

# Who's more relaxed about the risk of catching COVID – and are they habitual risk-takers?

*Which groups of people are more likely to take the risk of catching COVID-19? And does wearing a face covering make them more or less likely to stick to other preventative measures? **Madeline Quinlan** reports on a survey by **Benno Guenther, Matteo M Galizzi and Jet Sanders (LSE)** on risk tolerance in the COVID era.*

The fear of catching COVID-19 has dominated some people's lives for the past 18 months. Yet others are happy to take risks and break lockdown rules. In other words, there appears to have been a great deal of heterogeneity in people's tolerance of the risk. In a recent [article](#) for *Frontiers of Psychology*, we investigated if and how different parts of the population differ in their willingness to take various types of risk during the pandemic.

*Risk tolerance* is a term broadly used to describe how much risk people prefer to take in the decisions they make (for example opting to save money in a cash account, rather than investing in riskier equity markets), but also which situations or behaviours they regard as risky or not (such as over- or underestimating the likelihood of experiencing a negative event).

While previous research has found some trends in the heterogeneity of risk tolerance between individuals and groups, the unprecedented nature of the pandemic presented an opportunity to assess, for example, which individuals and groups are more likely to take on COVID-related risks, and which might be a priority for targeted interventions during possible future pandemics.

## How do we measure risk-taking?



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The study used four specific measures to assess individual differences in risk-taking during the first lockdown period in the UK (23 March 2020 to 26 May 2020). A number of real-world health behaviours (e.g. smoking and drinking) as well as COVID-specific health risk measures of self-isolation, social distancing, and mask wearing were also assessed. Two online studies sampled more than 1,200 UK residents, who completed the following widely recognised risk-taking tasks in behavioural economics and psychology:

[The Balloon Analogue Risk Task \(BART\)](#), which is a balloon pumping game where participants earn actual money for inflating a series of balloons. For each pump they receive a sum of money, so long the balloon does not burst.

[The Binswanger-Eckel-Grossman \(BEG\)](#) multiple lotteries task, where participants can choose between six gambles with different monetary wins, all paid for real.

[The Domain-Specific Risk-Taking task \(DOSPERT\)](#) , in which participants self-report how likely they are to engage in certain risky activities, such as “skydiving”, “having unprotected sex”, or “not returning a wallet found that contains \$200.”

[The German Socioeconomic Panel \(SOEP\)](#), which simply asks participants to indicate their “willingness to take risks”.

## Questions of interest

As yet there is very little data on differences in risk tolerance during the pandemic. The study looked to fill this gap by asking the following three main questions:

- 1) What are the differences in risk taking across different groups of the population (gender, age, pre-existing health status)? For example, in the risk-taking literature, we commonly find that men and younger respondents take more risks. Because there can be severe consequences for those with worse health when it comes to COVID, this was tested as well.
- 2) What is the relationship between the risk-taking tasks used in the study tasks and real-life behaviour?
- 3) Is there evidence for the “risk compensation hypothesis”? In other words, do people adjust their behaviour in response to changes in levels of risk in a compensatory way? For example, are people wearing a mask less likely to keep their distance or wash their hands?

## Men and younger people tended to take more COVID risks

We found that, consistent with pre-COVID times, male and younger participants tend to exhibit higher risk tolerance. Unlike evidence from the pre-COVID era, however, no relationship was found between regular health behaviours (e.g. smoking and drinking) or COVID health behaviours (e.g. isolating, handwashing, mask wearing) and risk-taking. This raises the question of whether these established measures of risk tolerance are really able to capture the real-world variability in risk taking during a pandemic.

We also found that healthier participants were significantly more tolerant of risks on our self-reported measures. Perhaps most interestingly, there was no evidence to support “risk compensation” within our participant groups. Those who took greater risk in their everyday behaviours, or in relation to COVID measures, also showed higher risk tolerance on the experimental tasks overall. Moreover, participants reported taking fewer COVID related risks while wearing a face covering.

## Existing ways of measuring risk tolerance may need to change

The study suggests that risk tolerance may adapt in the context of a pandemic, and new ways of measuring it could be more effective in predicting COVID or pandemic health-related real-world behaviours — specifically those which could observe real-world behaviour on a population-wide scale, rather than relying solely on risk-tolerance tasks and self-reporting.

While historically there has been mixed evidence around risk compensation, this study provides additional evidence that the phenomenon may not be supported by real-world behavioural patterns.

The results also invite an additional question: which other characteristics of individuals or groups play a part in risk-taking? What effect do wealth, education, or specific types of employment have? As we get used to the ‘new normal’, our risk tolerance may adapt. Consequently, we need to adapt how we measure risk tolerance so we can design policies that effectively target specific groups of the population and their behaviour — not only now, but in possible future pandemics.

*This post represents the views of the authors and not those of the COVID-19 blog, nor LSE.*