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Original Research Article

Screen Time amongst Adolescents Aged 10 to 19 Years: Prevalence of Screen Based Media Use & Physical Activity (Post COVID-19 Study)

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Abstract:

Introduction: As the technology becoming an integral part of our lives with its harmful impact on the personal health. The screen time is the time spent involving digital screen-based or electronic media devices e.g. television, video games, computer screen and smartphones, as recommended by the American Academy of Pediatrics, is not >2 h/day to all children, Adolescents and Adults who are above 2 years of age. Time that spent with the screens in any form mentioned above is an important risk factor for childhood Obesity and Overweight and other metabolic health issues. So It is Important to screen the population who at higher risk to developing sedentary lifestyle, which can lead so many consequences and adverse outcomes in their later life.

Objectives: To estimate the prevalence of screen time in children and adolescents aged 10-19yrs.

Method: In this cross-sectional study determined the prevalence of screen time use on screen based media conducted after the peak post COVID-19 period. Questionnaire forms were filled by the students by the visiting schools and interacting with the students in school hours.

Results: Out of the (n=500) population majority of students 262 (52.4%) were using Screen based media <2 hours per day and 238 (47.6%) students were using Screen based media >2 hours per day.

Conclusion: It is also notable that in some studies which were conducted during the COVID-19 pandemic and with social distancing, in that the screen time may not significantly having negative interference with the health and well-being, because it was the only connecting way to remain socially aware. Although screen-based media usage have so many benefits also, such as awareness and communication.

Keywords: Adolescents, Screen Time, Screen Based Media, Digital Devices.

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Introduction

As the technology becoming an integral part of our lives with its harmful impact on the personal health. The screen time is the time spent involving digital screen-based or electronic media devices e.g. television, video games, computer screen and smartphones, as recommended by the American Academy of Pediatrics, is not >2 h/day to all children, Adolescents and Adults who are above 2 years of age. [1] Increasing sedentary behaviour and lifestyle. There is an increasing concern of independent association of screen time with mental health among adolescents. [2]

Time that spent with the screens in any form mentioned above is an important risk factor for childhood Obesity and Overweight and other metabolic health issues. So It is Important to screen the population who at higher risk to developing sedentary lifestyle, which can lead so many consequences and adverse outcomes in their later life. So, we need to properly analyze the correlation between increasing screen time and its behavioral changes. Starts from socio-demographic variables there we need to determine modifiable environmental & social variables for the further future interventions. [3] Earlier than 2000s it was confined to only televisions most of the part. With the emerging modern technology involving smartphones, tablets, iPads, digital toys and video gaming, now a day's most of the time children are occupied with screen with various form of digital content. Excessive digital screen usage is related to the health, developmental, and behavioral challenges. [4] According to the 2021 update of the World Health Organization (WHO) [5], it has been analyse that 14% of young people between 10 and 19 years old have mental health problems, which represents globally, 13% of all diseases that affect this population.

Aims & Objective

To estimate the prevalence of screen time in children and adolescents aged 10-19yrs.

Methodology

This study carried out with the prepared questionnaire form, it was conducted as a survey to measure screen time spent with the screen based media devices or digital/video game devices. Adolescents were asked to report how many hours they spent on screen daily on their typical activities.6In this cross-sectional study determined the prevalence of screen time use on screen based media conducted after the peak post COVID-19 period. Questionnaire forms were filled by the students by the visiting schools and interacting with the students in school hours.

Results

Out of the (n=500) population majority of students 262 (52.4%) were using Screen based media <2hours per day and 238 (47.6%) students were using Screen based media >2 hours per day.

Table1: Screen time per day amongst the study population			
Screen time per day	No. of children (n=500)	Percentage	
< 2 hour	262	52.4%	
>2 hour	238	47.6%	

Table 2: Type of physical activity students doing amongst the study population

Physical Activity Type	No. of children (n=500)	Percentage
Outdoor play	124	24.8%
Cycling	123	24.6%
Walking	114	22.8%
Other	139	27.8%



Figure 1: Showing duration of the physical activity among the study population

Out of the total population 255 (51%) were taken 3 times meal per day, 244 (48.8%) patients were taken >3 times meal per day and rest1 (0.2%) patient take meal per day < 3 times. And 171 (34.2%) were consuming Junk food daily, 170 (34%) were consuming junk food 3 - 4 times per week and 159 (31.8%) patients were consuming junk food once in a week.

Almost all children were doing physical activity regularly in which 124 (24.8%) were doing outdoor play, 123 (24.6%) doing Cycling, 114 (22.8%) used to walking and 139 (27.8%) doing other activities.

In all of them 159 (31.8%) were doing Physical Activity daily, 171 (34.2%) were doing Physical Activity 3 days or more per week, and 170 (34%) were doing Physical Activity Once a week.

Conclusion

It is also notable that in some studies which were conducted during the COVID-19 pandemic and with social distancing, in that the screen time may not significantly having negative interference with the health and well-being, because it was the only connecting way to remain socially aware [7]. Although screen-based media usage have so many benefits also. such as awareness and communication.

Study was carried after post-COVID-19 period, and the only prevalence were observed during post covid-19 period. In the peak covid-19 period almost all children & adolescents studied from online classes owing government's stay-at-home policy, schools' online learning programs, and physical distancing. [8] From the other studies, it is

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concluded that the time spent with the digital devices and video games less (<2 hr/day) leads to significant decrease in the childhood and adolescence Psycho-social and behaviour problems. Consecutive education regarding the screen time to the students and their families, is necessary. Education of its impact on mental wellbeing is also important to aware them. Screen time increases sedentary lifestyle that can be harmful to the cardio-metabolic health also. [9]

References

- 1. American Academy of Pediatrics. Committee on Public Education. American Academy of Pediatrics: Children, adolescents, and television. Pediatrics. 2001; 107:4236.
- Iannotti RJ, Kogan MD, Janssen I, Boyce WF. Patterns of adolescent physical activity, screen-based media use, and positive and negative health indicators in the U.S. and Canada. J Adolesc Health. 2009; 44:493–9.
- Baranowski T, Anderson C, Carmack C. Mediating variable framework in physical activity interventions. How are we doing? How might we do better? Am J Prev Med. 1998; 15:266– 97.

- Mustafaoglu, R.; Zirek, E.; Yasacı, Z.; Özdinçler, A.R. The negative effects of digital technology usage on children's development and health. Addicta Turk. J. Addict. 2018;5: 227–247.
- 5. WHO Coronavirus (COVID-19) Dashboard. Google Scholar
- 6. World Health Organization. Adolescent mental health. 2021. Available from: https://www.who.int/newsroom/factsheets/detail/adolescent-mental-health.
- Pandya A, Lodha P. Social connectedness, excessive screen time during COVID-19 and mental health: a review of current evidence. Frontiers in Human Dynamics. 2021;3. Available from: https://www.frontiersin.org/ articles/https://doi.org/10.3389/fhumd.2021.68413 7
- T. Wiguna, G. Anindyajati, F. Kaligis, R.I. Ismail, K. Minayati, E. Hanafi, et al. Brief research report on adolescent mental well-being and school closures during the COVID-19 pandemic in Indonesia Front Psychiatr., 2020;11.
- 9. R.M.S. Santos, C.G. Mendes, G. Sen Bressani, et al. The associations between screen time and mental health in adolescents: a systematic review BMC Psychol, 2023;11: 127.