

COMPARATIVE OPTIMISM ABOUT INFECTION AND RECOVERY FROM COVID-19; IMPLICATIONS FOR ADHERENCE WITH LOCKDOWN ADVICE **Dr Koula Asimakopoulou and Dr Sasha Scambler** from King's College London



Comparative Optimism about Infection and Recovery From COVID-19; Implications for Adherence with Lockdown Advice

Comparative optimism is the belief that negative events are more likely to happen to others than oneself. Dr Sasha Scambler and Dr Koula Asimakopoulou from King's College London and their colleagues have recently conducted research exploring how the perceived controllability of events relating to COVID-19 in a large sample of UK-based participants impacts upon their health expectations and potential behaviour during the pandemic.

Understanding people's thinking about COVID-19 risk is critical to understanding and predicting their future COVID-19-related behaviour. In the field of health research, the phenomenon of comparative optimism refers to the belief that negative events – such as illness – are less likely to happen to oneself than to others. Although comparative optimism is wellestablished across gender and age groups, some systematic variation has been observed.

Controllability of COVID-19 risk has been an important component of the UK Government Public Health Advice. The initial slogan 'Stay at Home, Protect the NHS, Save Lives' was later replaced by 'Stay Alert, Control the Virus, Save Lives'. At the crux of these messages was the idea that the COVID-19 pandemic was controllable by individuals taking personal action.

Understanding the impact of comparative optimism on people's health expectations and potentially behaviour concerning the COVID-19 pandemic is the focus of recent work by Dr Sasha Scambler and Dr Koula Asimakopoulou from King's College London and their colleagues.



Dr Scambler and Dr Asimakopoulou proposed that given that greater perceived controllability of an event enhances comparative optimism, we would expect that recommendations encouraging protective behaviours would be associated with enhanced comparative optimism during the lockdown period. As such, we would expect to see high rates of comparative optimism concerning aspects of COVID-19 that people may judge as being personally controllable.

In contrast, we would expect people to show less comparative optimism for aspects of COVID-19 outside their direct control. Over the course of the pandemic, it became apparent that fatality from COVID-19 extended beyond individuals with underlying medical conditions. As such, we would expect people to show less comparative optimism



about the risk of serious consequences once infected, than the risk of being infected in the first place.

As Dr Scambler and Dr Asimakopoulou explain, whether people show comparative optimism concerning COVID-19 is important because of the potential psychological and behavioural consequences. Previous research has shown that comparative optimism contributes to risk-taking. In the COVID-19 context, comparative optimism may account for the anecdotally observed lack of lockdown compliance in the UK, although other factors, such as the misunderstanding of lockdown principles or loneliness may also have played a critical role.

To test their predictions, Dr Scambler and Dr Asimakopoulou studied a sample of 645 adults living in the UK who had completed an online survey between 24th April and 10th May 2020 (that is, weeks 5 to 8 of lockdown). These data were part of a larger study recruiting participants across ten countries. A total of 10 questions assessing comparative optimism about infection by and recovery from COVID-19 were analysed by the researchers.

As typical of existing data on health information processes, the sample was predominantly female and white. The vast majority had not been tested for COVID-19 and were not experiencing any COVID-19 symptoms at the time of completing the survey. The majority considered themselves not at being in a higher risk group for COVID-19. The researchers utilised a statistical technique known as principal components analysis which allows the identification of closely related patterns or 'factors' in large datasets. Three clear factors emerged from the responses to the questions completed by participants.

The researchers interpreted the first factor, which they labelled 'hospitalisation and recovery from COVID-19' as relating to aspects of COVID-19 that are outside the person's immediate control, i.e., what may happen if and when one gets infected.

The second factor was labelled 'current or imminent infection behaviours of self and others'. This was proposed to relate to aspects of COVID-19 that people may view as being controllable, that is, getting infected or infecting others in the past or near future.

Finally, the third factor, 'future infection and symptom development', was proposed to relate to aspects of COVID-19 that may take place in the more distant future.

The researchers then looked more closely at each of these factors. For the first factor of hospitalisation and recovery, the researchers found that one-third to almost half of the participants felt that, as compared to others of the same age and gender, they were unlikely to need hospitalisation, find themselves in intensive care, or need a ventilator if infected with COVID-19. Even more believed they were either 'somewhat' or 'extremely likely' to make a full recovery if infected as compared to others of the same age and gender. For the second factor of events believed to be controllable, such as current or imminent infection behaviours of self and others, the vast majority of participants reported they were 'somewhat' or 'extremely unlikely' to have accidentally infected others last month, to accidentally infect others next month, or to get infected themselves next month, as compared to others of the same age and gender.

For the third factor of future infection and symptom development, about half the participants thought that they were 'extremely likely' to get infected in the next year, and if infected, to develop COVID-19 symptoms, as compared to others.

Further analyses assessed the relative optimism or pessimism reported by participants. For the factors of hospitalisation and recovery from COVID-19, and current or imminent infection behaviours of self and others, statistically significant comparative optimism was observed overall.

For the third factor, future infection and symptom development, comparative pessimism was observed for the scale overall, in which participants generally reported thinking of themselves as being more likely to get infected and develop symptoms in the following year but at the same time, reported that felt they were no more likely than anyone else to infect others.

When comparing the first and second factors, the researchers confirmed that participants showed stronger comparative optimism for those aspects of COVID-10 that may be deemed as controllable than for those considered uncontrollable.

Analyses were repeated taking into account the potential for effects arising from gender and greater vulnerability to infection due to pre-existing conditions. The overall pattern of data did not change, confirming the validity of the results. Dr Scambler and Dr Asimakopoulou note that their finding that comparative optimism is stronger for controllable than for uncontrollable results concerning COVID-19 is consistent with the existing literature.

However, their observation of comparative pessimism about COVID-19 infection in the more distant future is inconsistent with previous research. In accounting for this, the researchers point to the important difference between COVID-19 and other risks, which is that controlling the pandemic was very much placed in the hands of individuals restricting their lives in the UK – as seen in the slogan 'Stay at Home'. Potentially, participants reasoned that, in the long term, staying at home would be less possible, plausible or practical. Furthermore, a high prevalence of negative events may engender comparative pessimism.

Both comparative optimism and comparative pessimism may have important consequences for people's psychological well-being and their likelihood of engaging in risk behaviours or responding to further lockdown measures.

If people believe COVID-19 'will not happen to me anytime now' or that they are unlikely to have infected others in the past or to do in the future, they may be more relaxed about lockdown advice. Despite the UK government's focus on social distancing rules in order to avoid infecting others, this is the aspect of COVID-19 for which Dr Scambler and Dr Asimakopoulou found the strongest comparative optimism.

This is one of the first ever studies to report compelling comparative biases in UK adults' thinking about COVID-19. Dr Scambler and Dr Asimakopoulou conclude that future work should systematically explore how these comparative biases may influence behavioural outcomes such as returning to school, work and normal life.

This SciPod is a summary of the open access paper 'Comparative optimism about infection and recovery from COVID-19; Implications for adherence with lockdown advice', published by the journal Health Expectations. <u>https://doi.org/10.1111/hex.13134</u>

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