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P05-10 Changes in mental health and physical activity patterns before and during the covid-19 pandemic in Swedish adolescents - a longitudinal study
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Background
The covid-19 pandemic has had a large impact on the daily lives of adolescents, even in Sweden where the restrictions were relatively mild. The aim of this study was to examine if there had been a change in mental health outcomes and if these changes were related to changes in physical activity patterns before and during the pandemic.

Methods
In this longitudinal study, data were collected in the autumn 2019 and in follow-up measurements in the spring 2021. Physical activity and sedentary time were measured for seven consecutive days by accelerometry (Actigraph). The mental health outcomes, health-related quality of life (HRQoL) and psychosomatic health were measured with questionnaires (KIDSCREEN-10 and PSP). ANCOVA analyses were applied to estimate the associations between change in physical activity patterns and mental health outcomes.

Results
In total, 585 boys (45%) and girls (55%), aged 13-14 years (baseline) from 34 schools around Stockholm, were included in the study. Between 2019-2021 there was a decrease in HRQoL (p > 0.001) and increase in psychosomatic problems (p > 0.001) among both boys and girls. There was a significant positive relationship between change in MVPA and change in HRQoL (β = 0.02, CI: 0.00, 0.05).

Conclusions
The results suggest that the COVID-19 pandemic has impaired the mental health of Swedish adolescents but increased physical activity was related to positive changes in the mental health outcome HRQoL.

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