

EDITORIAL

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SUMMARY

Wearing a face mask when in a public space or at work is now mandatory in Melbourne, Australia. In this editorial, we frame the adoption of masks as a trigger for behaviour change supported by theories that suggest that the mask has significant potential in this regard. The effectiveness of the mandated use of face masks during the COVID-19 pandemic may have benefits beyond the simple preventative effects—it could be the measure that turns the tide in a pandemic that looks set to reverse the benefits of a previous lockdown in this state.

Key Words

Public health, pandemic, COVID-19, psychology, medicine, primary prevention

INTRODUCTION

A recent systematic review of the literature concluded that there are no validated effective measures to change public behaviour during pandemics of infectious disease.¹ Therefore, it is not surprising that nothing seems to be stemming the second COVID-19 uptick in Melbourne, Australia at the date of writing this editorial (19 July 2020). The government has recently decreed that by 22 July, anyone leaving home for any reason will be required to wear a face mask or instantly face a AUD \$200 fine. Will that measure finally plateau the rising tide of cases? Public health experts worldwide appear to agree that people should observe strict social distancing, practice hand hygiene, and seek to be tested for COVID-19 if there is any hint (fever, cough, or sore throat) of an active infection. In some countries the hope that people will voluntarily comply with similar measures has proved ineffective.

Over the past three months, both in Melbourne, Victoria, and elsewhere in Australia, there have been many examples of people either overtly refusing to observe these directives or surreptitiously failing to comply. The consequences for Melbournians have been very unfortunate as the number of cases of infection, notwithstanding the increased testing and the modest positive predictive value of the screening test, have risen steadily following the relaxing of the first lockdown several weeks ago. Infections have been scientifically traced to people who did not follow these simple directives.² Those going to work or into public spaces might break the rules for many reasons, including harbouring the belief that the pandemic is not a reality, believing that the measures impinge on their civil liberties, or having no choice but to work even when ill.

The enforcement of face masks has the potential to be the most effective way to achieve the required behaviour from people who may not comply voluntarily. We believe a face mask is an effective trigger because of the way it has been introduced as a required measure. It is anchored in the act of leaving the home. There is no doubt when one is not at home. Masks are readily available, and Melbourne's population received three days' notice to acquire a mask or make a homemade version that covers their mouth and nose. Therefore, the ability to comply is not a major stumbling block. There is extrinsic motivation to comply with a significant fine for anyone who fails to follow the new rule and the requirement to remain in a specific locality unless there are valid reasons to be in a different location.³ This is consistent with requirements of BJ Fogg's behaviour change model.⁴

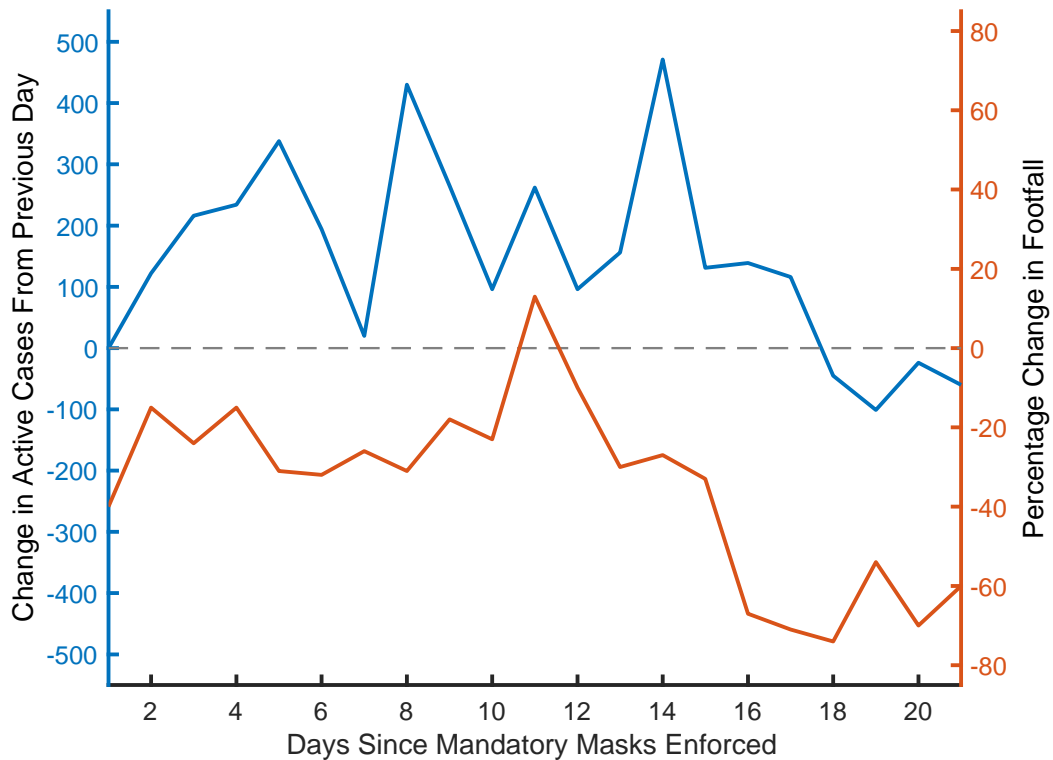
We acknowledge that face masks may not protect people from the infection or that it may interfere with communication.^{5,6} However, the real value of a mask is that it may act as a trigger for the other behaviours required at this time. In this part of the world, a face mask is not usually worn in any other circumstances. Therefore, those donning a mask may recognise that they are in a public place where they are now required to adopt specific behaviours. One rationale for legally imposing masks in addition to other measures cited above is that those failing to comply with the public health directives will be readily identified in a particular location, a factor that has a proven value in discouraging rule breaking.⁷ The impact of beliefs about the value or otherwise of any of the public health messages has to be weighed against the potential of harm to those who might suffer as a consequence of allowing non-believers to exercise autonomy.^{8,9}

The mandated use of face masks may further improve individual compliance with other recommended practices by acting as a salient reinforcer of one's own prosocial nature. According to self-perception theory, individuals use a process of self-evaluation to infer their own attitudes and underlying traits, which in turn can be used to inform behaviour.^{10,11} Studies in social psychology have demonstrated a link between the clothing a person wears and their self-perception, ultimately leading to changes in behaviour and decision-making. In one study, individuals dressed in black uniforms demonstrate a higher preference for more aggressive games than those wearing white uniforms,¹² a finding that has been replicated in digital media, with players assigned black-cloaked avatars in a digital world expressing more aggressive intentions than those assigned white-cloaked avatars.¹³ These findings demonstrate the potential for externally assigned identities to affect an individual's attitudes and behaviour via their self-perceived identity. Given that others wearing masks are perceived as more socially desirable and more trustworthy than those without masks,¹⁴ we may expect that the mandated use of face masks may promote behaviour that reflects these desirable traits, which may include increased compliance with other recommended practices.

In sum, the effectiveness of the mandated use of face masks during the COVID-19 pandemic may have benefits beyond the simple preventative effects. The donning of a mask may trigger increased awareness of the recommended behaviours. In addition, masks themselves may act as a prop, encouraging a heightened self-perception of prosocial traits, leading to increased compliance with other protective regulations. Figure 1 shows what actually happened in the 21

days following the mandatory introduction of masks in Victoria (22 July 2020).

Figure 1: Changes in the incidence of active COVID-19 cases



The number of active COVID-19 cases continued to rise compared to the previous day at a rate of 145 cases on average per day. Footfall (FF) traffic through the Bourke Street Mall at 9 am each day in Melbourne’s city centre dropped by about 35 percent on average compared to the four-week average. We posit that the reduction in footfall traffic may be a proxy measure for compliance with the host of other measures, including the mandatory wearing of masks. It was fully 18 days before the number of active cases of COVID-19 dropped compared to the previous day.^{15,16} The greatest challenge in this pandemic may be that rewards for compliance with social distancing, mask wearing, and working from home may not be apparent for what may seem a long time for those who might prefer immediate results. We agree with a recent commentary on the topic of mask wearing which concluded that:

Comprehensive and consistent public messaging is essential: “when we all mask up, we are all safer.” A well-crafted message addressing the common good could significantly increase mask use, changing social norms to achieve near universal compliance.¹⁷

In such a message, however, it would be essential for the public to be advised that results take time and that some of the success from the policy introduced in Victoria may reflect other government measures introduced at the same time.

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CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

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