Association of screen time with self-perceived attention problems and hyperactivity levels in French students: a cross-sectional study

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Abstract

Objective
To investigate whether high levels of screen time exposure are associated with self-perceived levels of attention problems and hyperactivity in higher education students.

Design
Cross-sectional study among participants of the i-Share cohort.

Setting
French-speaking students of universities and higher education institutions.

Participants
4816 graduate students who were at least 18 years old.

Exposure
Screen time was assessed by self-report of the average time spent on five different screen activities on smartphone, television, computer and tablet and categorised into quartiles.

Main outcome measure
We used the Attention Deficit Hyperactivity Disorder Self-Report Scale (ASRS-v1.1) concerning students’ behaviour over the past 6 months to measure self-perceived levels of attention problems and hyperactivity. Responses were summarised into a global score as well as scores for attention problems and hyperactivity.

Results
The 4816 participants of this study had a mean age of 20.8 years and 75.5% were female. Multivariable ordinary regression models showed significant associations of screen time exposure with quintiles of the total score of self-perceived attention problems and hyperactivity levels as well as the individual domains. Compared to the lowest screen time exposure category, the ORs (95% CI) were 1.58 (1.37 to 1.82) for each increasing level of quintiles of the global score, 1.57 (1.36 to 1.81) for increasing quintiles of attention levels and 1.25 (1.09 to 1.44) for increasing quartiles of hyperactivity.

Conclusions
Results of this large cross-sectional study among French university and higher education students show dose-dependent associations between screen time and self-perceived levels of attention problems and hyperactivity. Further studies are warranted to evaluate whether interventions could positively influence these associations.