

## A Survey On Screen Time Of Adolescents In Pune City

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### Abstract:

*The main aim of the study was to assess the status of screen time of among adolescents in Pune City. For this study total 500 students were randomly selected from Pune city. The subject's age were ranged in between 13-17 years of adolescents. For the purpose of collecting the data the researcher used and selected screen time questionnaire by (Vizcaino et al., 2019). The questionnaire is divided into three parts i.e average weekday, average Weeknight and average weekend days. This Scale consists of total an 18-item screen time questionnaire was developed to assess the use of commonly utilized screen-based devices The questionnaire categorized screen time activities into five distinct groups: television, TV-connected devices (e.g., streaming devices, video game consoles), laptop/computer, Smartphone, and tablet. , the questionnaire also inquired about screen use during an average weekday, an average weeknight, and an average weekend day (Saturday or Sunday) separately. The statistical analysis was done by using IBM SPSS (Version 25) software. The result of the study revealed that Adolescents engage in a significant amount of Television and Smartphone's are the most prevalent sources of screen time. Weekend screen time is significantly higher than weekday screen time. Background screen exposure is also substantial and increases on weekends.*

**Key word:** Survey, Screen Time, Adolescents, Physical Activity, Questionnaire

**INTRODUCTION:** "Screen time" is a term used for activities done in front of a screen, such as watching TV, working on a c<sup>1</sup>omputer, or playing video games. Screen time is sedentary activity, meaning you are being physically inactive while sitting down. Very little energy is used during screen time. Screen time refers to the amount of time an individual spends using electronic devices with screens, such as Smartphone's, tablets, computers, televisions, and gaming consoles. In today's digital age, screen time has become an integral part of daily life for many people, especially with the increasing reliance on technology for work, education, entertainment, and social interaction. While electronic devices offer numerous benefits and conveniences, excessive screen time can have various effects on physical, mental, and emotional well-being.

### Types of Screens and Activities

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- **Television:** Traditional television remains a significant source of screen time, with individuals spending hours watching a variety of content, including shows, movies, and commercials.
- **Computers:** Screen time on computers includes activities such as work, school-related tasks, social media, online browsing, and gaming.
- **Smartphone's and Tablets:** These portable devices are commonly used for various activities, including communication, social media, entertainment, gaming, and educational purposes.
- **Video Games:** Screen time related to video gaming involves interactive experiences that can range from casual mobile games to immersive console or PC gaming.

### Health Impacts

- a) **Physical Health Impacts:** Prolonged screen time often leads to sedentary behavior, as individuals may spend extended periods sitting or lying down while using electronic devices. This can contribute to a lack of physical activity, leading to health issues such as obesity, musculoskeletal problems, and poor posture. Additionally, excessive screen time, particularly before bedtime, can disrupt sleep patterns and quality, affecting overall health and well-being.
- b) **Eye Strain and Vision Problems:** Extended periods of staring at screens can lead to eye strain, dry eyes, and discomfort. Prolonged exposure to blue light emitted by screens may also impact sleep quality and contribute to digital eye fatigue. Over time, excessive screen time may be associated with an increased risk of developing myopia (near-sightedness) in children and adolescents.
- c) **Mental and Emotional Well-being:** Excessive screen time, especially when used for social media, gaming, or consuming online content, can impact mental health. It may lead to feelings of anxiety, depression, and social isolation. Excessive use of social media and exposure to online content can also contribute to negative self-image, cyber bullying, and addictive behaviors.
- d) **Cognitive Development:** For children and adolescents, excessive screen time can impact cognitive development and academic performance. It may interfere with the development of social skills, attention span, and the ability to engage in real-world activities and interactions.

**METHODOLOGY:** This was a survey study. The researcher handed over the three structured questionnaires (viz., physical activity, sedentary behavior, and screen time) to the sample-subjects (n=500) along with pencil and eraser. Prior to fill the questionnaires, the subjects were instructed to write their name, address (residential), and demographic information (e.g., age, sex etc.). They were instructed to read the information as mentioned in the first page of the questionnaires. Then the researcher gave examples about the process of giving answers to the questions and also clarified all doubts, if any, for filling up the questionnaires. Finally, the questionnaires of 500 students were properly filled in and hence accepted for analysis.

**METHOD OF MEASUREMENT OF VARIABLE:** In this survey study, as a first step, the investigator visited the authorities of schools affiliated to Bharati Vidyapeeth, Pune, and explained them about the purpose of this piece of research. After receiving permission, all the selected participants were requested to fill the respective questionnaires, Participants were instructed to estimate the total time spent in hours and minutes using each device, with the total time for each screen-based device quantified in minutes (e.g., 1 hour and 30 minutes = 90 minutes). Recognizing that screen time usage varies throughout the day and week, the

questionnaire also inquired about screen use during an average weekday, an average weeknight, and an average weekend day (Saturday or Sunday) separately. The data was collected through self-administered questionnaires. The statistical analysis was done by using IBM SPSS (Version 25) software. The data were presented through tables systematically. The step-wise results along with scientific as well as logical interpretations have been presented. The data as obtained in terms of the responses from the questionnaire were analyzed primarily considering percentage method with a view to find out the level of the selected variables.

### Socio-Demographic Characteristics of Study Participants

Variable		Frequency	Percentage
Gender	Male	261	52.2%
	Female	239	47.8%
Age	13 years	110	22%
	14 years	100	20%
	15 years	94	18.8%
	16 years	120	24%
	17 years	76	15.2%
Socioeconomic Status	Low Income	52	10.4%
	Middle Income	380	76%
	High Income	68	13.6%

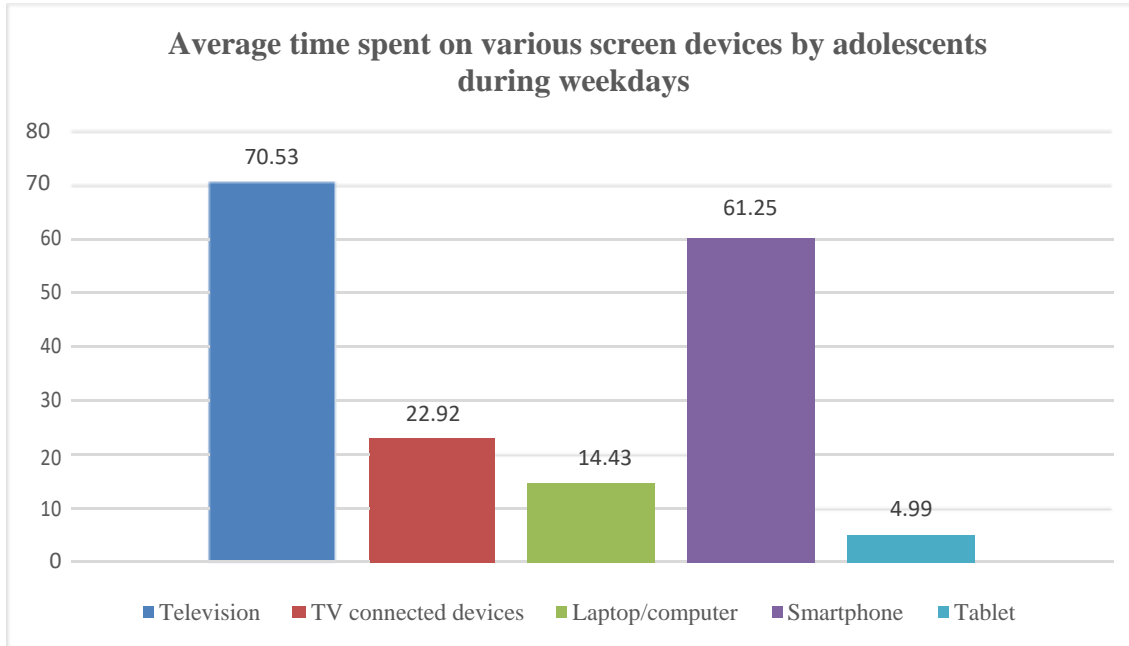
**Table 1**

### Descriptive Statistics

**Result of overall time spent on Different Screen Devices by adolescents on average Weekdays**

Device	Mean	Median	Inter quartile range
Television	70.53	60.0	90.0
TV-connected devices (e.g. streaming devices, video game consoles)	22.92	0.00	30.0
Laptop/computer	14.43	0.00	15.0
Smartphone	61.25	45.0	57.50
Tablet	4.99	0.0	0.00

**Fig1: Graphical representation of overall time spent on Different Screen Devices by adolescents on average Weekdays**



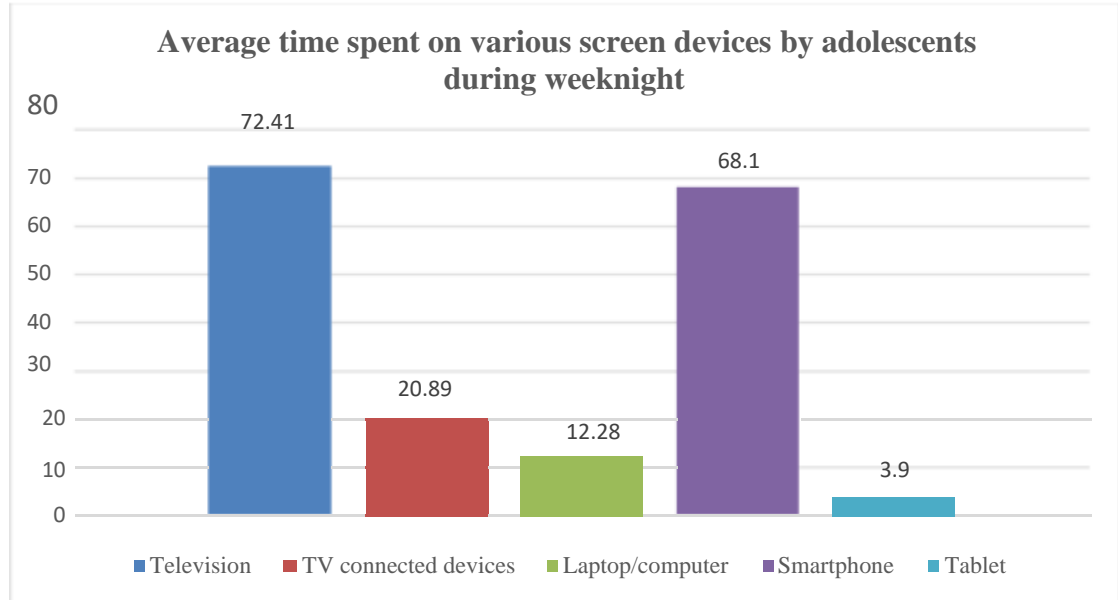
**Table 2**

**Descriptive Statistics**

**Results of overall time spent on Different Screen Devices by adolescents on average Weeknight**

Device	Mean	Median	Inter quartile range
Television	72.41	60.0	120.0
TV-connected devices (e.g. streaming devices, video game consoles)	20.89	0.00	30.0
Laptop/computer	12.28	0.00	0.0
Smartphone	68.10	47.50	75.00
Tablet	3.90	0.0	0.00

**Fig2: Graphical representation of overall time spent on Different Screen Devices by adolescents on average Weeknight**



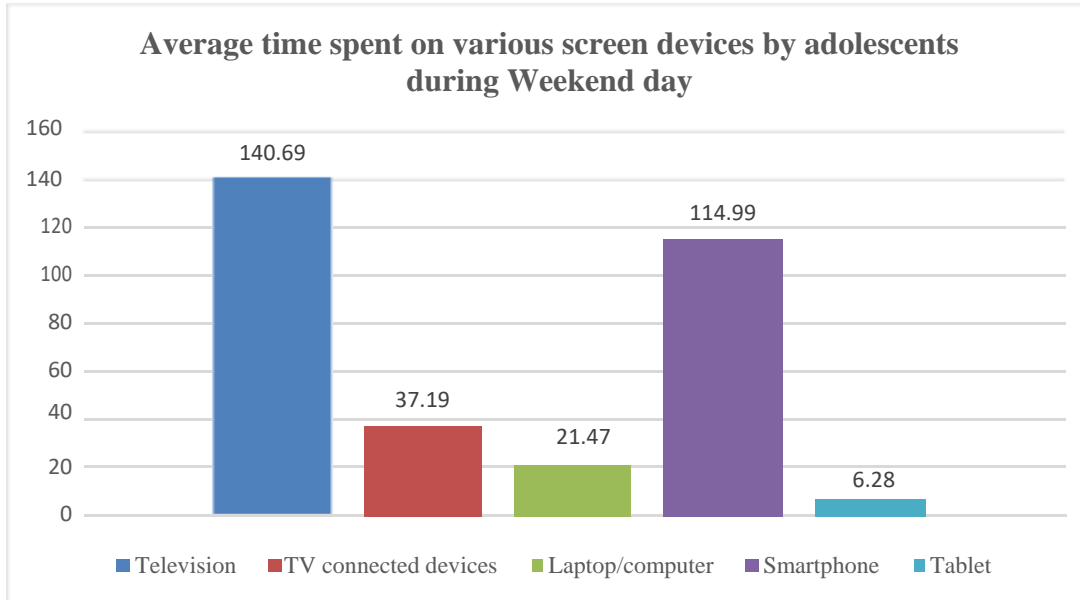
**Table 3**

**Descriptive Statistics**

**Results of overall time spent on Different Screen Devices by adolescents on average Weekend day**

Device	Mean	Median	Inter quartile range
Television	140.69	120.0	120.0
TV-connected devices (e.g. streaming devices, video game consoles)	37.19	0.00	60.0
Laptop/computer	21.47	0.00	30.0
Smartphone	114.99	60.00	150.00
Tablet	6.28	0.0	0.00

**Fig3: Graphical representation of Screen Time during average Weekend day**

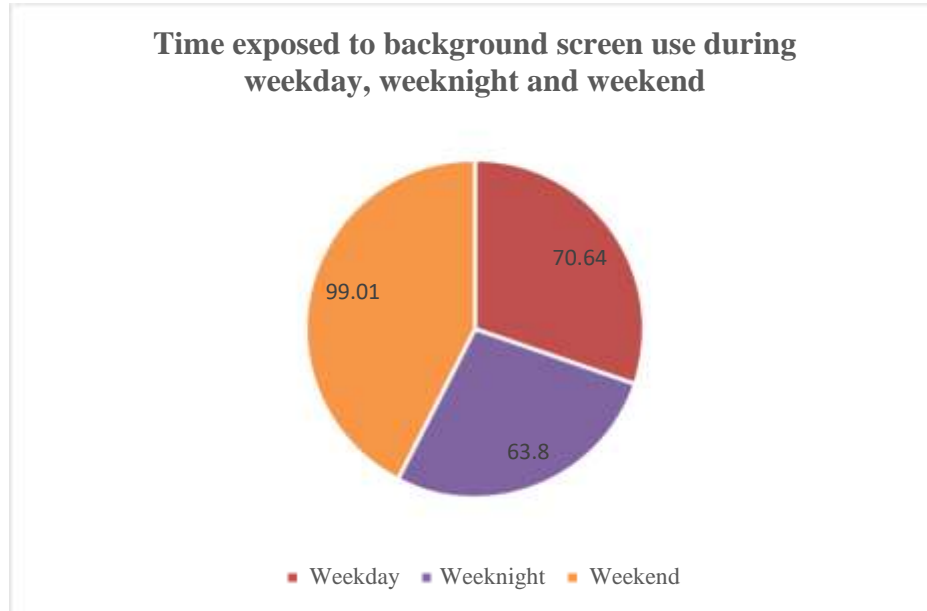


**Table 4**

**Time Exposed to Background Screen Use During an Average Weekday, Weeknight and Weekend by Adolescents**

Background Screen	Mean	Median	Inter quartile range
Background Screen Use on a Regular Weekday	70.64	60.00	90.0
Background Screen Use on a Regular Weeknight	63.80	60.00	90.0
Background Screen Use on a Regular Weekend day	99.01	60.00	150.0

**Fig 4: Background Screen Use during an Average Weekday, Weeknight and Weekend by Adolescents**



## DISCUSSION AND CONCLUSION:

The data reveal a significant difference in television and Smartphone usage between weekdays and weekends. On average, adolescents spent 140.69 minutes watching television and 114.99 minutes on Smartphone's during weekends, representing a substantial increase compared to weekdays. These results align with previous research indicating heightened screen engagement during leisure periods, such as weekends. The increased usage of TV-connected devices (37.19 minutes) and laptops/computers (21.47 minutes) on weekends further underscores the shift towards more screen-based activities during leisure hours.

It is interesting to note the variation in tablet usage, which had the lowest average of 6.28 minutes on weekends. This may be attributed to the preference for larger screens or alternative recreational activities during weekends. The presence of individuals with minimal or zero usage, indicated by median and interquartile range values, suggests that a significant proportion of adolescents may choose to abstain from specific devices during weekends, possibly engaging in other non-screen-related activities.

The study also assessed background screen exposure, revealing that adolescents, on average, are exposed to screens for similar durations on weekdays and weeknights, with means of 70.64 and 63.80 minutes, respectively. Weekend day background screen exposure significantly increases, averaging at 99.01 minutes, indicating a shift towards more prolonged and immersive screen engagement during leisure periods. The elevated weekend exposure may be associated with increased recreational screen activities, potentially contributing to the overall screen time load among adolescents during weekends.

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