Prospective relationships of adolescents’ screen-based sedentary behaviour with depressive symptoms: the Millennium Cohort Study

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## Sample

A total of 11 341 adolescents from the Millennium Cohort Study, a representative,
UK population-based. Data at age 11 and 14.

# Abstract

Abstract

 Background
 Frequent use of screen-based devices could be a modifiable risk factor for adolescent depression, but findings have been inconsistent and mostly from cross-sectional studies. We examined prospective associations of video gaming, social media, and internet use with depressive symptoms in adolescents.

 Methods
 A total of 11 341 adolescents from the Millennium Cohort Study, a representative, UK population-based. The main outcome was depressive symptoms from a Moods and Feelings Questionnaire (age 14). Exposures were frequency of video game, social media, and internet use (age 11). Physical activity (effect modifier) was measured by self-report.

 Results
 The fully adjusted models indicated that boys playing video games most days, at least once a week, and at least once a month at age 11 had lower depression scores at age 14 by 24.2% (IRR = 0.77, 95% CI 0.66–0.91), 25.1% (IRR = 0.75, 95% CI 0.62–0.90), and 31.2% (IRR = 0.69, 95% CI 0.57–0.83), compared with playing less than once a month/never. In girls, compared with less than once a month/never, using social media most days at age 11 was associated with 13% higher depression scores at age 14 (IRR = 1.13, 95% CI 1.05–1.22). We found some evidence of associations between using the internet most days and depressive symptoms compared with less than once a month/never in boys (IRR = 0.86, 95% CI 0.75–1.00). More frequent video game use was consistently associated with fewer depressive symptoms in boys with low physical activity, but not in those with high physical activity.

 Conclusions
 Different types of screen-time may have contrasting associations with depressive symptoms during adolescence. Initiatives to address adolescents’ screen-time may require targeted approaches.

# Outcome

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