



Bridging the Gap Between UK Government Strategic Narratives and Public Opinion/Behavior: Lessons From COVID-19

Neil Dagnall*, Kenneth Graham Drinkwater, Andrew Denovan and R. Stephen Walsh

Department of Psychology, Manchester Metropolitan University, Manchester, United Kingdom

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*Correspondence:

Neil Dagnall n.dagnall@mmu.ac.uk

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Dagnall N, Drinkwater KG, Denovan A and Walsh RS (2020) Bridging the Gap Between UK Government Strategic Narratives and Public Opinion/Behavior: Lessons From COVID-19. Front. Commun. 5:71. doi: 10.3389/fcomm.2020.00071 In the UK, there exists an important "action gap" between Government advice on measures necessary to counter the threat of COVID-19, and the behavior of a significant minority of the population. There are several reasons for this disconnect, including lack of message potency (i.e., credibility and congruence), inflexible/habitual behavior patterns, prevailing beliefs (i.e., vulnerability to, and seriousness of COVID-19), and individuals valuing personal concerns above general public health. For official messages to be effective and advice adhered to, strong, coherent "strategic narratives" are required. This article, using a psychological perspective, critically examined prevailing COVID-19 UK Government announcements during the lockdown (23/03/2020) and initial easing phase (10/05/2020). Specifically, it focused on important communication inconsistencies, and identified factors that may facilitate and create barriers to the adoption of essential public health directives. This included deliberation of factors that enhanced source impact, diminished the influence of message content, and the negative consequences of contrary information. Accordingly, this article proposes a framework for providing a unifying strategic narrative on COVID-19, one that helps to maximize the impact of key messages and promote effective behavior change. This framework places an emphasis on engaging the full range of actors and considers ways of reducing the efficacy of false information. The article provides recommendations that will potentially improve the reception of government policy and suggests how strategic narratives can harness the drivers of behavioral change needed to meet challenges such as COVID-19.

Keywords: strategic narratives, COVID-19, action gap, behavior change, public health

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INTRODUCTION

Background and Purpose

Adopting a psychological perspective, this article focused on the central role that strategic narratives played in persuading UK citizens to follow public health guidelines during the lockdown (23/03/2020) and initial easing phase (10/05/2020). This includes factors that enhanced source impact, diminished the influence of message content, and the negative consequences of contrary information (e.g., fake news). Accordingly, there is consideration of communication inconsistencies, and variables that facilitated and created barriers to the adoption of essential public health directives.

An emphasis was placed on factors that aligned to those identified by the UK's Behavioural Insights Team (BIT). BIT, established in 2010, combines the principles of psychology, cognitive science, and social science to push or nudge people to make better choices. BIT applies behavioral insights to inform policy making and improve public services. This involves using subtle policy changes to influence the decision-making of citizens. Thus, key points of focus were message quality and consistency, individual perceptions and identities, the role of expert opinion, and misinformation (The Behaviour Insights Team, 2020).

It is important to conceptually evaluate the effectiveness of strategic narratives because messages do not always have their intended outcome (Malecki et al., 2020). For instance in the UK, there exists an important "action gap" between Government advice on measures necessary to counter the threat of COVID-19, and the activities of a significant minority of the population, who despite warnings continue to engage in behaviors that potentially place public health at risk (i.e., attend social gatherings) (UCL, 2020). Illustratively, a snapshot of Ipsos MORI's research related to COVID-19 dated May 26, 2020, indicated that less than half of the sample surveyed (46%) had completely followed Government rules (Ipsos MORI, 2020a).

There are several reasons for this disconnect, such as lack of message potency (i.e., credibility and congruence), habitual behavior patterns, prevailing beliefs (i.e., about vulnerability to, and seriousness of COVID-19), and individuals valuing personal concerns above general public health (see Becker and Maiman, 1975; Webster et al., 2020). Another important factor is lack of "shared identity." Identity is the sense of self that people possess because of the social groups that they believe they "belong to" (Tajfel, 1972). Research has shown that social cohesion is a consequence of shared social identity (Haslam et al., 2011). A frequently cited example is the "Blitz spirit" demonstrated by the British people during World War II. Whether true or a socially persisting myth, the notion that state and society join as one to battle national adversity is an important theme that encourages co-operation and collaboration (Reicher and Stott, 2020).

Key to this process is leadership, which during the COVID-19 outbreak was undermined by a series of controversies (e.g., lockdown introduced too late and failure to provide frontline workers with protective equipment) (Reicher and Stott, 2020). Incidents such as these reduce shared social identity via the creation of "us" and "them" (Haslam et al., 2011), Additionally, structural factors (e.g., employer demands that employees attend work and reliance on public transport to achieve this) in some instances prevented individuals from adhering to Government advice. In such situations, people were aware of the message but unable to comply fully (Webster et al., 2020).

These influences produced varying motivations for ignoring or failing to act upon public health guidelines during lockdown and the initial easing phase. Accordingly, non-adherence to COVID-19 protection advice in some instances was unintentional, arising from lack of awareness or ignorance or constraints, whereas on others occasions it represented deliberate disregard. A pertinent example of identity-based disregard is available from the United States, where many regard COVID-19 related personal protective equipment as a badge

of Democratic party sympathy at best and rabid Marxism at worst (Smith D., 2020, July 4). Moreover, there are individuals who selectively adhere to some guidelines, whilst ignoring or trivializing the importance of other measures. For example, some complied with 2 m social distancing with strangers, but regularly met with family and friends outside their immediate household unit.

Regardless of motivation, an "action gap" is damaging to public health because it reflects the fact that people are continuing to engage in unsafe behaviors, which not only undermine the efficacy of protective public health measures, but also are likely to propagate COVID-19. Alongside direct adverse effects, there are also socially detrimental indirect consequences. Notable factors include, diminished faith in government, and disregard for scientific advice. Collectively, these factors weaken the effectiveness of protection advice and potentially normalize non-compliance.

Role of Strategic Narratives

To encourage maximum engagement, effective public health communication through strategic narratives is vital. Narratives generally are "a representation of connected events and characters that has an identifiable structure, is bounded in space and time, and contains implicit or explicit messages about the topic being addressed" (Kreuter et al., 2007, p. 222). Previous research indicates that narratives are an effective format for delivering persuasive health messages (Bilandzic, 2012). Extending this delineation, strategic narratives focus on "scientific development, strategic dissemination, and critical evaluation of relevant, accurate, accessible, and understandable health information communicated to and from intended audiences to advance the health of the public" (Bernhardt, 2004, p. 2051). Inherent within this definition is the notion that strong, coherent official strategic health narratives should provide pertinent advice, clear rules, and convey correct vital information (Gill and Boylan, 2012). Moreover, concentrating on these features enhances the effectiveness of official messages, and concomitantly encourages adherence to public health rules and recommendations.

Furthermore, for strategic narratives to be effective, it is crucial that those delivering and those receiving the message come together under the umbrella of shared group membership. No one takes advice from "one of them" in the same spirit as we take advice from "one of ours." Hence, for our public leaders to be trusted and effective, they need to be perceived as "one of us" (Haslam et al., 2011).

In this context, strategic narratives can shape the health perceptions, beliefs, and behavior of actors (Flaherty and Roselle, 2018). More generally, strategic narratives are a central component of communication that informs the development of a collective worldview and guides/constrains actions (see Miskimmon et al., 2014; Dagnall et al., 2015). With reference to COVID-19, this should also include broadcasting necessary actions and desired outcomes. The public reaction to UK government health communications concerning COVID-19 has highlighted the important role that strategic narratives play in determining personal and collective reality at times of crisis. The

crisis also reveals that no matter how effective strategic narratives are there exist factors that limit their impact and effectiveness (i.e., individual intrinsic motivations) (Kooistra et al., 2020).

THE EFFECTIVENESS OF STRATEGIC NARRATIVES

There are myriad variables that influence the effectiveness of strategic narratives. Noting this, the present article placed an emphasis on key conceptual factors pertinent to the UK Government handling of the COVID-19 outbreak during the first half of 2020 (i.e., lockdown and initial easing phase).

Awareness and Behavior Change

One factor that influenced the success of Government strategic narratives was variations in audience reception and reaction to key information. Public health literature reports, that although, increased awareness, persuasion/influence, and behavior change are overlapping processes, the extent to which they are achievable varies (Kelly and Barker, 2016). In the case of COVID-19, increasing public awareness of the dangers of the coronavirus and persuading people that lockdown was necessary was relatively easily realized. This was achieved using carefully orchestrated media messages by key Government officials and scientific advisors.

Mass media was the best vehicle to initiate social mobilization because of its rapidity and reach (Welch et al., 2016). Key to this discursive process was ensuring alignment between broadcast, digital, internet, print, and outdoor information platforms. To maximize effect, the main elements of the strategic narrative were concisely combined to produce the affectively powerful "Stay Home, Protect the NHS, Save Lives" slogan. This causally linked lockdown adherence to preservation of life and the reciprocal protection and empowerment of health care services (Conservatives.com, 2020b).

The initial Government assumption was that this core narrative, supported by expert opinion and empirical data, would also facilitate behavior change (i.e., adherence to lockdown measures). Though, the message successfully increased awareness of the need to act and persuaded people generally that lockdown was essential to counter the threat of COVID-19, the UK government had to rapidly introduce enforcement measures to ensure that guidelines were followed. This outcome was consistent with previous health research that has demonstrated that knowledge alone is not sufficiently persuasive to produce behavior change (Kelly and Barker, 2016). This disparity arises from the complexity of the health communication-behavior change relationship. Particularly, the fact that elements that increase awareness and message impact (e.g., risk and need for prevention) do not necessarily enable or sustain behavior change (Ross, 1991).

In the case of the COVID-19, the ability to adhere to lockdown in the UK was largely dependent upon internal motivations (i.e., capacity to comply with the rules, and the normative obligation to obey the law) (Kooistra et al., 2020). This finding was based

on data from an online survey, which comprised a nationally representative sample of 555 UK participants.

While, the confluence of factors effecting behavior change varies across health contexts, this example illustrates how external and internal drivers can limit behavior change (see Kwasnicka et al., 2016). Prevailing limiting factors are cognitive skills (critical thinking, decision-making, etc.) and socio-cultural context (personal, cultural, geographic, and economic variables) (Lewis et al., 2010). Associated with these is the extent to which individuals feel that they can influence health conditions (Syme, 2004).

Difficulties initiating and maintaining behavior change during the COVID-19 crisis align with previous research indicating that across health settings there is often a mismatch between information provided and behavior (Michie et al., 2011). This observation concurs with previous public health campaigns, which have found that although strong informational/educational components can influence behavior, they achieve only limited success (Economos et al., 2001).

Subtly influencing people to make better choices using nudges, in the form of actions and policies, has previously proved successful in public health, health policy, and health promotion (Ewert, 2020). Specifically, nudges have facilitated positive health-related behavior and encouraged use of healthcare systems (Vallgårda, 2012). Although, there are multiple methods employed in nudging strategies, these generally involve presenting options to the intended audience in such a way that they become obvious, default choices (see Thaler and Sunstein, 2008).

Consistent with a behavioral insights approach, the UK Government during the initial phase of the COVID-19 outbreak used a series of nudges (i.e., encouraged people to wash their hands, advised them to stop face touching and hand shaking, recommended that individuals stayed at home if they felt ill, and advocated self-isolate if a continuous cough developed) to curtail the spread of the virus.

The successfulness of this "nudging" approach is difficult to assess because the situation quickly escalated to lockdown. More generally, the degree to which nudges are successful is questionable (Ledderer et al., 2020). Furthermore, in a recent systematic literature review, Ledderer et al. (2020) concluded that while nudging can effectively produce immediate change, there was little evidence that nudging interventions resulted in lasting behavioral alterations.

Source Credibility

The success of strategic narratives varies also as a function of communication environment. Hence, factors that negatively impact on information transmission, flow and reception diminish the impact of protection advice (Miskimmon et al., 2014). In the case of the UK Government, early fundamental errors of judgment (i.e., expressed doubt that measures were necessary, the delay in reacting to rapidly worsening situation, and the continued sanctioning of mass gatherings) weakened the authority of subsequent COVID-19 messages (Kooistra et al., 2020). Consistent with this notion, a significant proportion of the British population surveyed on 24–27 April, 66%, thought

that the Government introduced lockdown too late; only 26% believed the measures came at the right time (Ipsos MORI, 2020b).

In combination, these factors undermined the perceived, source credibility of UK Government strategic narratives. The source credibility of the body issuing information, is an important component of effective health campaigns. When a source is highly credible, strategic narratives are more likely to effectively change attitudes and influence behavior (Schmidt et al., 2016). The important role source credibility plays in message acceptance is demonstrated by its inclusion in prominent models of persuasion (e.g., the Elaboration Likelihood Model, Petty and Cacioppo, 1984).

Credibility too relates to group membership. Individuals give more credibility to sources of information with which they are familiar and able to identify (e.g., family and friends) (Nauroth et al., 2017), and are frequently skeptical about the validity of government risk messages (Slovic, 2000). This is especially true, when risk messages conflict with people's personal experiences of their health and well-being (Thirlaway and Heggs, 2005). In the case of COVID-19, this factor is important because many individuals do not have direct personal experience of the virus.

Despite negative perceptions of timing, the credibility of the UK Government response message was enhanced by allying measures to scientific and expert opinion. For example, on March 16, at a press conference accompanied by the Chief Medical and Chief Science Advisors, the Prime Minister stated that anyone with a fever or a persistent cough should selfisolate for 7 days (Hunter, 2020). This was consistent with the prevailing theme that the UK Government would be guided by science and do the "right thing at the right time" (Prime Minister's Office, 2020). This illustrates how governments during the COVID-19 pandemic have attempted to use scientific evidence as a device for reducing uncertainties and ambiguities (see Van Dooren and Noordegraaf, 2020). However, as Van Dooren and Noordegraaf (2020) point out, the evidence provided on COVID-19 has often been manufactured and staged for political reasons. Another issue has been significant disagreements between experts and scientists. Consequently, specialist views on COVID-19 are wide-ranging and vary as a function of field of expertise. This has produced criticisms, notably that the UK Government overlooked public health experts and placed a disproportionate weight on the scientific assessments of infection modelers (Devlin and Boseley, 2020).

Narrative momentum, however, proved difficult to sustain because the rapidly evolving COVID-19 situation made it difficult to specify the nature and duration of subsequent measures. Correspondingly, the resignation of key scientific figures for violating lockdown rules (i.e., prominent government adviser; Hodgson, 2020; and Scotland's Chief Medical Officer, Beattie, 2020) potentially weakened the perceived credibility of scientific guidance. This is consistent with Reicher and Stott (2020), who observed that when significant figures fail to follow collective practices authority is weakened and togetherness undermined.

Inconsistency and False Information

The initial strategic narrative introduced on March 23 was simple and backed by clear guidelines (Conservatives.com, 2020b). However, these strengths were not inherent features of the shift from the containment to management of COVID-19. Easing the lockdown in England was difficult because the strategic narrative altered on May 10 from the explicit "stay home" to the ill-defined "stay alert" slogan (Conservatives.com, 2020a). This change in emphasis was poorly implemented, and the central message was vague and open to misinterpretation (Smith M., 2020, May 11).

Considering these points in turn, the UK Government seeded the new guidelines prior to official release via selected media. This caused public uncertainty because of the lack of confirmation, and was confusing because of extant rumor, conjecture and misinformation. Indeed, public ratings of the clarity of UK Government communications about what to do in response to the coronavirus dropped from 90% (27-30 March) to 56% (15-18 May) (Ipsos MORI, 2020c). Although, the underlying theme of the new discourse was to subtly indicate the beginning of the transition from lockdown to social normality, the lack of detail caused public ambiguity and generated political and social criticism (BBC, 2020). The knock-on effect of this was citizens reengaging in less than optimal behaviors (e.g., mass excursions to leisure sites) (Mailonline, 2020). Additionally, because the UK Government is only responsible for lockdown restrictions in England, Scotland, and Wales remained on full lockdown.

These different approaches influenced public perceptions of government handling of the crisis. Illustratively, in Scotland over three quarters (78%) of respondents thought the Scottish Government had handled the crisis well so far, compared with 34% who stated the same of the UK Government (Ipsos MORI, 2020d). Group membership is perhaps salient here where the population of Scotland might be looking at the contrast between "themselves" and the "others" in England/Wales. These issues obfuscated the importance of the new strategic narrative. Specifically, that although the English government was empowering individuals to enjoy greater autonomy as a step to returning to a new normal, important restrictions remained in place (i.e., social distancing and no public gatherings).

Contradictory information is particularly problematic to Government strategic narratives because it weakens the credibility and coherence of official communications. In the case of COVID-19, a recent survey found that 46% of respondents had encountered false or misleading information since the lockdown (Lally and Christie, 2020). In the present health crisis, the internet generally and social media particularly has amplified the speed, spread and reach of false information (Cuan-Baltazar et al., 2020). So prolific is the volume of inaccurate information about the COVID-19 outbreak that some authors have named it the global infodemic (Zarocostas, 2020). This denotes that information overload makes finding a solution more difficult (World Health Organization, 2018). Moreover, once processed contradictory information can prove difficult to reject. Indeed, strategies to correct misinformation are often ineffective and can inadvertently reinforce ill-founded health-related beliefs (Lewandowsky et al., 2012).

In the context of COVID-19, the flurry of information has also negatively affected understanding of the origins, nature and treatment of the virus, and caused social unrest (cf., the unfounded notion that 5G is linked to COVID-19) (Brainard and Hunter, 2020). This is important because false information distracts public attention away from official strategic narratives and potentially undermines safety advice and practice.

Reactance

When strategic narratives, as in the case of COVID-19, contain themes and messages that threaten personal freedoms, particularly behavioral actions (e.g., activities) and emotions/attitudes (e.g., sense of autonomy), they can arouse a motivation to resist advocacy (Quick and Stephenson, 2008). This process is explained by Psychological Reactance Theory (Brehm, 1966). Reactance arises from a combination of anger and negative cognitions. It represents the individual motivation to restore threatened or lost freedom (Brehm and Brehm, 1981). Characterized as an individual difference variable, high reactance is typified by desire for autonomy, resistance to rules and regulations, low concern for social norms, and defensiveness (Seibel and Dowd, 2001).

This manifests as expressing negative thoughts, counterarguing, feeling anger, derogating message source, and perceiving the narrative to be weak or not credible (Gollust and Cappella, 2014). Accordingly, reactance prone individuals are more likely to engage in risky health behaviors (Reynolds-Tylus, 2019). This is particularly relevant to the UK Government COVID-19 lockdown guidelines, which instructed people to avoid partaking in normal, routine behaviors. This notion is supported by Sibony (2020), who identified reactance as a potential reason for failure to comply with lockdown.

DISCUSSION

Identifying factors that influence the effectiveness of earlier COVID-19 strategic narratives, will help to improve subsequent health messages. This is important not only in the context of the present crisis, but also with regards to future public health initiatives. Previous public health campaigns have failed because they have not accounted for the complex relationship between communication and behavior change (Kelly and Barker, 2016). Thus, it is vital that future strategic narratives draw on health behavior theory (Perrier and Martin Ginis, 2018). This generally indicates that knowledge is an essential element of behavior change. Explicitly, the Health Belief Model usefully delineates variables that facilitate engagement with preventative action (Orji et al., 2012). These comprise whether the threat to health is viewed as serious, awareness of vulnerability, if the supposed benefits outweigh the costs, and individual concerns about the consequences of contracting the disease (Fisher and Fisher, 1992).

Collectively, these factors suggest strategic narratives that address explicit individual perceptions about susceptibility, benefits/costs, and self-efficacy will be most effective (Bushell et al., 2017). In the context of COVID-19, perceptions of the threat and evaluation of the effectiveness of counter behaviors

are key factors that increase the likelihood of engagement with health-related action.

Strategic narratives need also to consider the vital role of leadership. Effective leadership is important because it cultivates a sense of "we-ness," which in turn facilitates buy-in to collective aims and objectives (Haslam et al., 2011). Thus, "we-ness" can act as a health-related resource to motivate and sustain positive behavior change (Haslam et al., 2018). Accordingly, effective leadership during the COVID-19 crisis could encourage the same selfless behavior witnessed previously in times of social adversity (e.g., wars).

In order to achieve and sustain behavior change, strategic health narratives need to ensure that guidelines correspond closely with desired actions. This fact is often overlooked because health campaigns focus on the provision of information, which can often confuse the audience. Although data can enhance health understanding and literacy, narrative content does not directly influence behavior, and on occasion can interfere with desired behavior change.

Thus, while information plays a vital role with regards to increasing awareness and in shaping norms, data alone does not facilitate behavior change. This is only achievable through triangulation of accompanying policy, regulation, and environmental modifications (i.e., 2 m distancing).

To avoid resistance in the form of reactance, ensuing strategic health narratives need to obscure persuasive intent (Moyer-Gusé, 2008) and balance advocacy with the individual need for autonomy (Rains, 2013). Previously, this strategy has increased positive attitudes toward both the message and the advocated health behaviors (Gardner and Leshner, 2016). Other important features that diminish the possibility of negative reactions to COVID-19 messages are minimizing freedom-threatening language, discourse coherency, and demonstrating appreciation of the effect of the message on the audience. Additionally, the behavior of politicians and public figures is likely to affect levels of reactance (Sibony, 2020). As Sibony (2020) points out, media coverage of Prime Minister Boris Johnson publicly shaking hands, attending meetings and conducting visits, during the COVID-19 crisis, may have undermined the official message of social distancing (Bhanot, 2020).

To increase the impact of COVID-19 strategic narratives and decrease the aversive effects of false information, there are several measures the UK Government can implement. These include providing clear, accessible guidelines that are supported by expert opinion. To avoid ambiguity, where possible, strategic narratives should be accompanied by detail that operationalises key terms and outlines precisely how implementation will occur. This could include providing dedicated, trusted sites of information and undertaking measures to reduce the spread of misinformation (see The Behaviour Insights Team, 2020). In the case of COVID-19, this has involved encouraging digital platforms to moderate content (i.e., fact checking, and myth busting false claims) (Kapoor et al., 2020).

Following analysis of narratives around climate change, Bushell et al. (2017) identified key communication factors that enhance strategic narrative influence. Applying this to the present COVID-19 crisis in the UK, indicates ways in which

the Government can improve communication of subsequent related messages. Firstly, the strategic narrative should address the complexity of the central issue in an accessible manner. To achieve this and maximize understanding, the message should permit addressees to engage with COVID-19 in a manner that is comprehensible and that accords with their worldview. Secondly, the strategic narrative needs to legitimize policy by appealing to audiences. This is possible by providing a strong empirical rationale for measures, using inspirational language, and ensuring that the strategic narrative is coherent. Thirdly, appreciate the sociological and psychological issues that motivate behavior change in potential actors. Part of this process is to develop a narrative that bestows ownership of the problem on the audience (i.e., it needs to tap into their sense of identity). Additionally, the narrative should evolve through a strategic dialogue between the Government and the citizens throughout the duration of the measures. This reflexivity encourages an adaptive approach (Haasnoot et al., 2013).

These recommendations are consistent with Webster et al. (2020), who state that public health officials can improve adherence to health measures (i.e., quarantine during infectious disease outbreaks) through provision of clear, timely rationales and information about protocols, and by emphasizing social norms to encourage altruistic behavior. This is important with regards to the COVID-19 crisis in the UK because the situation is constantly evolving and further restrictions may prove necessary (e.g., Leicestershire City Council, 2020).

Although the conclusions in this article derived from careful consideration of existing data, it is important to acknowledge

limitations that potentially reduce the impact and effectiveness of recommendations. Concerns center on restricted available information, difficulties separating opinion and conjecture from fact, and determining audience perceptions of the COVID-19 crisis. Concomitantly, the article focused only on a narrow time period, and temporal immediacy mitigated a longer, critical reflective analysis. Moreover, from the perspective of social constructionism, it is important to note that meanings are fluid and dynamic because they are constructed via the coordination of people in various encounters (Gergen and Gergen, 2016). Accordingly, historical and cultural contexts may also restrict extrapolation of findings (Camargo-Borges and Rasera, 2013).

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

AUTHOR CONTRIBUTIONS

ND and KD decided on the Perspective topic and undertook the literature review, ND was the main author. KD and RW contributed to the article write-up. AD provided additional informed advice and performed the editing. All authors contributed to the article and approved the submitted version.

REFERENCES

- BBC (2020). Coronavirus: Minister defends 'stay alert' advice amid backlash.

 Available online at: https://www.bbc.co.uk/news/uk-52605819 (accessed July 15, 2020).
- Beattie, K. (2020, April 05). Scotland's chief medical officer resigns after visiting second home twice during lockdown. Available online at: https://www.pressandjournal.co.uk/fp/news/politics/scottish-politics/2127163/scotlands-chief-medical-officer-resigns-after-visiting-second-home-twice-during-lockdown/ (accessed July 13, 2020).
- Becker, M. H., and Maiman, L. A. (1975). Sociobehavioral determinants of compliance with health and medical care recommendations. Med. Care 13, 10–24. doi: 10.1097/00005650-197501000-00002
- Bernhardt, J. M. (2004). Communication at the core of effective public health. *Am. J. Public Health* 94, 2051–2053. doi: 10.2105/AJPH.94.12.2051
- Bhanot, S. (2020). Why are people ignoring expert warnings? psychological reactance. *Behavioural Scientist*. Available online at: https://behavioralscientist.org/why-are-people-ignoring-expert-warnings-psychological-reactancecoronavirus-COVID-19 (accessed March 20, 2020).
- Bilandzic, H. (2012). "Narrative persuasion," in The SAGE handbook of persuasion: Developments in theory and practice, eds J. P. Dillard and L. Shen (Thousand Oaks, CA: SAGE Publications, Inc), 200–219. doi: 10.4135/978145221 8410.n13
- Brainard, J., and Hunter, P. R. (2020). Misinformation making a disease outbreak worse: outcomes compared for influenza, monkeypox, and norovirus. Simulation 96, 365–374. doi: 10.1177/0037549719885021
- Brehm, J. W. (1966). A theory of psychological reactance. New York, NY: Academic. Brehm, S. S., and Brehm, J. W. (1981). Psychological reactance: A Theory of freedom and control. New York, NY: Academic.

- Bushell, S., Buisson, G. S., Workman, M., and Colley, T. (2017). Strategic narratives in climate change: towards a unifying narrative to address the action gap on climate change. *Energy Res. Soc. Sci.* 28, 39–49. doi: 10.1016/j.erss.2017.04.001
- Camargo-Borges, C., and Rasera, E. F. (2013). Social constructionism in the context of organization development: dialogue, imagination, and co-creation as resources of change. Sage Open 3:2158244013487540. doi: 10.1177/2158244013487540
- Conservatives.com (2020a). Stay Alert, Control The Virus, Save Lives: The Prime Minister's Update. Available online at: https://www.conservatives.com/news/ stay-alert-control-the-virus-save-lives (accessed June 1, 2020).
- Conservatives.com (2020b). Stay At Home, Protect The NHS, Save Lives. Available online at: https://www.conservatives.com/news/stay-at-home-protect-thenhs-save-lives (accessed June 1, 2020).
- Cuan-Baltazar, J. Y., Muñoz-Perez, M. J., Robledo-Vega, C., Pérez-Zepeda, M. F., and Soto-Vega, E. (2020). Misinformation of COVID-19 on the internet: infodemiology study. *JMIR Public Health Surveill*. 6:e18444. doi: 10.2196/18444
- Dagnall, N., Drinkwater, K., Parker, A., Denovan, A., and Parton, M. (2015). Conspiracy theory and cognitive style: a worldview. Front. Psychol. 6:206. doi: 10.3389/fpsyg.2015.00206
- Devlin, H., and Boseley, S. (2020). Scientists criticise UK government's 'following the science' claim. Available online at: https://www.theguardian.com/world/2020/ apr/23/scientists-criticise-uk-government-over-following-the-science
- Economos, C. D., Brownson, R. C., DeAngelis, M. A., and Novelli, P. (2001). What lessons have been learned from other attempts to guide social change? *Nutr. Rev.* 59, S40–S56. doi: 10.1111/j.1753-4887.2001.tb06985.x
- Ewert, B. (2020). Moving beyond the obsession with nudging individual behaviour: towards a broader understanding of behavioural public policy. *Public Policy Adm.* 35, 337–360. doi: 10.1177/0952076719889090
- Fisher, J. D., and Fisher, W. A. (1992). Changing AIDS risk behavior. *Psychol. Bull.* 111, 455–474. doi: 10.1037/0033-2909.111.3.455

Flaherty, E., and Roselle, L. (2018). Contentious narratives and Europe: conspiracy theories and strategic narratives surrounding RT's Brexit news coverage. J. Int. Aff. 71, 53–60.

- Gardner, L., and Leshner, G. (2016). The role of narrative and other-referencing in attenuating psychological reactance to diabetes self-care messages. *Health Commun.* 31, 738–751. doi: 10.1080/10410236.2014.993498
- Gergen, M. M., and Gergen, K. J. (2016). Playing with purpose: Adventures in performative social science. New York, NY: Routledge. doi: 10.4324/9781315422459
- Gill, T. P., and Boylan, S. (2012). Public health messages: why are they ineffective and what can be done? Curr. Obes. Rep. 1, 50–58. doi:10.1007/s13679-011-0003-6
- Gollust, S. E., and Cappella, J. N. (2014). Understanding public resistance to messages about health disparities. J. Health Commun. 19, 493–510. doi:10.1080/10810730.2013.821561
- Haasnoot, M., Kwakkel, J. H., Walker, W. E., and ter Maat, J. (2013). Dynamic adaptive policy pathways: a method for crafting robust decisions for a deeply uncertain world. Glob. Environ. Change 23, 485–498. doi: 10.1016/j.gloenvcha.2012.12.006
- Haslam, C., Jetten, J., Cruwys, T., Dingle, G., and Haslam, A. (2018). The new psychology of health: Unlocking the social cure. London: Routledge. doi:10.4324/9781315648569
- Haslam, S. A., Reicher, S. D., and Platow, M. J. (2011). The new psychology of leadership: Identity. Influence and Power. Hove; New York, NY: Psychology Press.
- Hodgson, C. (2020). Neil Ferguson resigns as government adviser after breaking lockdown rules. Available online at: https://www.ft.com/content/c554ad9e-2abd-4ffc-99d7-1cfbba0296b9 (accessed July 13, 2020).
- Hunter, D. J. (2020). Covid-19 and the stiff upper lip—The pandemic response in the United Kingdom. N. Engl. J. Med. 382:e31. doi: 10.1056/NEJMp2005755
- Ipsos MORI (2020a). Coronavirus tracking UK public perception 26th May 2020. Available online at: https://www.ipsos.com/sites/default/files/2020-04/ coronavirus-COVID-19-infographic-ipsos-mori.pdf (accessed June 1, 2020).
- Ipsos MORI (2020b). Coronavirus perceptions tracker 24–27 April 2020. Available online at: https://www.ipsos.com/sites/default/files/ct/news/documents/2020-04/coronavirus_omnibus_week_7_300420.pdf (accessed June 1, 2020).
- Ipsos MORI (2020c). Majority think Government communications on coronavirus are clear, but fall from peak after original lockdown. Available online at: https://www.ipsos.com/ipsos-mori/en-uk/majority-think-government-communications-coronavirus-are-clear-fall-peak-after-original-lockdown (accessed June 1, 2020).
- Ipsos MORI (2020d). Four in five Scots say Nicola Sturgeon has handled the coronavirus outbreak well. Available online at: https://www.ipsos.com/ipsosmori/en-uk/four-five-scots-say-nicola-sturgeon-has-handled-coronavirusoutbreak-well (accessed June 1, 2020).
- Kapoor, A., Guha, S., Das, M. K., Goswami, K. C., and Yadav, R. (2020). Digital healthcare: the only solution for better healthcare during COVID-19 pandemic? *Indian Heart* 72, 61–64. doi: 10.1016/j.ihj.2020.04.001
- Kelly, M. P., and Barker, M. (2016). Why is changing health-related behaviour so difficult? *Public Health* 136, 109–116. doi: 10.1016/j.puhe.2016. 03.030
- Kooistra, E. B., Reinders Folmer, C., Kuiper, M. E., Olthuis, E., Brownlee, M., Fine, A., et al. (2020). Mitigating COVID-19 in a nationally representative UK sample: Personal abilities and obligation to obey the law shape compliance with mitigation measures. Available online at: https://ssrn.com/abstract=3598221
- Kreuter, M. W., Green, M. C., Cappella, J. N., Slater, M. D., Wise, M. E., Storey, D., et al. (2007). Narrative communication in cancer prevention and control: a framework to guide research and application. *Ann. Behav. Med.* 33, 221–235. doi: 10.1007/BF02879904
- Kwasnicka, D., Dombrowski, S. U., White, M., and Sniehotta, F. (2016). Theoretical explanations for maintenance of behaviour change: a systematic review of behaviour theories. *Health Psychol. Rev.* 10, 277–296. doi:10.1080/17437199.2016.1151372
- Lally, C., and Christie, L. (2020). COVID-19 misinformation. Post.parliament.uk. Available online at: https://post.parliament.uk/analysis/COVID-19-misinformation/ (accessed June 1, 2020).
- Ledderer, L., Kjær, M., Madsen, E. K., Busch, J., and Fage-Butler, A. (2020).Nudging in public health lifestyle interventions: a systematic literature review

- and metasynthesis. *Health Educ. Behav.* doi: 10.1177/1090198120931788. [Epub ahead of print].
- Leicestershire City Council (2020). *Increased Restrictions for Leicester and Parts of Leicestershire Announced*. Available online at: https://www.leicestershire.gov.uk/coronavirus-COVID-19/how-you-can-help/increased-restrictions-for-leicester-and-parts-of-leicestershire-announced (accessed July 15, 2020).
- Lewandowsky, S., Ecker, U. K., Seifert, C. M., Schwarz, N., and Cook, J. (2012). Misinformation and its correction: continued influence and successful debiasing. *Psychol. Sci. Public Interest* 13, 106–131. doi:10.1177/1529100612451018
- Lewis, S., Thomas, S. L., Hyde, J., Castle, D., Blood, R. W., and Komesaroff, P. A. (2010). "I don't eat a hamburger and large chips every day!" A qualitative study of the impact of public health messages about obesity on obese adults. BMC Public Health 10:309. doi: 10.1186/1471-2458-10-309
- Mailonline, K. (2020, May 20). *Thousands of locked-down Brits cram onto packed beaches as temperatures soar to 82F*. Available online at: https://www.dailymail.co.uk/news/article-8339235/Britain-hits-beach-bask-82F-sunshine-today-hottest-day-year-far.html (accessed July 15, 2020).
- Malecki, K., Keating, J. A., and Safdar, N. (2020). Crisis communication and public perception of COVID-19 risk in the era of social media. Clin. infect. dis. doi: 10.1093/cid/ciaa758. [Epub ahead or print].
- Michie, S., Ashford, S., Sniehotta, F. F., Dombrowski, S. U., Bishop, A., and French, D. P. (2011). A refined taxonomy of behaviour change techniques to help people change their physical activity and healthy eating behaviours: the CALO-RE taxonomy. *Psychol. Health* 26, 1479–1498. doi: 10.1080/08870446.2010.540664
- Miskimmon, A., O'loughlin, B., and Roselle, L. (2014). Strategic narratives: Communication power and the new world order. New York, NY: Routledge. doi: 10.4324/9781315871264
- Moyer-Gusé, E. (2008). Toward a theory of entertainment persuasion: explaining the persuasive effects of entertainment-education messages. *Commun. Theor.* 18, 407–425. doi: 10.1111/j.1468-2885.2008.00328.x
- Nauroth, P., Gollwitzer, M., Kozuchowski, H., Bender, J., and Rothmund, T. (2017). The effects of social identity threat and social identity affirmation on laypersons' perception of scientists. *Public Underst. Sci.* 26, 754–770. doi: 10.1177/0963662516631289
- Orji, R., Vassileva, J., and Mandryk, R. (2012). Towards an effective health interventions design: an extension of the health belief model. *Online J. Public Health Inform.* 4:4321. doi: 10.5210/ojphi.v4i3.4321
- Perrier, M. J., and Martin Ginis, K. A. (2018). Changing health-promoting behaviours through narrative interventions: a systematic review. *J. Health Psychol.* 23, 1499–1517. doi: 10.1177/1359105316656243
- Petty, R. E., and Cacioppo, J. T. (1984). Source factors and the elaboration likelihood model of persuasion. Adv. Consum. Res. 11, 668–672.
- Prime Minister's Office (2020). Prime Minister's statement on coronavirus (COVID-19): 12 March 2020. Available online at: https://www.gov.uk/government/speeches/pm-statement-on-coronavirus-12-march-2020 (accessed July 13, 2020).
- Quick, B. L., and Stephenson, M. T. (2008). Examining the role of trait reactance and sensation seeking on perceived threat, state reactance, and reactance restoration. *Hum. Commun. Res.* 34, 448–476. doi: 10.1111/j.1468-2958.2008.00328.x
- Rains, S. A. (2013). The nature of psychological reactance revisited: a meta-analytic review. *Human Commun. Res.* 39, 47–73. doi: 10.1111/j.1468-2958.2012.01443.x
- Reicher, S., and Stott, C. (2020). On order and disorder during the COVID-19 pandemic. *Br. J. Soc. Psychol.* 59, 694–702. doi: 10.1111/bjso.12398
- Reynolds-Tylus, T. (2019). Psychological reactance and persuasive health communication: a review of the literature. Front. Commun. 4:56. doi: 10.3389/fcomm.2019.00056
- Ross, M. W. (1991). Factors affecting information and education, and behaviour change. AIDS Care 3, 419–421. doi: 10.1080/09540129108251602
- Schmidt, A. M., Ranney, L. M., Pepper, J. K., and Goldstein, A. O. (2016). Source credibility in tobacco control messaging. *Tob. Regul. Sci.* 2, 31–37. doi: 10.18001/TRS.2.1.3
- Seibel, C. A., and Dowd, E. T. (2001). Personality characteristics associated with psychological reactance. J. Clin. Psychol. 57, 963–969. doi: 10.1002/jclp.1062
- Sibony, A. L. (2020). The UK COVID-19 response: a behavioural irony? *Eur. J. Risk Regul.* 11, 350–357. doi: 10.1017/err.2020.22

Slovic, P. (ed.). (2000). "Perceived risk trust and democracy," in *The Perception of Risk*, ed P. Slovic (London: Earthscan), 316–326.

- Smith, D. (2020, July 4). 'Consigning his voters to sickness': trump fuels culture war over masks. *The Guardian Newspaper*. Available online at: https://www. theguardian.com/us-news/2020/jul/03/trump-face-masks-coronavirus-covid-19 (accessed July 14, 2020).
- Smith, M. (2020, May 11). Brits split on changes to coronavirus lockdown measures. Available online at: https://yougov.co.uk/topics/health/articles-reports/2020/05/11/brits-split-changes-coronavirus-lockdown-measures (accessed July 14, 2020).
- Syme, S. L. (2004). Social determinants of health: the community as an empowered partner. *Prev. Chronic Dis.* 1:A02.
- Tajfel, H. (1972). "Social categorization. English manuscript of 'La catégorisation sociale," in *Introduction à la Psychologie Sociale*, Vol. 1, ed S.Moscovici (Paris: Larousse), 272–302.
- Thaler, R. H., and Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness.* London, UK: Yale University Press.
- The Behaviour Insights Team (2020). COVID-19: How do we encourage the right behaviours during an epidemic? Available online at: https://www.bi.team/blogs/COVID-19-how-do-we-encourage-the-right-behaviours-during-an-epidemic/ (accessed July 15, 2020).
- Thirlaway, K. J., and Heggs, D. A. (2005). Interpreting risk messages: women's responses to a health story. *Health Risk Soc.* 7, 107–121. doi:10.1080/13698570500108677
- UCL (2020, May 22). More than half of young adults not 'strictly' sticking to lockdown guidelines. Available online at: https://www.ucl.ac.uk/news/2020/ may/more-half-young-adults-not-strictly-sticking-lockdown-guidelines (accessed July 14, 2020).

- Vallgårda, S. (2012). Nudge—A new and better way to improve health? Health Policy 104, 200–203. doi: 10.1016/j.healthpol.2011.10.013
- Van Dooren, W., and Noordegraaf, M. (2020). Staging science: authoritativeness and fragility of models and measurement in the COVID-19 crisis. *Public Adm. Rev*, 80, 610–615. doi: 10.1111/puar.13219
- Webster, R. K., Brooks, S. K., Smith, L. E., Woodland, L., Wessely, S., and Rubin, G. J. (2020). How to improve adherence with quarantine: rapid review of the evidence. *Public Health* 182, 163–169. doi: 10.1016/j.puhe.2020.03.007
- Welch, V., Petkovic, J., Pardo, J. P., Rader, T., and Tugwell, P. (2016). Interactive social media interventions to promote health equity: an overview of reviews. *Health Promot. Chron. Dis. Prev. Can. Res. Policy Pract.* 36, 63–75. doi: 10.24095/hpcdp.36.4.01
- World Health Organization (2018). Managing epidemics: Key facts about major deadly diseases. World Health Organization.
- Zarocostas, J. (2020). How to fight an infodemic. Lancet 395:676. doi: 10.1016/S0140-6736(20)30461-X

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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