

Australians underestimate social compliance with coronavirus restrictions: findings from a national survey

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Australia's relatively successful response to the coronavirus pandemic has been largely attributed to the community's compliance with restrictions on social behaviour and movement.¹ Government and public health leaders have praised public cooperation, but instances of non-compliance receive considerable media attention. It is unclear whether or how these competing messages (one of widespread compliance, the other of non-compliance) have shaped Australians' perceptions of how the community behaves. Here, we test how much Australians say they personally comply with restrictions and their perceptions of compliance in the broader community.

Perceptions about others are important determinants of individual behaviour. In a novel situation, we seek out information about others' behaviour when deliberating the best course of action. This reliance on social cues is heightened under conditions of threat and uncertainty.² However, several cognitive biases lead to perceptual inaccuracies in judging the behaviour of others and how our own behaviour compares.³ These biases are sometimes the result of internal psychological needs: for instance, egocentrism and the drive for self-enhancement engenders a tendency to view oneself as unique in desirable qualities, and as better-than-average on task performance.⁴ Perceptual inaccuracies are compounded by external forces, such as the media. Extensive coverage of relatively rare events can increase one's ability to recall this information (the

Abstract

Objective: We assessed differences between Australians' perceptions of their own compliance with coronavirus restrictions and their perceptions of community compliance.

Methods: We surveyed a national quota sample of 1,690 Australians in August and September 2020. Participants reported their level of compliance with coronavirus restrictions and estimated compliance from others in their state/territory.

Results: Overwhelmingly, most people reported complying with restrictions. They believed their fellow community members were much less compliant. Age and other demographics were only weakly associated with self-reported compliance and perceptions of others' compliance.

Conclusions: The results are consistent with prevalent cognitive biases, including the tendency to believe one is better-than-average, and to more easily recall instances of deviances from social norms.

Implications for public health: We recommend public health messaging avoids amplifying instances of social transgressions of coronavirus restrictions. Instead, the widespread nature of social compliance with restrictions across the country should be emphasised.

Key words: coronavirus, COVID-19, uniqueness bias, better-than-average effect

'availability heuristic'), in turn leading to overestimation of the prevalence of particular behaviours or events.⁵

Perceptual inaccuracies arising from a combination of internal processes and media coverage leads us to expect that judgements about one's own compliance with coronavirus restrictions will depart from judgements about the behaviour of others. This is important because (in)accuracy in self perceptions and other perceptions of compliance is likely to reduce future compliance, as people adjust their behaviour based on their understanding of the group norms.

Methods

We engaged Qualtrics to survey 1,690 Australians between 20 August and 20 September 2020, representative across age ($M=47.42$, $SD=17.77$), gender (51.6% male, 48.0% female) and location (64.4% capital city, 21.6% regional town, 13.0% rural area). Ethics approval was granted by the Human Research Ethics Committee of *blinded for review*. [Authors, please provide]

Survey dates coincided with the first period of metropolitan Melbourne's Stage 4 restrictions. Regional Victoria and other jurisdictions were implementing various – less-severe – restrictions, such as caps on social gatherings.

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Submitted: March 2021; Revision requested: October 2021; Accepted: November 2021

The authors have stated they have no conflicts of interest.

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Aust NZ J Public Health. 2021; Online; doi: 10.1111/1753-6405.13195

Participants completed the survey online and were compensated with individual incentives. Participants rated how closely they were complying with the coronavirus restrictions in their state/territory, on a sliding scale from '0 – not at all closely' to '100 – extremely closely'. Participants used the same scale to rate how closely they thought others in their state/territory were complying.

Results

Self-rated compliance with restrictions was very high: 83% of participants rated their own compliance higher than they rated others' compliance in their state/territory by an average of 27 scale-points. Figure 1 shows that, Australia-wide, people estimated their own compliance ($M=84.57$, $SD=17.78$) as significantly greater than others', $M=63.41$; $SD=20.62$; $t(1,689)=37.77$, $p<0.001$, $d=0.92$. This difference was replicated in every jurisdiction except the Northern Territory. The strongest self-other differences were in Victoria and the Australian Capital Territory. Age was weakly associated with self-reported compliance ($r=0.12$, $p<0.001$) and perceived

compliance of others ($r=0.10$, $p<0.001$). Females ($M=86.27$; $SD=16.58$) reported more compliance than males ($M=82.98$, $SD=18.75$, $t(1682)=-3.80$, $p<0.001$, $d=0.19$, but there was no gender difference for perceptions of others' compliance ($p=0.147$). Those in rural areas ($M=87.58$, $SD=16.38$) reported greater compliance than those in capital cities ($M=83.77$, $SD=17.71$, $F=4.25$, $p=0.014$), but the association was very small: $\eta^2=0.01$. Regional residents ($M=84.80$, $SD=0.99$) did not differ from city or rural residents on reported compliance. There were no differences in perceptions of others' compliance between rural/regional/city residents ($p=0.121$).

Discussion

Most Australians report high levels of compliance with coronavirus restrictions, but their assessment of others in their community is less glowing. These results illustrate internally driven biases: while we are privy to our own sterling efforts, we lack insight into others' behaviour, and thus believe we are 'better than average'.⁶ Critically, it may also reflect an 'availability heuristic', whereby easily

retrievable instances are judged as occurring more frequently than is true.⁵ Media (including social media) arguably amplify coronavirus restriction transgressions: images of house parties and counter-demonstrations increase the salience, and hence retrievability, of normative deviance. To summarise, we easily recall hardships associated with our own compliance, but the transgressions of others loom large. Uniqueness and availability biases likely both operate to produce the patterns in our data.

These results have important implications for public health efforts. First, incorrect normative information can change people's behaviour over time, as individuals tend to regress to the assumed norm. In novel situations, assumed norms (both what people *should be* and *are* doing) begin in flux, but an inaccurate consensus about the behaviour of others quickly become established.⁷ Norms may be key for ensuring ongoing compliance with social distancing and test, trace, isolate and quarantine strategies,⁸ but misguided assumptions of widespread normative deviance risk demotivating efforts to comply. These same processes may undermine

Figure1: Figure caption: Ratings of own compliance with coronavirus restrictions versus perceptions of others' compliance by each state and territory. Error bars denote 95% confidence intervals.



Notes

ACT (Australian Capital Territory): $t(28)=4.94$, $p<0.001$, $d=1.27$; NSW (New South Wales): $t(515)=21.51$, $p<0.001$, $d=1.16$; NT: $t(5)=3.80$, $p=0.013$, $d=0.90$; QLD (Queensland): $t(328)=16.14$, $p<0.001$, $d=1.09$; SA (South Australia): $t(138)=10.00$, $p<0.001$, $d=0.95$; Tas (Tasmania): $t(55)=5.54$, $p<0.001$, $d=0.68$; Vic (Victoria): $t(438)=22.03$, $p<0.001$, $d=1.35$; WA (Western Australia): $t(175)=9.69$, $p<0.001$, $d=0.74$.

vaccination efforts if people falsely inflate vaccine hesitation.

Public health communicators and government leaders play crucial roles in not over-stating (either explicitly or implicitly) the frequency of non-compliance and vaccine hesitancy. An undue focus on normative deviance risks sending false normative information and can also change perceptions of group belongingness.⁵ The high levels of social influence and popularity currently enjoyed by political and health leaders across Australia is predicated on a sense of shared social identity, reflecting the sentiment that Australians are 'all in this together'. Reframing that narrative to 'we, the authorities' versus 'you, the uncooperative sections of the community', highlights social divisions and imperils national unity. This risks further exacerbating non-compliance as people regress to the assumed norms of their own 'group'.⁹ Finally, it risks undermining the community's perceptions of social cohesion, which leads to a willingness to be vaccinated.¹⁰

In summary, we recommend health practitioners, media, and others emphasise the 'togetherness' of communities, as indicated by widespread compliance with restrictions, and to challenge media overemphasis of relatively infrequent transgressions.

References

1. Seale H, Heywood AE, Leask J, Sheal M, Thomas S, Durrheim DN, et al. COVID-19 is rapidly changing: Examining public perceptions and behaviors in response to this evolving pandemic. *PLoS One*. 2020;15(6):e0235112.
2. Mullen B, Atkins JL, Champion DS, Edwards C, Hardy D, Story JE, et al. The false consensus effect: A meta-analysis of 115 hypothesis tests. *J Exp Soc Psychol*. 1985;21:262–83.
3. Robbins JL, Krueger. Social projection to ingroups and outgroups: A review and meta-analysis. *Pers Soc Psychol Rev*. 2005;9:32–47.
4. Alicke MD. Global self-evaluation as determined by the desirability and controllability of trait adjectives. *J Pers Soc Psychol*. 1985;49:1621–30.
5. Tversky A, Kahneman D. Judgment under uncertainty: Heuristics and biases. *Science*. 1974;185:1124–31.
6. Kruger J. Lake Wobegon be gone! The "below-average effect" and the egocentric nature of comparative ability judgments. *J Pers Soc Psychol*. 1999;77:221–32.
7. Monin B, Norton MI. Perceptions of a fluid consensus: Uniqueness bias, false consensus, false polarization, and pluralistic ignorance in a water conservation crisis. *Pers Soc Psychol Bull*. 2003;29:559–67.
8. Murphy K, Williamson H, Sargeant E. Why people comply with COVID-19 social distancing restrictions: Self-interest or duty? *Aust NZ J Criminol*. 2020;53(4):477–96.
9. Haslam A, Reicher S, Bentley S. Identity leadership in a crisis: A 5R framework for learning from responses to COVID-19. *Soc Issues Policy Rev*. 2021;15:35–83.
10. Cárdenas D, Donaldson J, O'Donnell J, Qureshi I, Stevens M, Cruwys T, et al. COVID-19 in Australia: What Factors Drive Pro-vaccination Behaviour? A Longitudinal Investigation of Australians to Better Understand Who Will Choose to be Vaccinated and Why. Canberra (AUST): Australian National University; 2021.