Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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types of decision being processed. These findings set the stage for future experiments manipulating circuit-computation-specific functions of multiple valuation algorithms in aggression.

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**Keywords:** Aggression, Neuroeconomics, Decision Making, whole mouse brain, medial prefrontal cortex

25. Longitudinal Impact of COVID-19 Pandemic on Mental Health of Children in the ABCD Study Cohort

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**Background:** A large longitudinal study on the impact of the COVID-19 pandemic on mental health in children is limited. This large-scale longitudinal observational study examines the pandemic’s effects on children’s mental health while considering the effects of parental care styles.

**Methods:** The Adolescent Brain Cognitive Development Study is a large-scale, longitudinal multicenter study in the United States. Of the 11,875 children aged 9–12 years in its database, 4,702 subjects were selected for this study. The child behavior checklist and parental monitoring questionnaire (PMQ) were used to assess children’s mental health and parental support styles, respectively. Data collected before and during the pandemic were compared.

**Results:** Withdrawn/depressed and attention problems significantly worsened during compared to before the COVID-19 pandemic (p < 0.001, withdrawn/depressed; 53.4 ± 5.7 to 53.7 ± 5.9, attention problems; 53.4 ± 5.4 to 53.6 ± 5.6). However, the T scores are in the normal range both before and during the crisis. Simple slope analysis found withdrawn/depressed problems and aggressive behavior worsened when the PMQ was 1 SD below the mean, and rule-breaking behavior was improved when the PMQ was 1 SD above the mean.

**Conclusions:** While the COVID-19 pandemic exacerbated children’s depressive symptoms and attention issues, the effects may be minor. Additionally, parental involvement serve as a protective factor for the child’s mental health even during the pandemic.

**Funding Source:** JSPS

**Keywords:** COVID-19 pandemic, Mental health, Adolescent Brain Cognitive Development (ABCD) Study

26. Adjunctive Simvastatin for Treatment-Resistant Depression: A Randomized Clinical Trial

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**Background:** Preliminary trials suggest that statins may be useful adjunctive treatments for depression. This 12-week RCT, conducted in five centres in Pakistan, aimed to assess the efficacy and tolerability of adjunctive simvastatin compared to placebo for reduction of depressive symptoms in treatment-resistant depression (TRD).

**Methods:** The study involved adults (age: 18-75 years) with a DSM-5 major depressive episode that had failed to respond to at least two adequate trials of antidepressants. Participants were randomized to receive standard care plus: (i) simvastatin 20 mg/day or (ii) placebo. The primary outcome was the difference between the two groups in change in Montgomery-Åsberg Depression Rating Scale (MADRS) total scores at week 12. Secondary outcomes included changes in the CGI, GAD-7, and body mass index from baseline to week 12. Statistical analysis used mixed models. C-reactive protein (CRP) and plasma lipids were measured at baseline and week 12.

**Results:** 150 participants were randomized to simvastatin (n = 77) or placebo (n = 73). A significant baseline-to-end point reduction in MADRS total score was observed in both groups and did not differ significantly between groups (estimated mean difference [95% confidence interval] for simvastatin vs. placebo: -0.61 (-3.69, 2.46), p = 0.70). There were no significant group differences in any of the secondary outcomes. Changes in plasma CRP and lipids did not mediate response to simvastatin.

**Conclusions:** Simvastatin 20 mg/day provided no additional antidepressant benefit in TRD compared to placebo. The study was conducted in a LMIC with high prevalence of social stress, and its findings may not be generalizable to high-income countries.

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**Keywords:** Depression, Statins, Randomized clinical trial, Treatment Resistant Depression