Health and psycho-social outcomes of playing video games among undergraduates at University of Sri Jayewardenepura, Sri Lanka

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**Background:** With the increase in the technological advances, the use of media devices has contributed to increase the screen time of users. Especially playing video games has a major contribution to excessive screen time and also that leads to make changes in daily routines, social behaviors, emancipative values, family relations and social interactions. Therefore, excessive time spending on video games holds the potential to be harmful to one’s health. Though there are no local evidence of screen time related to video games, higher levels of playing video games have shown associations with some health and psycho-social problems in previous studies in other countries.

**Objectives:** The objective of this study was to estimate the time spend on playing video games, associated health and psycho-social problems among undergraduates at University of Sri Jayewardenepura.

**Methods:** This descriptive cross-sectional study was conducted among 430 participants selected by convenient sampling in four faculties including Faculty of Medical Sciences, Humanities & Social Sciences, Management Studies and Commerce and Faculty of Applied Sciences of University of Sri Jayewardenepura. A pre-tested, self-administered questionnaire was used to ascertain data related to video game usage. Hyperactivity and conduct problems were measured based on Strengths and Difficulties Questionnaire (SDQ). Data were analyzed using SPSS statistical software (Version 20). Associations were determined with chi-square test. Ethical approval for the study was obtained from ethics review committee of the Faculty of Medical Sciences.

**Results:** The mean time spent on playing video games in a week day was 27.76 minutes (SD=80.57) followed by 40.90 minutes (SD=103.17) weekend-day. Excessive video game playing in week days was significantly associated with frequent hand pain (OR=2.13, 95%CI=1.04-4.38) followed by obesity and overweight (OR=1.81, 95%CI=1.05-3.10). Playing video games excessively in week days was significantly associated (p<0.05) with delaying main meals very often (OR=1.86, 95%CI=1.20-2.87) followed by hyperactivity (OR= 1.88, 95%CI=1.00-3.57) and conduct problems (OR= 2.72, 95%CI=1.45-5.08) respectively. Playing video games excessively in weekends also associated with hyperactivity (OR= 1.88, 95%CI=1.00-3.53) and conduct problems (OR= 3.01, 95%CI=1.61-5.62).

**Conclusions:** Excessive video games playing has impacts on physical and psychological well-being as well as normal behavior of the university students. Students should be made aware regarding the harmful effects of involving in video games excessively in order to minimize the harmful effects.