 billion people inside their houses and to adopt habits to mitigate the disease's spreading, even paying high economic and social costs.

On a compared research performed by [Al-Hasan, Yim, and Khuntia \(2020\)](#), nudge messages are the elected alternative to promote health behavior. When analyzing citizens' adherence to relevant policy recommendations in COVID-19 context from three different countries (USA, Kuwait, South Korea), they found that a positive idea

about government efforts is followed by adherence on social distancing and sheltering and, regarding higher perceptions, individuals also believe that others would follow the recommendations. Government persuasion sharing relevant data performed a meaningful role. However, the findings emphasize that people are influenced by a broader range of information such as peers and social media, which is more significant because the herd effect structures crowds' behavior.

[Hume et al. \(2020\)](#) discuss nudges' potential to increase compliance to prosocial behaviors. The authors focused on providing normative feedbacks and foregrounding identifiable beneficiaries as alternatives to interventions in social contexts since sharing information about norms can affect behavior. In one experiment ran online in the UK, nudge plus (classic form combined with reflective device) was the only promising option, and their findings suggest that pressure during pandemic might be diminishing nudge's effects. One explanation is the prominence of prevention material on media, making people not pay much attention to nudges ([Weijers & Koning, 2020](#)).

The lack of efficiency of nudges messages may result from digital disruption during the pandemic. Artificial intelligence, data analytics, and user profiling already manipulate people's behavior using nudge mechanisms, increasing the pressure by intensifying the message overload ([Bunker, 2020](#)). That is one of the hypotheses raised by [Favero and Pedersen \(2020\)](#) to explain why no pattern was found in the experiment in which the goal was to measure if information cues priming prosocial motivation and empathy could shape reported physical distancing compliance. It

means that the impact expected was not reached due to prior messaging saturation, so the messages lost potency throughout the course of the pandemic.

Kim et al. (2020) highlighted another type of reaction to government messages. Uncertainty scenarios make people perceive threats instead of real problems. Lack of information, biased evaluation of risks, and emotions can lead people to irrational behavior. During the pandemic, public service advertisements might have influenced people to this kind of irrationality, for example, when they compulsively buy toilet paper. In this situation, nudges might have worked differently than expected as far as the desired outcome was to evoke fear to engage people in the message's recommendations. However, the excellent outcome was the additional comparative statistics with critical information that helped decrease threats and stockpiling intentions.

In addition, the challenging context characterizes a complex structure for decision-making. There is no proven effective treatment, and the significant amount of information puts people in the complicated situation of learning from diverse sources and managing all the data to decide among actions most suitable or just good enough (Al-Hasan, Yim, & Khuntia, 2020). Regarding lack of information, health behavior intentions have been influenced by gain and loss messages in many situations, and public health campaigns can attract people's attention with emotional appeals (Kim et al., 2020), like those experienced during the year 2020. It recalls Cohen's (2013) explanation that delivering information through nudges cannot be a risk to rationality, seeing that they are considered as such just because they would not be usually provided, and the goal is a particular influence on behavior.

### *Trend goal: Increasing commitment*

It represents the purpose of encouraging policy adherence, and it can be achieved through nudges by changing behavior without coercion or enforcement measures and regulations. For example, Minoi, Mohamad, Arnab, and Hock (2020) present how the Malaysian government used nationalistic nudges to convince people to obey rules at high economic and social costs. Also, Knight (2021) argues that among the New Zealand government's responses to the pandemic, nudges were used to encourage sociological modifications that, in general, are seen in the behavior's changes in people's daily routine.

Thanks to its insights into promoting healthier habits, behavioral science principles are well suited to bear the pandemic. West, Michie, Rubin, and Amlôt (2020) proposed a behavior wheel settled in nine intervention categories and recommended policies. Similarly, Lunn, Belton, Lavin, McGowan, Timmons, and Robertson (2020)

enhance five behavioral topics in the pandemic's mitigation perspective. Hand washing, face touching, and self-isolation are motivated by nudge messages, while public-spirited behavior and responses to crisis communication were driven by social influence to increase compliance. Notwithstanding, all of them depend on a commitment to be successful.

The COVID-19 situation covers the whole social fabric; that said, the adherence to policy recommendations varies according to social influence. It might happen because policies usually have collective implications, like limiting interactions (Al-Hasan et al., 2020). This setting demands prosocial behavior since physical distancing compliance depends on motivation and empathy to benefit the health of the individuals and the lives of others, particularly the risky group.

Nonetheless, whether nudges can increase commitment during a pandemic is yet to be evaluated. In opposition to India's successful case exposed by Debnath and Bardhan (2020), Pierre (2020) questioned Sweden's liberal policies. By not imposing lockdown, this country's strategy counted with flattening the curve sooner than the countries that opted for the completed lockdown, in which the number of deaths could be smaller in the first stages, but with a higher number with the forthcoming opening. Their policies included nudges to comply with the desired behavior to mitigate the virus spread, but whether they were enough to control the pandemic is still under investigation.

In a broader sense, the stimulus drive to the collective (Favero & Pedersen, 2020) and empathy to the most vulnerable were already shown as motivation to COVID-19 measures (Pfafftheicher, Nockur, Böhm, Sassenrath, & Petersen, 2020); besides, human sociability has been proved to be a tool for nudges working as policy instruments since Thaler and Sunstein's earlier studies. This fact could be the reason for the significant number of studies exploring how to increase adherence and commitment in the sample for the present review; however, we reinforce that the literature on this topic is just starting to get broader, so our conclusions are just initial inferences about trends in the field.

### *Nudge policies in COVID-19 context: A necessary action*

This section returns to some topics of the results section (avoid fake news, promote hand hygiene, and maintain social distance) since they represent behaviors spotted during the pandemic in which nudge policies can show suitable effects. Major health problems are, at least in part, a consequence of modifiable unhealthy behaviors, and that is one reason for the great success of nudges for health outcomes (Cohen, 2013). While the cure and efficient treatments to SARS-CoV-2 are unknown and tests



are limited, a set of non-pharmaceutical interventions and simple measures regarding habit changing are the solution to restrain the spread of the pandemic (Al-Hasan et al., 2020; Pfattheicher et al., 2020; West, Michie, Rubin, & Amlôt, 2020). More than ever, “getting people to behave in specific ways can save lives. In other words, the stakes have never been so high when it comes to incorporating behavioral insights into policy design” (Sibony, 2020, p. 353), seeing that citizen’s compliance and voluntary support are required to curb the human-to-human virus transmission (Yan et al., 2020).

### *Avoid fake news*

Misinformation sharing on social media relates to both social influence and complex questions. Thaler and Sunstein (2009) presented how the excess of information created complex questions on Part D plan and led people to bad decisions. The same logic is applied to the massive amount of online data and news intermixed with content in which accuracy is not relevant. In this case, sharing false information was due to distraction from objective evidence or intuition rather than a willingness to share fake news. It might happen because the pandemic is also characterized as a complex situation (Pennycook, McPhetres, Zhang, Lu, & Rand, 2020). Further, Pennycook, McPhetres, Zhang, Lu, and Rand (2020) also illustrate the social influence on their argument about social media’s immediate feedback, which social validation and reinforcement rely on. In this regard, nudge messages and notes may be helpful to recall people regarding information verification.

In this sense, nudges might work as an instrument to avoid misinformation and fake news spreading. Laato, Islam, Islam, and Whelan (2020) wrote about the menace of misinformation during pandemics and proceeded an empirical test in Bangladesh to determine whether the specific individual characteristics and cyberchondria (anxiety or distress heading to online health searching) could be a driver of the COVID-19 misinformation sharing on social media. They found that health beliefs and cyberchondria had no relation to misinformation sharing, but online information trust and information overload did. Along with Islam, Laato, Talukder and Sutinen’s (2020) and Bunker’s (2020) studies, Laato et al. (2020) also show how fake news, false or inaccurate information may nudge out people to comply with public health measures. Therefore, if nudge can be the problem, if well used, it is a solution, since it can also be a tool to make readers check information before sharing it.

### *Promote hand hygiene*

Nudges in health domains are not new and policies could benefit from this knowledge. Evidence from various researches exposes that it is necessary to make habits convenient and fortify them as social norms (Lunn, Belton, Lavin, McGowan, Timmons, & Robertson, 2020). In this sense, highlighting a device or step is a nudge to guide people to the desired action. In order to promote hand hygiene, emphasizing its need is a way to fortify it as a social norm, and making it convenient or easier to reach the hand sanitizer dispenser or sink might contribute to develop the habit. Weijers and Koning (2020) talk about salience nudge to intentionally draw attention to messages either in health care or nonmedical settings. Since attempts to promote hygiene habits through education are not enough, combined interventions with nudge reminders and better facilities resulted in significant improvements. For example, messages on hospitals next to a hand sanitizer dispenser increased usage by 1.5 times just by focusing on the benefits through the framing effect technique. All these measures overlap with Benartzi et al.’s (2017) pre-pandemic study, where the investigation focused on interventions to increase influenza vaccinations by creating commitment using planning prompts and reminder letters.

### *Maintain social distance*

Social distance is a critical preventative measure to avert the virus from spreading since there is no effective treatment. Ho, Seraj, Yee, Liu, and Erlebacher (2020) exposed how the nudges worked as a context awareness fed by information provided by a Bluetooth device from mobile phones. Beyond that, large-scale crises like the COVID-19 pandemic ask for quick and population-wide solutions and instruments. One example is digital contact tracing, one of the necessary actions created by the pandemic outcomes. Adopting it is an issue many governments face (Riemer, Ciriello, Peter, & Schlagwein, 2020). Mandates are highly effective, but they are also not well regarded by the public. Moreover, they only work satisfactorily in collectivist societies like China or places used with previous pandemic outbreaks, for example, South Korea. In other instances, nudges are encouraged to voluntarist, individualistic, non-government, and balanced approaches.

Another path to engage people is to promote empathy. In this regard, empathy for more vulnerable ones is an example of prosocial behavior. This behavior is shown by Pfattheicher, Nockur, Böhm, Sassenrath, and Petersen (2020) in an experiment with samples from the USA, UK, and Germany, in which the discussion indicates how inducing empathy can motivate people to wear a face mask and adherence to social distancing.

## DISCUSSION

We analyze the ethical dilemmas of nudge theory through the lens of ethical perspectives. The trends exposed in the previous section are connected to this discussion as practical examples of the arguments developed.

### Nudge policies in COVID-19 context: Ethical dilemma

This section puts ethics into perspective, considering the ongoing discussion about nudges. To do so, first, we return to the major ethical dilemmas of autonomy, dignity, and welfare to analyze them under ethics perspectives and relate to the trending topic of the narrative review, the nudge messages. Next, our distinguishing argument is the relation between the nudge theory and three normative moral theories, utilitarianism, deontology, and virtue ethics. The utilitarianism perspective explains nudge policies regarding wearing a face mask, staying at home, and maintaining social distance; nudge policies aiming to increase commitment and nudge messages are justified by deontological arguments and to avoid fake news and to promote hand hygiene are analyzed by virtue ethics principles.

Smart (1998) said that an ethical system could not appeal to everybody, all the time, and even to the same person in different moods, but he tried to prove the opposite by defending his preference for utilitarianism. We do not aim for that since the following brief reflection is just trying to bypass the ethical discussions regarding nudges. Our purpose is to give a different standpoint for an old problem through a different perspective and scientific foundation, showing that the classic philosophy of normative ethics can offer more inputs in order to find a way to consolidate nudge's theory.

#### *The ethical dilemmas autonomy, dignity, and welfare under ethics perspectives*

Ethics on nudges is a long-term discussion involving manipulation, autonomy, dignity, and welfare. The legal scholar Cass Sunstein is one of the greatest defenders, as shown previously in this paper, and his plea is the nudge's inevitability as far as people are walled by choice architectures (Sunstein, 2016). If that is the reality, the libertarian paternalism premises assure that intending private welfare promotion with pro-self nudges is the most ethical option (Barton & Grüne-Yanoff, 2015). In this logic, nudges are ethical, or at least not immoral, since they do not threaten people's liberty, autonomy, dignity, and welfare. In other words, it is essential to maintain all options at hand. Due to that, nudges are liberty-preserving since they are just

decision-making aids, and the ethical problem consists of deviating them for manipulative purposes (Leal & Oliveira, 2020).

To discuss ethics regarding nudges, one must resort to applied ethics, in which questions are related to specific human affairs. Universality is not the goal, and the deliberations are about practical problems; in saying so, principles are inducted, and the moral dimension is highly connected. Moral depends on the context, so, when it is under a substantive view, it comprehends principles, norms, commands/prohibitions, values, and ideals; and, as an adjective, it characterizes specific aspects of human life (Zappellini, 2013).

Moreover, to understand nudges as an ethical instrument in a substantive perspective, one must reflect on the moral as a practice. However, Sunstein's argument (and from most pro-nudges authors) is that nudges are ethical and moral because they are liberty-preserving. This reasoning, in contrast, represents an adjective qualification of each specific case. Labeling a situation, or using an adjective to describe it as being ethical or not, is also necessary in public policy, and it means that Sunstein's argument works if we are classifying the application of every single nudge on itself. The problem of nudge's theory consists of trying to describe it according to a substantive standpoint; grounding it through a normative perspective should give some direction. However, as we explained, some inconsistencies are found when nudge's justifications are framed in a moral theory from a substantive perspective.

Regarding the nudge most discussed in our narrative review, the nudge messages, this instrument cannot be considered entirely paternalistic. Leonard (2008) has explained that it could be considered a solution for the market failure known as lack of information. In this sense, they are not violating autonomy, dignity, or welfare; however, they can end in manipulation depending on the intention of the message senders and fall into the adjective qualification standpoint. Since these nudges are more informative, and considering that they have the purpose of reinforcing/encouraging the expected behavior, one can think about which assumption of human conduct they carry. If there is something to be done and it needs reinforcement, one may expect that some will not behave in such a manner. Nevertheless, such reinforcement through nudge is necessary because it is a behavior that achieves the expected effect. We believe that these behaviors can be interpreted within the anthropological assumption inherent to each ethical tradition, giving support to a particular nudge as well.

## Nudging as a utilitarian choice

Nudges should not be a burden to those who want to use their freedom (Thaler & Sunstein, 2009), although it is impossible to steer every single person according to their true preference in a heterogeneous society. It means some people may wish to be unreasonable, and nudges might drive them to outcomes different than those desired (Barton & Grüne-Yanoff, 2015). From this point of view, nudges are better fitted in utilitarian<sup>1</sup> logic since the goodness of their acts is justified by the ends. Besides, utilitarianism also implies freedom, as Leal and Oliveira (2020) remarked when they quoted J. Stuart Mill's definition of liberty, which consists of power boundaries carried out in social and individual terms. In this regard, the government should honor people's choices, but this is where nudges can fall into traps.

The utilitarian normative theory has two main strands: act-utilitarianism and rule-utilitarianism. Goodness is judged by its consequences in the first, while, in the second, right and wrong are regarding the conformation to rules, which aims at a greater good (Smart, 1998). As far as public policies need to cope with power and politics, the act-utilitarianism is dangerous, while rule-utilitarianism is challenging to follow since politics involve managing different values (Pops, 1994). That said, guiding nudges with utilitarian ideas should avoid the act option.

The utilitarian justification of nudges is even more fitting to the COVID-19 pandemic context since personal preferences might be put aside for the good of the greatest number of people. So, being nudged to wear a face mask, stay at home, and maintain social distance are measures that, if voluntarily followed, represent the attempt to achieve a greater good for society from a utilitarian perspective. Nonetheless, like the criticism against utilitarianism, knowing what is the greater good during this pandemic outbreak is the question no one has answered yet. In the case of nudges, libertarian paternalism hints that governments are the ones defining it, and this is the tricky part of accepting nudges to steer our behavior if one considers the nudge's premises of liberty.

## The deontological argument for nudges

The biggest problem of the utilitarian view applied to nudges is the social orientation of its ends. As claimed before, the societal version, characterized as the prosocial nudges, is not as welcome as the pro-self one since the justification for liberty preserving and autonomy-keeping is promoting individual welfare. The individual versus social welfare promotion leads the ethical discussion into a crossroad, and a solution might be analyzing it from a rational perspective, leading to a deontological view as

far as nudges interventions seek to help decision-making when people usually deviate from rationality.

As a moral theory, deontology is better seen in Kant (2005), in which what we ought to do comes from pure reason as the only maxim a priori. If ethics were built from human actions and experience, the maxim would be empirically constructed. To summarize, Kant proposes a universal moral law guided by pure reason, and nothing is better than the willingness to obey the rules dictated by the categorical imperative (Zappellini, 2013). If one accepts nudges because the rationality maxim rules them, one does it by deontological premises. The deontological argument justifies the trend goal of 'increase commitment' since the policy adherence depends on people's acceptance of the rationality supporting the norms.

Autonomy and freedom are widely discussed as necessary statements to an intervention labeled as a nudge. Kant's ethical theory may also give some insights about these premises since he claimed that regular people should be capable of full self-government in moral matters. In a nutshell, no one can tell us what to do (Schneewind, 2005). According to this logic, the deontological argument justifies interventions so that they are only aids to get to the moral law imposed by rationality. This means we are not following a government; we are autonomously governing ourselves to the best outcome. In this regard, these premises perfectly justify the nudge recommendation to consider people the best judges of themselves.

Deontology assumes that the agents obey norms, rules, and obligations and, otherwise, they would be breaking a moral precept. A limited situation would be unfair rules or nudges of this nature. We believe that following the nudge messages fits this perspective since the information disclosed suits norms and rules to guide behavior during the pandemic. However, these nudges take the form of a duty to do something within a specific context. For example, social detachment is a must in times of a pandemic, being an action informed by duty, but not all the time because it does not apply outside of a pandemic situation. That said, it is not a Kantian categorical imperative, and therefore, it is closer to what Ross and Stratton-Lake (2002) called *prima facie* duty or duty at first sight.

## Virtue ethics as the primary purpose of nudging people

Lastly, as a normative ethical theory, virtue ethics can unite individual and societal perspectives. As Aristotle (1999) considered, moral virtues are developed from individuals to the collective and the overall happiness, or 'eudaimonia,' and they are reached just by social means. In



other words, it is possible in a lifestyle and conditions that permit others to flourish as well (Sison & Ferrero, 2015). A virtuous agent who is a carrier of moral maturity (the same as saying that someone has practical wisdom) would agree to accept a nudging policy that reduces risks to society as a matter of prudence (as far as it does not smear his/her character). The policy's acceptance could happen through a heteronomous morality suggested by a nudge policy. The virtuous agent would decide and come to act according to the nudge by the light of his/her conscience, even if he/she did not participate in the deliberation of that option.

This perspective assumes a notion for the intellectual virtue of prudence according to which someone acts out of such an intellectual disposition, informed by good ends indicated by the character of an agent of moral virtues, such as an honest, just, upright, courageous, and prudent citizen. Nudges can contribute to the result in general for a community. At the same time, it can be beneficial to improve the virtues because, for some habits, someone can still act in a more vicious way than virtuous. For example: to use the mask whenever recommended by the nudge, someone must have self-control and moderate the urge to remove the mask when others are without it. Virtue ethics helps the person act in a wholesome manner and corresponds to a rational aspect that balances reason and emotion.

The most significant difference between normative ethics perspective and virtue ethics is that the latter seeks to understand moral acts from the point of view of the individual human being; that is, it rules the central aspect of its moral foundation in the very person, considering human nature and its final end (Sison & Ferrero, 2015). Besides, virtue ethics considers that people will decide and act based on each decision while taking into account the various contextual elements involved: others, consequences, rules, and the action itself.

Still, the problem of virtuous action by those who are still developing the moral virtues remains, such as the behavior of the youngest, for whom self-control (temperance or moderation) (Sanz & Fontrodona, 2019) may be lacking, as well as the strength to maintain actions, and there may be a predominance of the sense of justice based more on the self and the small group, rather than on society. Especially for this subset, nudge policies can be a tool to motivate the learning of expected behaviors by the collective. Initially, it is a habit practice based on an external recommendation (heteronomous morality), but which, over time, as discussed by MacIntyre (2007), may come to be contemplated from the person's own will, when he/she already understands the internal goods of such practices, that is, the virtues. Even Aristotle conceives that "we become just by doing just actions, and temperate

by doing temperate actions and brave by brave actions" (Aristotle, 1999, 1103a1-2). Nudge to avoid fake news and promote hand hygiene can be classified within this kind of external recommendation since they motivate the learning of behavior that, in the end, will be absorbed by people because of the goodness of these actions.

In this sense, nudges could contribute to moral improvement, especially in contexts where the expected behaviors are not consolidated in the local culture. However, the possibility of using nudges to cultivate virtue in adult citizens is still an issue under discussion (Niker, 2018). For example, Niker (2018) highlights the discussion over the difference between automatic-behavioral and discernment-developing nudges. Finally, a final issue related to the nudge policies to confront the COVID-19 context would be to reflect on autonomy and the long-term consequences for individuals and society. By following virtue ethics theory, it is possible to see nudges as tools for learning behaviors. From this perspective, the pandemic's nudge policies could have long-lasting consequences on the individual's moral development.

## CONCLUSION

This paper brought back some discussions about ethics on nudge policies, revising them on the new setting imposed by COVID-19. The first part of the article brings a theoretical background on nudges, and in the second part, we opted for a narrative review to search for the latest studies about nudges in the COVID-19 pandemic context. The trend strategy of nudge's operation was sending nudge messages to change behavior, and the trend goal (the nudges' purpose) was to increase the commitment to policies, followed by the goals of avoiding fake news, promoting hand hygiene, and maintaining social distance. Our findings indicate that, despite some drawbacks and non-desired outcomes on its implementation, nudges might be a necessary action and their theory should not be discarded as an alternative for low-cost and quick implemented policy instruments.

Since the pandemic, behavior changes were required to curb the spread of the disease; hence, behavioral sciences and nudges have been returned to focus on government responses and public policies. So far, no consensus was reached on whether nudges are ethical and effective instruments for policies. Many experiments have shown no significant results, and some drawbacks indicate that nudges must be more extensively revised, especially during a crisis.

In the last part of this paper, the discussion section reflects nudges as ethical dilemma, using the narrative review sample's studies as practical examples. Our study



differentiates from others since we explain nudges within three normative moral theories.

Utilitarianism best defines the ‘by any means’ found during the pursuit of the greater good that rules nudge policies. These conclusions warn regarding the act-utilitarianism for nudges and the changing perspective on its aiming since utilitarianism leads nudges to the prosocial perspective. The utilitarian perspective justifies the policies that promote wearing a face mask, staying at home, and maintain social distancing.

Deontology gives some insights that help justify this theory through the rationality maxim that rules the theory, and the Kantian explanations for autonomy justify nudges as an incentive to consider people as the best judges of themselves. This rationality maxim and personal judgment are necessary when discussing increasing commitment and policy adherence and nudge messages in the pandemic context.

Finally, virtue ethics combines individual and social perspectives and gives an outcome for using nudges as a tool to improve morality, being an aid to the steady development of morals in adults. This perspective also

foresees the learning of the virtue (or good) act, and it is one way of explaining policies that aim to avoid fake news and promote hand hygiene since they teach the goodness of the behaviors expected to be internalized by people.

The three ethical perspectives have in common the fact that they point to the possibility of deliberation by the agents, who will consider the rules, consequences, uses of a particular nudge in their reality, and context of action. This discussion is essential to better understand some inconsistencies found in nudges applications. Our suggestion for further research is to go deeper into the normative grounds offered by the moral theories aiming to propose a model to analyze nudges, combining ethics to fulfill current gaps and inconsistencies, and making its application more effective during crisis scenarios as seen during the pandemic outbreak.

## NOTE

1. Utilitarianism is a consequentialist theory in which actions, values, and results are judged as good or bad in accordance with the positive consequences produced (Petit, 1997).

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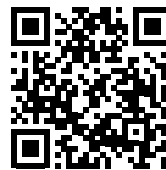
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