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The consequences of the COVID-19 crisis for the mental health of young adult twins in England and Wales

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KEYWORDS: COVID-19, pandemic, lockdown, mental health

ABSTRACT:

The COVID-19 pandemic has impacted the lives of many, not only through the infection itself, but also through full or partial isolation (lockdown). Here we investigated how the COVID-19 pandemic and unprecedented global lockdown affected the mental health of young adults in England and Wales. We compared the mental health symptoms of 4000 twins in their mid-twenties prior to COVID-19 crises (2018) to those of a four-wave longitudinal data collection during the pandemic in April, July, and October 2020, and in March 2021. The average changes in mental health symptoms were small and mainly occurred over the 2-year period from 2018 to March 2020 (average Cohen $d=0.24$) but we did not observe trends in worsening mental health during the pandemic. Twin analyses indicated that aetiology of individual differences did not change during the lockdown. The average heritability was 33% across 5 waves of assessment, and the average genetic correlation between T1 and T2-T5 was .95, indicating that the genetic effects of T1 are substantially correlated with genetic effects at T2-T5. However, we show that the COVID-19 pandemic disproportionately affected the mental health of young adults who at T1 had pre-existing vulnerabilities. We conclude that on average young adults in the UK are remarkably resilient to the effects of the pandemic and associated lockdown. However, young people with pre-existing mental health problems are adversely affected. Preventive interventions for young adults should be targeted to those with existing vulnerabilities during and after a crisis, and this is especially important in young adulthood because it is a tipping point for life-long psychological problems.

GRANT SUPPORT: UK Medical Research Council (MR/M021475/1) with additional support from the US National Institutes of Health (AG04938); Sir Henry Wellcome Postdoctoral Fellowship