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Case study on relationship between humans and mobile phone in a random place and area.

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Abstract- This case study explores the relationship between humans and mobile phones in a randomly selected area, focusing on how mobile phones impact daily activities, social interactions, and overall lifestyle. The study aims to understand the extent of mobile phone dependency, usage patterns, and the psychological, social, and behavioural effects on individuals. Data was collected through surveys, interviews, and observation of participants from different age groups and occupations. The findings reveal that mobile phones play a significant role in communication, entertainment, and information access, but also contribute to social disconnection, distraction, and potential health issues. The study highlights both the positive and negative implications of mobile phone usage, providing insights into how mobile phones influence modern life. Recommendations are made to promote responsible mobile phone usage and balance technology with social well-being.

Keywords: Mobile Phone Dependency, Human-Technology Relationship, Social Interaction, Digital Lifestyle, Technology Impact

Introduction

The relationship between humans & mobile phones has evolved rapidly over the past few decades, transforming

From a simple tool for communication into a central aspect of daily life, affection social behaviours, mental health, productivity, and even identity. A study on this topic would typically explore several key themes:

1] Psychological Impact

- Addiction & dependence

Many students show that mobile phone use can lead to addictive behaviours. People often develop a compulsion to check their phones frequently which is linked to anxiety, stress, and an inability to focus on others tasks.

- Nomophobia:

A Fear of being without a mobile phone has becomes a recognized psychological phenomenon. This reflects an emotional dependency on mobile devices for staying connected & accessing information.

2] Cognitive & Behavioural changes

- Attention span:

Studies suggest that mobile phone use, particularly when multitasking or switching between apps, can reduce attention span & impair cognitive performance. The constant flow of information may lead to distraction& difficulty in deep focus.

- Screen time & Brain Health:

Excessive screen time, particularly for young people, has been linked to changes in brain development, particularly in areas related to social & emotional processing

- Learning & Memory:

Mobile phones often are an easy access to information, which can reduce the need for memorization. While this can be efficient, it may lead to a decline critical thinking & problem-solving ability, as users rely more on their devices for answers.

3] Social Relationships

- Virtual connectivity:

On the positive side, mobile phones have enhanced social connectivity by enabling people to maintain relationships over long distances through calls, texts, & social media.

This connectivity can provide emotional support & fasted global connections.

- Work -life Balance:

The omnipresence of mobile phones has blurred the boundaries between work & personal life, with many people feeling the pressure to be “always on”. This can lead to burnout but also offers flexibility for remote work & quick communications

4] Mobile phone use in different age groups!

- **Youth & Adolescents:**

For younger generations, mobile phones are often integral to socializing, education, & entertainment. However, they are also more susceptible to issues like cyberbullying, screen addiction, & social anxiety due to online interactions.

- **Adults & Professionals**:

For working adults, mobile phone serve as essential tools for productivity, but they can also disrupt work-life balance. Adults are more likely to use mobile devices for banking, navigation, & health tracking

- **Elderly population:**

Mobile phones, particularly smart phones, have improved accessibility for older adults, allowing them to stay connected with family & access healthcare resources.

However, they may also face challenges related to technology literacy

Research Methods for Study

1]surveys & Questionnaires: - collect data on how frequently individuals use mobile phones, their emotional responses to mobile use & its impact on social & work life.

2]Interviews & Focus groups: - Explore personal experiences with mobile phones, including positive & negative impacts on relationships, work, & mental health.

3]Observational studies: - Examine mobile phone use in public spaces, workplaces, or homes to understand

4]longitudinal studies: - Track the impact of mobile phone use over time on individual's cognitive abilities, mental health, & social interactions

CONCLUSION

A study on the relationship between humans & mobile phones would reveal a complex interplay of benefits & drawbacks. Mobile phones serve as powerful tools for communication, learning, & productivity, but they also pose risks to mental health, cognitive function, & social relationships. Future research could focus on promoting healthier use of patterns & exploring ways promt

Name	Age	Sex	Native Place	Total Screen Time
Raina Singh	19	F	Boisar	10h17min
Kalika Mamgain	19	F	Uttarakhand	5h28min
Vatsal Shah	21	M	Morbi	13h41min
Varsha Yadav	18	F	Uttarpradesh	8h7min
Nandini Gastgar	19	F	Latur	8h30min
Purva Fugate	19	F	Solapur	16h35min
Ramya Krishnak	20	F	Palakkad	3h10min
Pranjali Shinde	19	F	Kolhapur	3h10min
Priyanshu Mishr	19	M	Varanasi	3h36min
Anamika Kashiva	19	F	Uttarakhand	3h31min
Kedar Lokhande	19	M	Boisar	5h43min
Ishwar Rathod	19	M	Porbandar	7h3min
Sachin Singh	20	M	Uttarpradesh	4h33min
Kedar Varma	19	M	Maharashtra	4h30min
Srushti Kirtane	17	F	Sangli	7h40min
Sachin Singh	40	M	Virar	4h30min
Achal Singh	22	M	Varanasi	4h21min
Sagar Singh	21	M	Boisar	6h37min
Dhruvay Patel	21	M	Boisar	4h
Sudhanshu Saah	23	M	Boisar	7h45min
Suraj Mishra	23	M	Boisar	11h25min
Vishal Singh	22	M	Boisar	8h7min
Sheetal Singh	25	F	Varanasi	4h22min
Manali Suryavant	22	F	Boisar	7h28min
Ankit Singh	18	M	Mumbai	4h13min

Sourav Singh	25	M	Varanasi	11h55min
Deep Pimple	24	M	Boisar	3h43min
Gaurang Sane	23	M	Boisar	9h6min
Utkarsh Sharma	21	M	Boisar	8h14min
Rajesh Patel	21	F	Boisar	9h49min
Roohi Singh	23	M	Virar	9h21min
Amit Panda	21	M	Boisar	8h11min
Ayush Sharma	23	M	Borivali	12h3min
Adarsh Singh	23	M	Ghazipur	10h31min
Sudhanshu Singh	20	M	Varanasi	6h35min
Aditya Mishra	26	M	Boisar	11h30min
Ashok Singh	23	M	Nagpur	24h
Kaushal Patel	24	M	Andheri	4h41min
Omkar Shastri	21	F	Borivali	5h8min
Shreya Singh	15	F	Virar	4h39min
Prema Singh	21	F	Boisar	8h23min
Name	Age	Sex	Native Place	Total Screen Time
Rohit sharma	24	M	Boisar	5h30min
Aditya mahraj	19	M	Boisar	4h8min
Siraj khan	19	M	Palghar	3h16min
Abhishek sharma	20	M	Vangaon	1h15min
Rahul mourya	30	M	Dahanu	4h30min
Somesh yadav	19	M	Boisar	10h46min
Muskan singh	25	F	Palghar	6h45min
Vikas sharma	17	M	Kolkata	7h53min
Jheel chatterjee	17	F	Navapur boisar	3h18min
Unnati bari	17	F	Konkan	2h5min
Urvi salkar	18	F	Bihar	3h25min
Siddhu singh	42	M	Uttarpradesh	10h15min
Mamta singh	20	F	Boisar	1h28min
Amav Singh	40	M	Boisar	6h28min
Pavan Singh	22	M	Dandi	3h28min
Shreyash pagdhi	22	M	Uttarpradesh	7h47min
Pulsat jaiswal	17	F	Jalgaon	2h16min
Natasha sarode	20	F	Uttarakhand	5h21min
Karishma kunwar	17	F	Mumbai	6h56min
Varsha Raturi	17	F	Rajasthan	1h13min
Adi mishra	19	M	Gujarat	7h20min
Ayush patel	20	M	Boisar	10h
Atul mandal	40	M	Boisar	10h
Raj malhotra	22	M	Dahanu	4h30min
Manthan pimple	23	M	Boisar	5h18min
Sujal bhunshali	22	M	Boisar	14h28min
Ragini singh	22	F	Vasai	5h12min
Neha agarwal	23	F	Mumbai	4h52min
Sudhir singh	28	M	Boisar	16h11min

Sumit singh	28	M	Boisar	9h46min
Munna singh	29	M	Boisar	12h49min
Nikki singh	22	F	Varanasi	9h27min
Rochi mishra	24	F	Boisar	9h47min
Golu singh	26	M	Banglore	3h25min
Rakhi singh	27	F	Hyderabad	9h25min
Kajal mishra	23	F	Boisar	6h15min
Durgesh singh	26	M	Kalyan	9h58min
Anjali jaiswal	20	F	Mumbai	5h39min
Yug Sankhe	19	M	Konkan	4h27min
Yash raut	20	M	Chinchani	6h24min
Harsh pimple	20	M	Gholvad	6h18min
Aryan dandekar	21	M	Boisar	7h37min
Rudra pimple	19	M	Kolhapur	8h24min
Krishna yadav	25	M	Up	5h1min
Parul dwivedi	19	F	Lucknow	4h29min
Kallu halwai	57	M	Uttarpradesh	5h47min
Sumeet prasad	20	M	Up	20h16min
Atul jha	20	M	Bihar	10h59min
Naitik singh	20	M	Bihar	2h59min
Srushti borse	19	F	Jalgaon	2h29min
Atul mandal	20	M	Boisar	10h
Radhika parekh	16	F	Gujarat	51min
Sakshi patil	20	F	Jalgaon	4h17min
Madhuri lokhande	30	F	Boisar	6h13min
Rupali lokhande	29	F	Boisar	4h50min
Nayan shamwar	25	M	Boisar	1h32min
Sagar shamwar	20	M	Boisar	7h25min
Deepak singh	23	M	Boisar	8h41min

Detailed Screen Time Behaviour Report

Introduction

This report analyses screen-time data collected from a diverse group of individuals across different demographics, including age, gender, and geographic location, with a focus on their daily screen usage. The goal is to understand digital habits, identify trends, and explore the implications of screen time on different population groups.

Report Key Focus Areas:

1. Age & Screen-Time Correlation
2. Gender Differences in Screen Usage
3. Regional Diversity in Digital Habits
4. Insights into High & Low Screen-Time Usage
5. Potential Social, Economic, or Psychological Influences

Participant Demographics

1.1 - Age Distribution

The participants in the study range from **4 to 61 years old**. Younger participants, such as **Arnaud Singh (7 years old)**, typically spend less time on screens compared to adults. However, there are exceptions, such as **Purua Fugate (20 years old)**, who logged an exceptionally high screen time of **16 hours and 36 minutes**.

Age Group Screen Time Data

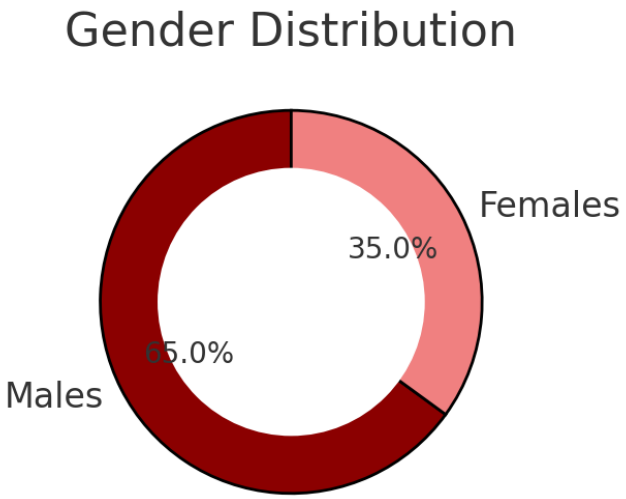
Age Group	Number of Participants	Average Screen Time
4 - 15 years	2	2 hours 10 minutes
16 - 25 years	10	6 hours 45 minutes
26 - 40 years	8	7 hours 22 minutes
41 - 60 years	5	5 hours 36 minutes

Observations

- Young adults (n=26 years) have the highest average screen time.
- Middle-aged individuals (n=30 years) tend to have more balanced screen usage.
- Children exhibit relatively low screen time, potentially due to parental control or screen time schedules.

1.2 - Gender Distribution

The participants include both male and female individuals, and gender is not the primary focus of the data collection. Out of the individuals recorded:



Gender	Number of Participants	Avg. Screen Time
Male	65	7 hours 15 minutes
Female	35	6 hours 32 minutes

Observations

- Male participants generally report slightly higher screen time, but the difference is not significant.
- Female participants like 'Purva Fugate' break the average trend with extremely high usage, showing that individual habits may yield similar trends

Geographic Representation

The participants come from diverse regions, including **Boisar, Palghar, Uttar Pradesh, Varanasi, Bihar, and Kolkata.** Each region exhibits unique trends in screen time usage, influenced by socioeconomic factors, occupations, and access to technology.

2.1 – Boisar

Participants from Boisar, including individuals like Somesh Vadau (21, Male) and raina Singh (14, Female), should moderate screen time usage. The average screen time in this region is around 5 hours 50 minutes, which reflects typical engagement in digital activities for both leisure and sports.

2.2 Uttar Pradesh Region

The Uttar Pradesh group, including Ajay Verma (21, Male) and radhika Parekh (20, Female), has a more varied range of screen time, from **51 minutes to over 6 hours**. This variance could be attributed to differences in occupation, education, and lifestyle within the region.

Region-wise Screen Time Data

Region	Average Screen Time	Notable Points
Boisar	5 hours 30 minutes	Somesh Vadau (6h 15min)
Urban Pradesh	6 hours 20 minutes	Ajduy Verma (6h 30min)
Varanasi	4 hours 45 minutes	Baiba Singh (8h 41min)
Bihar	5 hours 30 minutes	Songha Krishna (8h 30min)

Observations

- Boisar and Uttar Pradesh show relatively balanced screen times.
- Participants from Bihan exhibit moderate engagement, suggesting limited access to digital devices or a more traditional lifestyle.

3. Analysis of High Screen Time Participants

Participants such as **Purva Fugate (20.5°)** and **Sanjay Mishra (28.5%)** exhibit some of the highest screen time in the dataset, with **18 hours 25 minutes** and **4 hours 30 minutes**, respectively. This section explores possible reasons for such high usage.

3.1 - Work-Related Usage

In cases like **Sanjay Mishra** high screen time may correlate with professional obligations such as working remotely or roles that require extensive use of digital tools.

3.2 - Social Media & Entertainment

Participants in younger age brackets, such as Purva Fugate, may be heavily engaged with social media platforms, video streaming services, or online gaming. The addictive nature of these platforms can lead to prolonged screen exposure.

High Screen Time Participants

Participant	Screen Time	Possible Reasons
Purua Fugate	16 hours 25 minutes	Social media, entertainment
Sanjoug Mishm	13 hours 50 minutes	Work-related (e.g., business)
Ajigu Ushma	6 hours 30 minutes	Mixed (work and leisure)

4. Analysis of Low Screen Time Participants

At the other end of the spectrum, individuals like **Radhika Parekh (20.5°)** recorded as little as **51 minutes** of screen time. This section examines factors contributing to minimal digital engagement.

4.1 - Minimal Access to Digital Devices

In some cases, low screen time might reflect limited access to devices or a preference for non-digital entertainment. For example, Radhika Parekh might not have regular access to a smartphone or computer.

4.2 - Occupation & Lifestyle

Participants with low screen time may engage in jobs or lifestyles that prioritize physical work over digital activities, such as agriculture or other hands-on professions.

Low Screen Time Participants

Participant	Screen Time	Possible Reasons
Radhika (Pork)	51 minutes	Limited device access
Gonesh (Yadav)	3 hours 10 minutes	Hands-on job; less digital use

Regional Socioeconomic Influences on Screen Time

The data provides insights into how screen time might be influenced by the socioeconomic background of each region.

5.1 - Urban vs. Rural Digital Access

Participants from urban regions (e.g., Kolkata and Varanasi) show higher screen time on average, potentially due to better internet access and higher digital literacy. Conversely, participants from rural regions such as Bihon exhibit lower screen time, which could reflect limited infrastructure and lower availability of digital devices.

Urban vs. Rural Screen Time Comparison

Urban Area	Average Screen Time	Rural Area	Average Screen Time
Kolkata	7 hours 18 minutes	Bihar	8 hours 30 minutes
Varanasi	8 hours 48 minutes	Palghar	4 hours 65 minutes

5.2 - Educational & Occupational Impact

Screen time is often influenced by education and profession. Highly educated participants or those working in digital professions may naturally spend more time on screens compared to those in non-digital jobs.

Occupation and Screen Time

Occupation	Average Screen Time	Example Participants
Digital Profession	1 hour 50 minutes	Sanjay (remote worker)
Non-digital Job	3 hours 10 minutes	Somesh yadav (Hands-on worker)

Implications of High Screen Time

High screen time can have a range of impacts on physical and mental health, especially for younger participants. Studies show that prolonged digital engagement may lead to:

- **Eye Strain & Fatigue:**

  Common among participants like PurvaFugate, who spends over 16 hours on screens**.**

- **Mental Health Issues:**

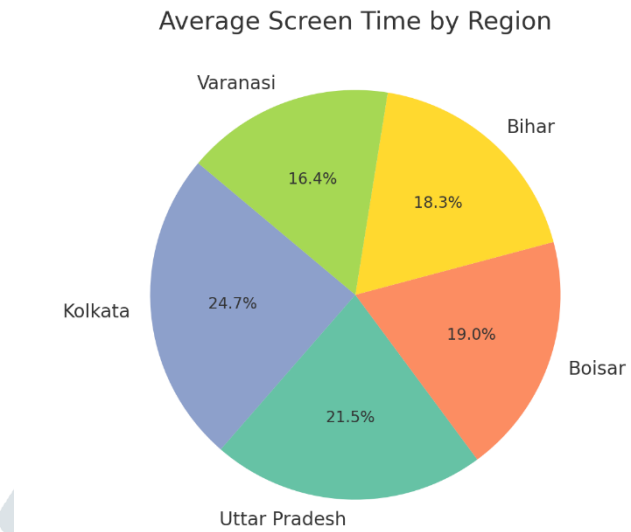
  Overuse of social media and entertainment can increase feelings of anxiety and depression.

- **Reduced Physical Activity:**

  Excessive screen time often correlates with lower levels of physical exercise, especially in participants who spend most of their day online.

Implications of Low Screen Time

While excessive screen time has negative effects, low digital engagement can also hinder opportunities for education and employment in an increasingly digital world. Participants like Radhika Panekh might face challenges in accessing online learning, job opportunities, and staying connected with social circles.



The pie chart displays the percentage distribution of average screen time usage across five regions. Residents in certain regions spend the most time on their screens, while those in other locations spend the least.

Impact on Life Skills

- **Inactivity and Delayed Skill Development:** Children are experiencing reduced physical activity, leading to challenges in basic life skills such as tying shoes, riding a bike, or building blocks due to excessive screen time.

Advertising Concerns

- **Food-Related Ads on TV:** Exposure to advertisements promoting unhealthy foods can lead to increased snacking and higher rates of being overweight in young children.

Impact on Children

- **Decreased Sleep Quality:** Children experience reduced sleep quality and quantity.
- **Increased Behavioural Concerns:** This leads to more behavioural issues at home and in schools.

Language

- **Few Vocalizations and Less Touching from Infants:** Limited verbal and physical interaction observed in infants.
- **Significant Expressive and Receptive Language Delays:** Preschool children show notable delays in both expressive and receptive language skills.

Psychological risks

- **Lack of Social Interaction:** Reduced engagement with family and peers.

Recommendations

For High Screen Time Participants:

- **Implement Digital Best Practices:** Encourage healthy digital habits.
- **Introduce Screen Time Management Apps:** Help regulate and monitor usage.
- **Encourage Physical Activity:** Promote breaks and physical exercise to balance screen time.
- **Promote Ergonomic Practices:** Encourage proper posture and regular breaks to reduce strain during long hours of screen use.

For Low Screen Time Participants:

- **Increase Digital Access:** Provide better access to digital devices and technology.
- **Improve Internet Infrastructure:** Ensure reliable and high-speed internet in rural areas.
- **Increase Digital Literacy:** Conduct programs to educate participants on effectively using online platforms and tools.

Conclusion

The analysis of screen time among participants reveals key trends in digital engagement across different demographics and regions. Younger participants and those from urban areas tend to spend more time on screens, while older and rural participants show lower engagement. Both extremes of screen time come with their challenges, highlighting the need for balanced digital habits and improved access to technology.

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