Effect of Internet Use and Electronic Game-play on Academic Performance of Australian **children.** Scientific Reports.2020; 10:21727 https://doi.org/10.1038/s41598-020-78916-9

Background and Aim:

- •Internet and electronic games have been regarded as important, not just for better results at school, but also for self-expression, sociability, creativity and entertainment for children and adolescents
- •However, evidence points to the fact that their use is found to have detrimental effects e.g. reduced sleeping time, behavioral problems (low self-esteem, anxiety, depression), attention problems and poor academic performance in adolescents.
- •Urgent need of understanding the effect of the Internet use & electronic gaming on the development of children and adolescents, esp. academic performance.

Methods: Young minds matter (YMM) was an Australian nationwide cross-sectional survey. The study used a standardized test of academic performance: NAPLAN (The National Assessment Program-Literacy and Numeracy) among Australian adolescents aged 11-17 years using nationally representative data from the Second Australian Child and Adolescent Survey of Mental Health and Wellbeing—Young Minds Matter (YMM).

ACADEMIC P.E.A.R.L.S

Pediatric Evidence And Research Learning Snippet



Effect of Internet & Electronic games on children: Bane or Boon

Results: From year 2010 to 2015, 2967 samples were surveyed, 1704 adolescents were sampled for this study

- •A gradual decline in average NAPLAN tests scores (reading, writing and numeracy) scores were observed for internet use over 4 h during weekdays, and over 3 h during weekends.
- •Use of internet (non-academic use) during weekdays, especially more than 4 h, was negatively associated with academic performance. Adolescents who had internet addiction were 17% less and 14% less likely to score higher in reading and numeracy. But adolescents who spent 2–4 h on the internet during weekends were more likely to achieve better reading and writing scores.
- •In contrast, 16% of electronic gamers were more likely to get better reading scores on weekdays(1-2 hrs), time spent on electronic gaming over 2 h during weekends also had a positive effect on readings scores.
- Addiction tendency to internet and electronic-gaming was found to be adversely associated with academic achievement

Conclusions: Average time spent on the internet on weekends and electronic gaming (both in weekdays and weekends) was positively associated with academic performance. There was a negative association between addiction tendency (internet use or electronic gaming) and academic performance.

Key message: Addiction to both internet and electronic games is bad for children and adolescents. Internet use is not harmful to academic performance if it is used moderately, especially, if ensuring very limited use on weekdays.

EXPERT COMMENT



Addiction to both internet and electronic games is associated with poor academic performance."

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With warm regards,

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Reference

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