

A checklist for prosocial messaging campaigns such as COVID-19 prevention appeals

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Addressing public good problems typical requires people to adopt behaviors that are personally burdensome but beneficial for society. For instance, during the COVID-19 pandemic, people have been asked to stay home except in extenuating circumstances, maintain social distance, and wash their hands frequently. What is the best way to phrase one's requests to ensure that people are maximally motivated to adhere? We distill three key insights from the behavioral science literature on social norms to create a simple messaging checklist: communicate the benefit to the community; make the ask unambiguous, categorical, and concise; and generate the impression that others expect compliance. We justify this guidance and illustrate it using practical examples, with a focus on COVID-19 prevention behaviors.

When addressing problems such as climate change, resource overuse, and antibiotic resistance, government, community, corporate leaders frequently call upon citizens to adopt burdensome behaviors for the public good--to fly less, conserve, complete medication regimens, *etc.* Even when official edicts mandate the desired behaviors, governments often do not have the legal means or resources to monitor

and enforce compliance - and, thus, the challenge remains. In most cases, a key step is to develop the messages requesting behavior change, which raises a crucial question: how should leaders and advocates phrase their messages to best motivate people to take on the desired behaviors?

The ongoing COVID-19 pandemic has brought this question into sharp focus. Although the COVID-19 pandemic is fundamentally a medical challenge, a large part of successfully addressing this challenge is *behavioral*. Slowing the spread of coronavirus and “flattening the curve” requires individuals to radically change their daily lives for the benefit of society at large - for example, by engaging in extreme social distancing and rarely leaving their homes (Anderson et al. 2020). Thus, government and community leaders face the daunting task of motivating their citizens to adopt such behaviors, often with substantial legal constraints and minimal resources.

In this document, we provide a simple “checklist” for developing such a messaging strategy. This checklist is based on a large body of scientific research on cooperation suggesting that people are deeply motivated to impress peers, and to comply with peer pressure--what we term ‘social enforcement’. Underlying this conclusion is the perspective that prosocial preferences and beliefs are shaped--often subconsciously--by social enforcement, as in models of norm enforcement (e.g., Panchanathan and Boyd, 2004) or indirect reciprocity (Nowak and Sigmund, 1998); for a review, see Rand et al. (2014). For simplicity, we will speak in this paper as if people deliberately think through the consequences of social enforcement, but our conclusions do not at all rest on such conscious deliberation. They also apply to situations in which behavior is driven by the genuinely-experienced desire to do good - a desire which is itself often subconsciously responsive to social enforcement cues (Dear et al., 2019).

Our organizing premise, then, is that people will find messages more compelling--without them necessarily knowing why--if those messages trigger social enforcement concerns. Based on that premise, we provide 3 simple principles designed to maximize the effectiveness of public goods messaging efforts.

Across the 3 principles, we provide specific applications to COVID-19, as well as considering other public good problems beyond the current pandemic.

1. Communicate the benefit to the community

We suggest beginning by communicating that the desired behaviors are not merely individual choices, but instead constitute a *public good*. The primary goal of this emphasis is to ‘activate’ people’s desire to be seen as a good member of society, and their intuition that this ask will be socially enforced.

A rich literature demonstrates the power of simply framing individuals’ decisions in the context of the public good. For example, subjects in laboratory experiments are often more generous towards, and more cooperative with, others when the decision is framed by the word ‘community’, as compared with a neutral frame, or one that invokes competition like ‘the stock market’ (e.g., Brewer & Kramer, 1996, McCusker & Carnevale, 1995, Rege & Telle, 2004, Ellingsen et al. 2010). Public good frames presumably indicate - subconsciously - that subjects will be judged based on how they treat others, introducing an element of social enforcement to what would otherwise be an effort to earn as much as possible while participating in the experiment.

In practice, public good frames tend to be fairly straightforward. The kitchen sign in Fig 2a. communicates the benefit to the community by stating, “Everyone has to use this kitchen. Let’s keep it nice.” Bars that put up signs asking departing guests to keep quiet often remind them that neighbors are sleeping. Neighborhood signs asking drivers to slow down invoke the safety of pedestrians and playing children.

At this stage in the COVID-19 pandemic, there are plenty of examples of public good frames. For instance, #flattenthecurve and #stayhomesavelives are accurate, succinct, widely recognized, and likely effective ways of communicating that prevention behaviors benefit one’s community. In the COVID-19

prevention signs in Fig. 1, we communicated the benefit to the community in three ways: ‘COVID-19 Is a Public Health Emergency’, ‘Avoid spreading coronavirus’ (as opposed to ‘Avoid getting coronavirus’), and ‘Failure to follow these steps puts those around you in danger. Do your part to keep our community safe!’ (as opposed to ‘...puts you in danger...to keep yourself safe!’). Indeed, after designing the signs in Fig. 1 for this article as a demonstration of our checklist, we tested the effectiveness of the sign in Fig 1a against an otherwise identical version that focused on the benefit to the self. We found that for increasing prevention behavior intentions, the sign that focused on the benefit to the community meaningfully outperformed the sign that focused on the benefit to the self (Jordan et al., 2020).

It likely helps to make the public good frame as personal and specific to the individual’s community as possible (Goldstein et al., 2008). This can be done, for instance, by invoking specific people in the community who are impacted, and obtaining testimonials from some of those people (e.g., “stay home to protect me from COVID-19”, which can be presented alongside a photo). This can include people who are at risk because of age or preexisting conditions, as well as healthcare workers such as nurses.

In some cases, you might find that explicitly communicating the benefit to the community is pedantic. For instance, when creating the sign in Fig. 2b aimed at encouraging cleanliness, we did not feel the need to explicitly remind people to help keep the kitchen clean. The sign was originally designed for a small lab group after several discussions about keeping the kitchen clean, so there was no need to reiterate the point. Regardless, we suggest going through the exercise of explicitly identifying the precise public good that the behavior in question provides. Simply thinking through why you are asking your audience to change their behavior can help you to refine what you ask of them in the next step.

2. Make the ask unambiguous, categorical, and concise

Next, explicitly communicate the ask(s)--i.e. the desired behaviors. When doing so, it is critical to make the asks unambiguous, categorical, and concise. The goal is to eliminate any plausible disagreement over whether someone complied (i.e. to eliminate “plausible deniability”).

The technical reason for this advice is that social enforcement involves some coordination amongst those who enforce: in models of norm enforcement or indirect reciprocity, ‘third parties’ are better off enforcing if, and only if, others expect them to enforce (Hoffman et al., 2020). Thus, higher order beliefs--what third parties believe others believe--play an important role: if a third party believes that someone has not complied, but that other third parties are not aware of this, they are better off not enforcing (for extreme examples that illustrate the crucial role of higher order beliefs, look to the #metoo movement, which finally spurred censure of known sexual predators like Harvey Weinstein by publicly outing them). For an ask to be enforceable, it is important that when someone fails to comply with it, it is commonly believed by third parties that the person failed to comply (Dalkiran et al. 2012).

When an ask is ambiguous, it makes it harder to tell when someone complied, and harder to tell whether everyone else agrees that they complied. For instance, many office kitchen signs include messages like ‘clean up after yourself’, which is too ambiguous: different people have different definitions of clean. Eliminate this source of plausible disagreement by choosing unambiguous messages like, ‘don’t leave dirty dishes in the sink’ (see Fig. 2). In the context of COVID-19, many localities have sent their residents instructions to ‘social distance’ without clearly defining the term and, in particular, when it is permitted to leave the house. This not only leaves residents confused over whether it is permissible to, for instance, go for a jog--it leaves them the opportunity to exploit the fact that others are confused over what is allowed to go out more than they would have otherwise.

When an ask is not categorical, it is hard to know whether everyone agrees that the desired threshold has been met (Hoffman et al., 2020). For instance, medical practitioners often advise people to wash their hands for 20 seconds, but it's hard to tell exactly how many seconds someone actually washed for, because that's a continuous measure. If they washed for 19.9 seconds, is that really different from 20 seconds? Will others realize it is different? *Etc.* One can eliminate this source of plausible disagreement, for instance, by asking people to wash their hands for as long as it takes to say the pledge of allegiance. While they probably will not literally say it out loud, it will still feel more 'socially enforceable' because it is clear whether or not you sang the song in its entirety.

When the list of asks is too long (or an ask is too complicated), it makes it easier for people to plausibly feel like--and claim-- that they complied by only doing part of the ask, or 'trying' to do it half-heartedly. To see what we mean, just imagine trying to comply with the list in Fig. 3. Keep the ask concise to ensure people feel like they can be reasonably expected to comply with all the asks, in their entirety. Of course, this will also reduce the cost of complying with the ask, which, itself, will help.

3. Generate the impression that others expect compliance

Finally, look for ways of making it feel particularly likely that social enforcement will occur. This is important because the degree of social enforcement varies from setting to setting, and to be effective the messaging needs to communicate that social enforcement will be great in the current setting. That is, people can often get away with not acting prosocially and suffer few negative consequences, as evidenced by cultural variation in e.g., littering norms (Krauss et al., 1978) or hygiene norms (Curtis et al., 2011). If one wants people to act in response to a message asking for prosocial behavior, it is thus helpful for the message to make people feel like they are expected to do so.

There are many ways to achieve this goal. Some well known behavioral interventions -

descriptive norms (“75% of guests reused their towel,” Goldstein et al., 2008), injunctive norms (“75% of guests think reusing their towel is the right thing to do”), identity frames (“Be a voter!”; Rogers et al., 2016), or public good frames as discussed above are amongst the best known examples (Rogers et al., 2018) - likely work well in part because people (rightly) infer from these messages that social enforcement is strong in this context: if many others are complying, or the people they admire are complying, then they themselves must be expected to comply. Involving influencers, athletes, and celebrities likely communicates a similar message. In the handwashing sign in Fig. 1a, we took another tack when generating the impression that others expect compliance: we invoked authority via the photos of the doctors, and by stating that the message came from an official office. Furthermore, it is especially useful for advocates to not only state the importance of compliance, but also demonstrate their belief in that importance by engaging in the behavior themselves - advocates who “practice what they preach” are more effective (Kraft-Todd et al., 2018). A powerful example of this in the context of COVID-19 is late-night television hosts such as Jimmy Fallon and Stephen Colbert who are broadcasting “at home” editions of their shows, demonstrating their commitment to social distancing.

Conclusion

By considering the role of social enforcement, we are able to provide focused guidance on how to develop prosocial asks, as is often required during the COVID-19 pandemic. We hope that this checklist is useful to behavioral scientists and practitioners during the current pandemic, as well as in the future when combatting other public good problems. We also hope that behavioral scientists find it helpful to consider, as we have, the role of social enforcement when designing messaging, designing novel interventions, and interpreting their research findings.

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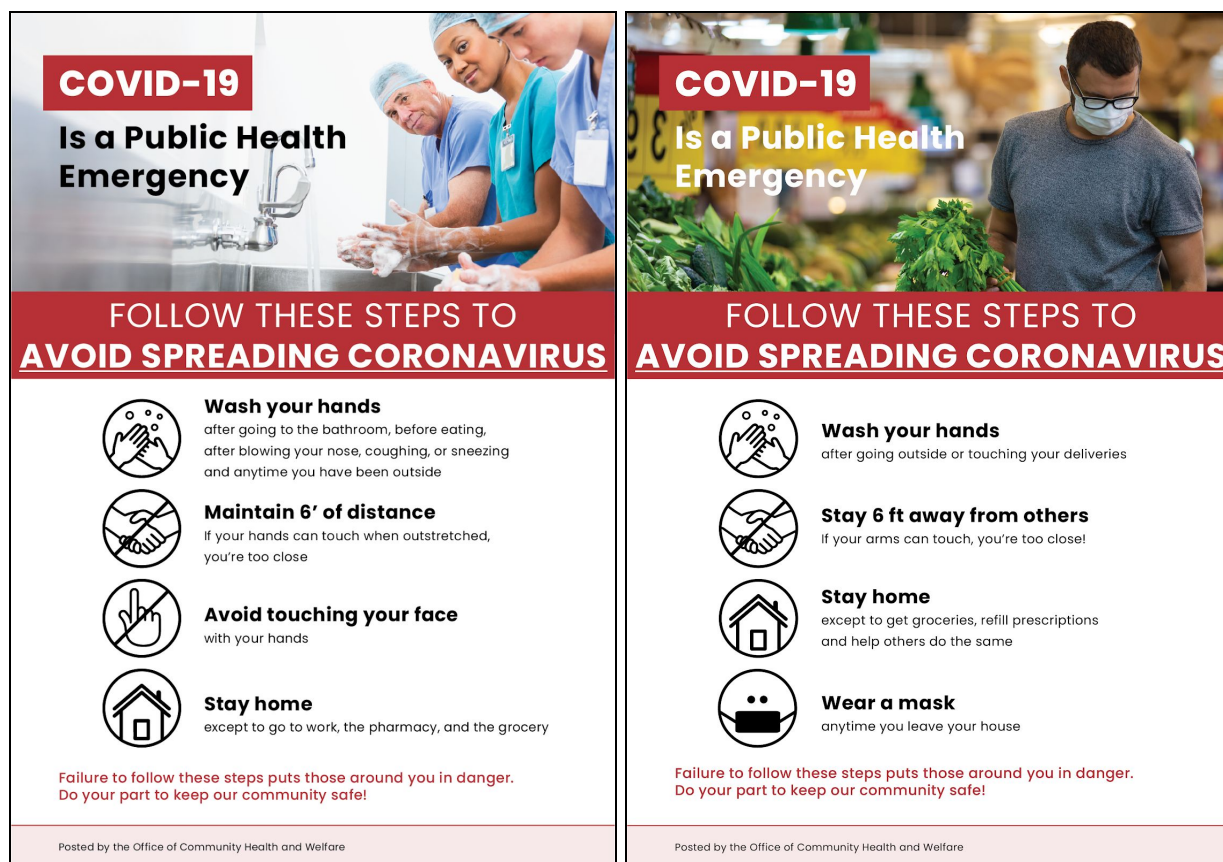


Figure 1: Sample COVID-19 signs that incorporate the principles in this document. The sign on the left was designed to reflect guidance early in the crisis. As the crisis advanced and the asks changed, we updated the sign to the one on the right. (1) We **communicate the public good** by including the following messages: ‘COVID-19 Is a Public Health Emergency’, ‘AVOID SPREADING CORONAVIRUS’, and ‘Failure to follow these steps puts those around you in danger. Do your part to keep our community safe!’. (2a) We **make our asks unambiguous and categorical**. For instance, we do not ask people to wash their hands ‘frequently’, to ‘be more careful’ about touching their face, or to stay home ‘except when necessary’. That’s because ‘frequently’, ‘more careful’, and ‘necessary’ are ambiguous (people can disagree over what counts as frequent, more careful, and necessary), and continuous (people can wash their hands more or less frequently, they can be more or less careful, and something can be more or less necessary). Instead, we ask them to wash their hands ‘after going to the bathroom, ...’ and ‘avoid touching your face’, full stop. Similarly, we explicitly state the only acceptable reasons for leaving one’s house. Everyone agrees on the meaning of these asks, and one can only comply with the asks fully, or not at all. (2b) We **keep our asks simple and concise**, to ensure that people feel they can be expected to comply with all the asks. (3) In the sign on the left, we **generate the impression that compliance is expected** by invoking authority via the photos of the doctors, and by stating that the message came from an official office. In the sign on the right, we replace the image of doctors with that of an individual complying with the asks, the visual analog to a descriptive norm.



Figure 2: Examples of signs urging office mates to keep the office kitchenette clean. Although the sign on the left clearly communicates the public good, it does a poor job of making the ask unambiguous and categorical, since different people have different definitions of clean. The sign on the right eliminates this source of plausible disagreement by using the unambiguous message, ‘don’t leave dirty dishes in the sink.’ It also generates the impression that compliance is expected by humorously highlighting an admired individual in the office who has a track record of keeping the kitchenette clean.

