An Exploratory Study on the Effects of Digitization on Indian Youth, Their Social Competencies and Intergenerational Relations, from Mumbai City

Dr. Abhijeet Mohite[1], Dr. Anju Kapoor[2], Ms. Ananya Rajesh Deolalkar[3]
Professor, Usha Pravin Gandhi College, Mumbai, Maharashtra, India[1]
Principal, Usha Pravin Gandhi College, Mumbai, Maharashtra, India[2]
Mass Communication, Usha Pravin Gandhi College, Mumbai, Maharashtra, India[3]

Abstract: *This study explores the impact of constant digital connection, particularly smartphones, on youth. It examines how device use affects social behaviour, health, and family dynamics. The research investigates a gap where youth and parental perspectives haven't been combined. By analyzing consumption patterns and their impact on mental and physical health, the study aims to understand the complex consequences of digital dependence on young people and their relationships.*

Keywords: Youth, Digitization, Smartphone Use, Social Competencies, Mental Health, Anxiety, Cyberbullying, Parental perspectives, Social Media Usage, OTT platforms, Family Time

I. INTRODUCTION

In today's age, digitalization plays a dual role in the lives of both youth and parents, with both positive and negative impacts. For youth, digitalization offers a plethora of opportunities for learning, entertainment, and social connection. Access to educational resources and online platforms allow for self-paced learning and skill development, while media platforms provide avenues for networking, self-expression, and enhanced social interactions. However, the pervasive influence of digitalization also poses challenges for youth. Excessive screen time and digital distractions can lead to reduced productivity, poor mental and physical health, fear of missing out (FOMO), social isolation, and poor academic performance. Moreover, proximity to internet threats such as internet harassment, misinformation, and online attackers further poses a risk to all tech-savvy youngsters. Excessive screen time among children can lead to conflicts over device usage, bedtime routines, and family time. Finding a balance between embracing technology's benefits and mitigating its risks requires ongoing communication and mutual respect between youth and parents today.

- **Social Competence:** The term "social competence" (Orpenas, 2010) describes the capacity to have meaningful conversations with other people. The idea of social competence among youth in India is complex and encompasses the capacity of young people to successfully negotiate social interactions. It includes a wide range of abilities and qualities necessary for effective assimilation and engagement in society. The cornerstone of effective communication is for young people to be able to express their thoughts, ideas, and feelings clearly.

- **Phenomenon that arises due to digital overload:** Studies have established close links between depression and the use of social media, which also reduces interpersonal communication. Some phenomena that arise due to excessive device usage include FOMO, asocial behaviour, antisocial behaviour and phubbing. FOMO includes the perception of missing out, followed by compulsive behaviours to maintain social connections, and is associated with negative life experiences. Asocial behaviour refers to a pattern of behaviours characterized by a lack of desire to engage in social interactions or conform to social norms. Antisocial behaviour may be both hidden and overt, including acts of intentional harm, verbal abuse, peer bullying, and fighting. Depression is a frequent and significant medical ailment that negatively impacts feelings, thoughts, and behaviours, producing unhappiness and/or lack of interest in previously enjoyed activities, causing various mental and

physical difficulties. Anxiety is characterized by feelings of tension, concerned thoughts, and bodily changes such as elevated blood pressure.

- Peer pressure is when a peer group or individual influences others to change their values, attitudes, or behaviours to conform to the group and cyberbullying is the use of technology to harass, threaten, embarrass, or target another person.

- **Family, The Cultural Nucleus of India:** Family is an important institution in Indian culture, and the interests of the family usually take priority over those of the individual. Overall, the link between culture and family in India transcends generations, providing a framework for intergenerational relationships and familial communication.

SIGNIFICANCE OF THE STUDY

- **Understanding Digital Content Consumption and Social Behaviour:** This study explores the relationship between young people's online content consumption and their social behaviours, providing crucial insights into how India's digital ecosystem influences the next generation's social interactions and behaviours.

- **Exploring Psychological and Physical Effects of Digital Media Usage:** By examining social disconnection and behavioural phenomena caused by digital media, this research highlights the negative implications of excessive digital consumption on the mental and physical wellbeing of Indian youth.

- **Establishing Links Between Digital Media and Parent-Child Relationships:** The study correlates digital media usage with changes in time spent with parents, addressing the impact of smartphones on behavioural changes and parental concerns, thereby enhancing the understanding of family dynamics and intergenerational relationships.

- **Examining Intergenerational Dynamics in the Digital Age:** This research investigates intergenerational family dynamics amid digitization, emphasizing tensions from parental device restrictions and conflicts, and highlights how digitalization shapes family interactions and generational divides concerning technology attitudes.

- **Highlighting Consensus Between Indian Youth and Parents:** The study reveals a positive correlation between youth and parents' perspectives on digital media usage, emphasizing improved communication and understanding, fostering healthier digital habits, and strengthening familial relationships amid technological change.

RESEARCH GAP

This study addresses a significant gap concerning the changing dynamics of family structure and relationships in India due to technological advancements. Existing research often overlooks comprehensive studies dedicated to understanding parental perspectives without emphasizing their own device usage. This study aims to bridge this gap by considering both youth and parental viewpoints.

OBJECTIVES

- To assess the frequency and extent to which smartphone usage impacts a child's ability to complete planned work or tasks.

- To investigate the correlation between habitual smartphone usage and difficulty concentrating in various tasks, including classroom activities, assignments, and work, among young individuals.

- To investigate the prevalence and potential causes of neck and wrist pain associated with smartphone usage among children, in order to assess the impact of digital device use on physical well-being and inform strategies for promoting healthier technology habits in youth.

- To assess the level of dependence on smartphones among individuals and their perceived ability to cope without them, thereby gaining insights into the psychological impact of smartphone usage on daily life.

- To investigate the psychological impact of smartphone disengagement by examining the manifestation of feelings of impatience and fretfulness in individuals when not using their smartphones.

- To investigate the cognitive phenomenon of smartphone-related intrusive thoughts among respondents during periods of non-usage, thereby contributing to a deeper understanding of the psychological implications of smartphone dependency and its impact on daily cognition and attentional processes.
- To assess the level of perceived dependency on smartphones among respondents and their willingness to continue usage despite experiencing negative impacts on daily life.
- To assess the frequency and motivations behind smartphone usage for the purpose of staying updated on conversations across social media platforms such as WhatsApp, Instagram, and Facebook, among participants in the study.
- To investigate instances of prolonged smartphone usage beyond intended durations among participants, thereby examining the prevalence and potential implications of excessive phone usage habits within the target demographic.
- To assess the perceived extent of smartphone usage by the participant, as reported by feedback from acquaintances or observers, in order to gain insights into external perceptions of personal digital device usage.

Hypothesis

- "I have a hard time concentrating in class, while doing assignments or working because I have the habit of checking my Smartphone." Ho- We reject the null hypothesis and we accept the alternate hypothesis, which shows that the opinions of the youth and parents are significantly different.
- "Many times, the back of my neck or wrists pain while using my Phone." Ho- Here, we reject the null hypothesis since the statements of parents and children are different.
- "If I don't have a phone, I won't be able to stand it." Ho- There is a significant difference in opinions of the parent and child, in regards to this statement, so we reject the null hypothesis and accept the alternate hypothesis.
- "I tend to feel impatient and fretful when I am not using my Smartphone" Ho- Here, we fail to reject the null hypothesis.
- "I tend to think of my Smartphone sometimes, when I am not using it." Ho- Here, we fail to reject the null hypothesis as there is positive correlation between statements of parents and youth.
- "If ever, my daily life gets affected due to my Phone, I will still continue using it." Ho- Here, we fail to reject the null hypothesis.
- "Many a times, I just check my Phone so as to not miss conversations between other people on WhatsApp, Instagram or Facebook." Ho- In this statement, we fail to reject the null hypothesis.
- "There are times when I land up using my Phone for way longer than intended." Ho- For this statement, accept the alternate hypothesis as we reject the null hypothesis.
- "I have heard from others that I use my Phone too much at times." Ho- For this statement, we fail to reject the null hypothesis and accept the alternate hypothesis.

II. REVIEW OF LITERATURE

This chapter explores the negative impacts of excessive digitalization on youth, such as anxiety, social comparison, FOMO, antisocial behaviour and smartphone addiction, which affect sleep patterns and overall health. It also examines how increased smartphone use changes relations between youth and parents, leading to issues like academic performance concerns, cultural divides, reduced quality time, and parental anxiety. Additionally, it delves into understanding the effects these phenomena have on intergenerational relationships. This review of literature aims to understand these complexities in depth.

Smartphones have become indispensable tools in today's digital age, particularly among the youth, revolutionizing communication and access to information through social networking sites. They exert profound influences across various domains such as business, education, health and social interactions, albeit raising concerns about health implications such as eye strain and mental health issues (Rubio, 2018). In India, the rapid pace of digitalization has been fuelled by widespread smartphone adoption, fundamentally altering how individuals access apps and services.

Initiatives like Digital India underscore the nation's ambition to emerge as a global digital powerhouse, although challenges like the digital divide persist, particularly in rural areas (Tamble, 2018). Also, Mobile Phone Addiction (MPA) has emerged as a critical concern, characterized by excessive and compulsive smartphone use that significantly impacts productivity, mental health, and social relationships, particularly among the youth. Research indicates associations between MPA and anxiety, depression, and sleep disorders (Choliz, 2012; SK & Naik, 2019). The proliferation of smartphones among Indian youth has reshaped social dynamics and interpersonal relationships. Social media platforms such as Facebook, Instagram, and WhatsApp have become primary avenues for communication, content sharing, and community building. These platforms not only influence societal norms but also shape behaviours and perceptions among adolescents and young adults (Singh, 2019). However, excessive use of social media has raised concerns about its impact on mental health, contributing to feelings of loneliness, anxiety, and low self-esteem (Malik et al., 2023).

Moreover, the integration of digital devices into daily life has also transformed family dynamics and parental relationships. The omnipresence of technology presents challenges in maintaining balanced screen time and promoting meaningful offline interactions. (Rideout, Foehr & Roberts, 2010; Mishra & Sharma, 2020). Effective parental mediation involves establishing clear boundaries, fostering digital literacy, and facilitating open dialogue about online risks and etiquette (Livingstone & Byrne, 2018).

Mobile technologies have revolutionized learning environments by offering personalized learning experiences, expanding educational access, and facilitating remote learning opportunities. E-learning platforms and mobile apps provide interactive content delivery and adaptive learning modules that cater to diverse learning needs, thereby enhancing student engagement and academic outcomes (Alyonzo et al., 2020; Dash & Dash, 2023).

The impact of smartphones on youth development is multifaceted, influencing cognitive development, social interactions, and academic performance. While digital technologies offer numerous benefits, their pervasive use has raised valid concerns. Addressing these challenges necessitates a balanced approach that promotes responsible technology use, cultivates digital literacy, and supports healthy family relationships (Twenge, 2017; Kuss & Griffiths, 2017). Future research should focus on comprehensively understanding the long-term effects of digitalization on youth development and devising strategies to optimize benefits while mitigating potential risks. This requires collaboration among policymakers, educators, healthcare professionals, and parents to ensure that digital technologies contribute positively to the holistic development of young individuals in today's interconnected world (Dhir et al., 2021; Elhai et al., 2022). Many studies have indicated that poor parent-child communication is highly linked to problematic smartphone use and the kids are less likely to listen to parents, with whom they have a poorer relation then compared to the kids who have a good nurturing relation with their parents.

In conclusion, while smartphones and digital technologies offer numerous benefits, their pervasive use raises concerns about their impact on mental health, social relationships, and educational outcomes. Future research should focus on understanding the long-term effects of digitalization on youth development and formulating strategies to maximize its benefits while mitigating potential risks. Smartphones and all types of technology has interfered with parental relations that are gradually reducing and changing as each day passes.

III. RESEARCH METHODOLOGY

The study utilized purposive sampling to recruit youth and parents from Mumbai, aiming to gain insights into the challenges faced by youth due to digitalization. It also explored parental viewpoints on the influence of smartphone usage on children's communication skills, employing a mixed-methods approach to provide a comprehensive understanding of digitalization's effects on individuals and families.

Sample Selection

In Mumbai City, 200 participants were randomly sampled, including 100 youth aged 15-29 (63 female, 38 male) reporting on digital device usage, and 100 parents aged 35-65 (56 female, 46 Male, 3 others) providing insights into their children's device usage and its impact on relationships. Convenience sampling was employed based on participant availability.

Sample Size and Justification

The sample of 200 respondents, evenly split between youth and parents, enables a thorough exploration of how digitization impacts Indian youth and intergenerational relationships. Focusing on youth aged 15-29 aligns with national youth policy objectives, while including parents aged 35-65 ensures representation from the generation influencing youth attitudes towards technology. This balanced approach allows for meaningful comparisons and meets statistical significance criteria, ensuring robust and reliable data.

Tools used

The Smartphone Addiction Scale-Short Version (SAS-SV) assesses problematic smartphone use with 10 items rated on a Likert scale, and it has been extensively validated for reliability. It measures excessive use, withdrawal symptoms, and daily interference, making it suitable for assessing youth smartphone addiction and its impact on social competencies and intergenerational relationships.

Cronbach's Alpha

The SAS-SV demonstrated performance nearly equal to the SAS in predicting and concurrently assessing smartphone addiction. This suggests it could be a viable and time-saving alternative. SAS-SV's Cronbach's Alpha coefficient is $0.884 >$ the threshold level of 0.7. This proves that this tool is internally consistent and hence all the items included are highly correlated with one another and is a good alternative for the SAS Scale version.

Procedure

A survey with 10 SAS-SV questions was distributed online to 100 youth and 100 parents in Mumbai, using convenience sampling, and responses were rated on a five-point Likert scale. Secondary research involved studying various sources and ethically securing permissions, with the best portions selected and cited to address the research gap.

IV. DATA ANALYSIS AND INTERPRETATION

Statistical Analysis

This section provides an overview of the statistical analysis framework used to examine the correlation between device usage and intergenerational relationships. This section presents a comprehensive overview of the statistical framework and analysis of the study, which aims to highlight the intricate correlation between device usage and navigation of intergenerational relationships. Quantitative methods were used to analyse the survey and data collected from 200 participants.

Normality Tests

This study employed multiple tests of normality, including the Shapiro-Wilk, Kolmogorov-Smirnov and Anderson-Darling tests, to assess the distributional properties of the data pertaining to smartphone usage behaviours. The Shapiro-Wilk test is a widely used method for assessing normality, mainly 50, hence the data appears skewed. The Kolmogorov-Smirnov test is a non-parametric test that evaluates whether a sample comes from a specific distribution, such as a normal distribution and hence this test was mainly considered since the sample size is more than 50 people (200). Additionally, the Anderson-Darling test, which is a more sensitive variant of the Kolmogorov-Smirnov test.

Table 1. Normality Test

Tests of Normality		Statistic	p
Many a times, I miss planned work due to Smartphone usage	Shapiro-Wilk	0.928	< .001
	Kolmogorov-Smirnov	0.181	< .001
	Anderson-Darling	5.54	< .001
I have a hard time concentrating in class, while doing assignments or working because I have the habit of checking my Smartphone.	Shapiro-Wilk	0.946	< .001

IJARSCT

ISSN (Online) 2581-9429

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.67

Volume 5, Issue 1, February 2025

	Kolmogorov-Smirnov	0.176	< .001
	Anderson-Darling	4.6	< .001
Many times, the back of my neck or wrists pain while using my Phone.	Shapiro-Wilk	0.946	< .001
	Kolmogorov-Smirnov	0.161	< .001
	Anderson-Darling	4.3	< .001
If I don't have a phone, I won't be able to stand it.	Shapiro-Wilk	0.873	< .001
	Kolmogorov-Smirnov	0.204	< .001
	Anderson-Darling	8.5	< .001
I tend to feel impatient and fretful when I am not using my Smartphone	Shapiro-Wilk	0.961	< .001
	Kolmogorov-Smirnov	0.102	0.03
	Anderson-Darling	2.14	< .001
I tend to think of my Smartphone sometimes, when I am not using it.	Shapiro-Wilk	0.951	< .001
	Kolmogorov-Smirnov	0.131	0.002
	Anderson-Darling	2.91	< .001
If ever, my daily life gets affected due to my Phone, I will still continue using it.	Shapiro-Wilk	0.886	< .001
	Kolmogorov-Smirnov	0.206	< .001
	Anderson-Darling	7.61	< .001
Many a times, I just check my Phone so as to not miss conversations between other people on WhatsApp, Instagram or Facebook.	Shapiro-Wilk	0.954	< .001
	Kolmogorov-Smirnov	0.138	< .001
	Anderson-Darling	2.77	< .001
There are times when I land up using my Phone for way longer than intended.	Shapiro-Wilk	0.904	< .001
	Kolmogorov-Smirnov	0.2	< .001
	Anderson-Darling	6.33	< .001
I have heard from others that I use my Phone too much at times.	Shapiro-Wilk	0.924	< .001
	Kolmogorov-Smirnov	0.169	< .001
	Anderson-Darling	4.78	< .001
Note. Additional results provided by *moretests*			

Statement wise understanding of the Shapiro-Wilk Test, Kolmogorov-Smirnov Test and Anderson-Darling Tests.

1. "Many a times, I miss planned work due to Smartphone Usage." The Shapiro-Wilk test ($p < 0.001$), Kolmogorov-Smirnov test ($p < 0.001$), and Anderson-Darling test (statistic 5.54, $p < 0.001$) all indicate significant departures from normality.

2. "I have a hard time concentrating in class, while doing assignments or working because I have the habit of checking my Smartphone": The Shapiro-Wilk ($p < 0.001$), Kolmogorov-Smirnov ($p < 0.001$), and Anderson-Darling tests (statistic 4.6, $p < 0.001$) consistently show that the data deviates significantly from normality.

3. "Many times, the back of my neck or wrists pain while using my Phone": The Shapiro-Wilk ($p < 0.001$), Kolmogorov-Smirnov ($p < 0.001$), and Anderson-Darling tests (statistic 4.3, $p < 0.001$) all indicate significant deviations from normality for data on neck or wrist pain.

4. "If I don't have a phone, I won't be able to stand it": The Shapiro-Wilk ($p < 0.001$), Kolmogorov-Smirnov ($p < 0.001$), and Anderson-Darling tests (statistic 8.5, $p < 0.001$) indicate the data significantly deviates from normality.

5. "I tend to feel impatient and fretful when I am not using my Smartphone": While the Kolmogorov-Smirnov test ($p = 0.03$) suggests normality, the Shapiro-Wilk ($p < 0.001$) and Anderson-Darling tests ($p < 0.001$) indicate significant deviations from normality.

6. "I tend to think of my Smartphone sometimes when I am not using it": The Shapiro-Wilk and Anderson-Darling tests (both $p < 0.001$) show significant deviations from normality, whereas the Kolmogorov-Smirnov test ($p = 0.002$) suggests potential normality.

7. "If ever, my daily life gets affected due to my Phone, I will still continue using it": The Shapiro-Wilk ($p < 0.001$), Kolmogorov-Smirnov ($p < 0.001$) and Anderson-Darling tests (statistic 7.61, $p < 0.001$) consistently indicate significant deviations from normality.

8. "Many a times, I just check my Phone so as to not miss conversations between other people on WhatsApp, Instagram, or Facebook": The Shapiro-Wilk ($p < 0.001$), Kolmogorov-Smirnov ($p < 0.001$) and Anderson-Darling tests (statistic 2.77, $p < 0.001$) all indicate significant deviations from normality.

9. "There are times when I land up using my Phone for way longer than intended": The Shapiro-Wilk ($p < 0.001$), Kolmogorov-Smirnov ($p < 0.001$) and Anderson-Darling tests (statistic 6.33, $p < 0.001$) all show significant deviations from normality.

10. "I have heard from others that I use my Phone too much at times": The Shapiro-Wilk ($p < 0.001$), Kolmogorov-Smirnov ($p < 0.001$) and Anderson-Darling tests (statistic 4.78, $p < 0.001$) all indicate significant deviations from normality.

Independent Sample T-test of Youth and Parents

The Independent Samples T-Test was conducted to compare the sample means between two groups. The results of the t-test indicated several statistically significant differences between parents and youth, however, not all statements showed significant differences, suggesting areas of similarity in their smartphone-related behaviours and attitudes.

Table 2. Independent Sample T-test

		Statistic	df	p
Many a times, I miss planned work due to Smartphone usage	Student's t	-5.050	199	< .001
I have a hard time concentrating in class, while doing assignments or working because I have the habit of checking my Smartphone.	Student's t	-6.899	199	< .001
Many times, the back of my neck or wrists pain while using my Phone.	Student's t	-6.087	199	< .001
If I don't have a phone, I won't be able to stand it.	Student's t	0.770	199	0.779
I tend to feel impatient and fretful when I am not using my	Student's t	2.392	199	0.991

Smartphone				
I tend to think of my Smartphone sometimes, when I am not using it.	Student's t	1.562	199	0.940
If ever, my daily life gets affected due to my Phone, I will still continue using it.	Student's t	-0.639	199	0.262
Many a times, I just check my Phone so as to not miss conversations between other people on WhatsApp, Instagram or Facebook.	Student's t	-1.890	199	0.030
There are times when I land up using my Phone for way longer than intended.	Student's t	-4.666	199	< .001
I have heard from others that I use my Phone too much at times.	Student's t	0.895	199	0.814
Note. $H_a \, \mu_{Parents} < \mu_{Youth}$				

Independent Samples T-Test Statement wise understanding:
Statements with a significant difference

1. Missing planned work due to Smartphone usage: Based on the data, we reject the idea that Parents (μ Parents) and Youth (μ_Youth) have similar experiences with missing planned work due to phones. Since the P value is < 0.001, it signifies that the opinions of parents and youth, with regards to the child using the phone and missing planned work are significantly different.

2. Difficulty concentrating in class or at work due to phone: The data leads us to reject the claim that Parents and Youth have similar opinions about youth facing difficulty concentrating due to phone use (H_0). Since the P value is < 0.001, it signifies that the opinions of parents and youth, with regards to the child using the phone and missing planned work are significantly different.

3. Neck/wrist pain while using phone: The analysis suggests we should reject the null hypothesis (H_0) which stated Parents and Youth have similarly recognised average scores for neck/wrist pain related to phone use. The highly significant p-value (p-value < 0.001) indicates a difference in opinions of both.

4. Using phone longer than intended: The data compels us to reject the null hypothesis (H_0) which proposed Parents and Youth have similarly recognised youth tendencies to use their phones for longer than intended. The highly significant p-value (p-value < 0.001) suggests Youth and parents have recognised that Youth are more likely to use their phones for longer.

Statements with No Significant Differences:

1. Won't be able to stand not having a phone: Based on the data, we reject the idea that Parents (μ Parents) and Youth (μYouth) have similar experiences with their kids missing planned work due to phone use (H_0). Since the P value is >0.001, it signifies that the opinions of parents and youth, with regards to the child using the phone and missing planned work are significantly similar there is no significant difference in the opinions of the two.

2. Feeling impatient and fretful without phone: The data doesn't provide enough evidence to reject the null hypothesis (H_0). This hypothesis suggested that Parents and Youth have recognised a similar experience with impatience levels and fretfulness in youth when not using their phones. The p-value (0.991) is not statistically significant, indicating no clear difference between thoughts of these groups.

3. Thinking about phone when not in use: The analysis suggests we should fail to reject the null hypothesis (H_0), which proposed that Parents and Youth think that Youth think about their phones when not actively using them. The p-value (0.940) is not statistically significant, indicating no clear differentiation between parental and youth perspectives.

IJARSCT

ISSN (Online) 2581-9429

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.67

Volume 5, Issue 1, February 2025

4. Continuing phone use despite negative impacts on life: There's not enough evidence to reject the null hypothesis (H_0), which stated there's no difference in continuing phone use despite negative impacts on daily life between Parents and Youth. The p-value (0.262) is not statistically significant, indicating no clear difference between these groups based on this data.

5. Checking phone to avoid missing social media interactions: While the p-value (0.030) is statistically significant, it's marginally so. We might cautiously reject the null hypothesis (H_0), which stated Parents and Youth together agree that youth check their phones to avoid social interactions.

6. Hearing from others about excessive phone use: While the p-value (0.814) is statistically significant, so we reject the null hypothesis (H_0), which states that Youth and Parents both agree that youth check their phones to avoid social interactions. There is no significant difference in between these two groups.

Correlation Matrix

The correlation matrix presents the pairwise linear correlations between different statements related to smartphone usage, as assessed by Pearson's correlation coefficient (r). A low p-value ($< .001$) associated with each correlation coefficient suggests statistical significance, implying that the observed correlations are unlikely to occur by random chance.

Table 3. Correlation Matrix

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Q1	**Pearson's r**	—	0.64	0.475	0.399	0.185	0.165	0.351	0.346	0.514	0.25
	df	—									
	p-value	—									
Q2	**Pearson's r**	0.64	—								
	df	199	—								
	p-value	< .001	—								
Q3	**Pearson's r**	0.475	0.609	—							
	df	199	199	—							
	p-value	< .001	< .001	—							
Q4	**Pearson's r**	0.399	0.405	0.257	—						
	df	199	199	199	—						
	p-value	< .001	< .001	< .001	—						
Q5	**Pearson's r**	0.185	0.225	0.184	0.419	—					
	df	199	199	199	199	—					
	p-value	0.009	0.001	0.009	< .001	—					
Q6	**Pearson's r**	0.165	0.16	0.21	0.339	0.682	—				
	df	199	199	199	199	199	—				
	p-value	0.019	0.023	0.003	< .001	< .001	—				
Q7	**Pearson's r**	0.351	0.351	0.307	0.527	0.336	0.291	—			
	df	199	199	199	199	199	199	—			

IJARSCT

ISSN (Online) 2581-9429

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.67

Volume 5, Issue 1, February 2025

	p-value	< .001	< .001	< .001	< .001	< .001	< .001	—			
Q8	**Pearson's r**	0.346	0.388	0.4	0.32	0.326	0.256	0.33	—		
	df	199	199	199	199	199	199	199	—		
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	< .001	—		
Q9	**Pearson's r**	0.514	0.523	0.411	0.368	0.245	0.276	0.472	0.404	—	
	df	199	199	199	199	199	199	199	199	—	
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	—	
Q10	**Pearson's r**	0.25	0.249	0.204	0.35	0.454	0.496	0.478	0.237	0.36	—
	df	199	199	199	199	199	199	199	199	199	—
	p-value	< .001	< .001	0.004	< .001	< .001	< .001	< .001	< .001	< .001	—

Statement wise understanding of the Pearson's Correlation Test
Statements with a positive correlation:
1. "Many a times, I miss planned work due to Smartphone usage":
- For question number one, the Pearson correlation coefficient indicates a moderately strong positive correlation with question two, suggesting that Youth and Parents both have realised how youth who often miss planned work due to smartphone usage tend to also experience difficulty concentrating in class or while working because of smartphone distractions.
- In the provided Pearson correlation matrix, the correlation between question Q1 and question Q3 is positive and moderate ($r = 0.475$, $p < .001$).
- In the provided Pearson correlation matrix, the correlation between question Q1 and question Q4 is positive and moderate ($r = 0.399$, $p < .001$).

2. "I have a hard time concentrating in class, while doing assignments or working because I have the habit of checking my Smartphone":
- This statement exhibits a significant positive correlation with "Many times, the back of my neck or wrists pain while using my Phone" ($r = 0.609$, $p < .001$).

3. "Many times, the back of my neck or wrists pain while using my Phone":
- There is a moderate positive correlation between this statement and "If I don't have a phone, I won't be able to stand it" ($r = 0.257$, $p < .001$).

4. "If I don't have a phone, I won't be able to stand it"
- This statement shows a weak positive correlation with "I tend to feel impatient and fretful when I am not using my Smartphone" ($r = 0.419$, $p < .001$).

5. "I tend to feel impatient and fretful when I am not using my Smartphone"
- There is a significant positive correlation between this statement and "I tend to think of my Smartphone sometimes when I am not using it" ($r = 0.682$, $p < .001$).

6. "I tend to think of my Smartphone sometimes when I am not using it"
- This statement exhibits a weak positive correlation with "If ever, my daily life gets affected due to my Phone, I will still continue using it" ($r = 0.339$, $p < .001$).

7. "If ever, my daily life gets affected due to my Phone, I will still continue using it"

- There is a moderate positive correlation between this statement and "Many a times, I just check my Phone so as to not miss conversations between other people on WhatsApp, Instagram or Facebook" ($r = 0.291$, $p < .001$).

8. "Many a times, I just check my Phone so as to not miss conversations between other people on WhatsApp, Instagram, or Facebook"

- This statement shows a moderate positive correlation with "There are times when I land up using my Phone for way longer than intended" ($r = 0.330$, $p < .001$)

9. "There are times when I land up using my Phone for way longer than intended"

- There is a moderate positive correlation between this statement and "I have heard from others that I use my Phone too much at times" ($r = 0.404$, $p < .001$).

10. "I have heard from others that I use my Phone too much at times"

- This statement exhibits a weak positive correlation with "Many a times, I miss planned work due to Smartphone usage" ($r = 0.250$, $p < .001$)

V. CONCLUSION

The research results and the reasons for shifts in intergenerational dynamics due to digitalization. The primary objective was to understand the challenges faced by youth due to digitalization, including mental health issues and physical ailments from excessive device usage, and its role in family dynamics and social competencies. A critical research gap was addressed by analyzing previous studies that extensively explored the impact of social media on youth behaviour and family time reduction due to device usage but lacked comprehensive insights into parental perspectives independent of their own device usage.

The study hypothesizes a significant relationship between increased digitization and reduced parent-youth relationships, emphasizing the need to consider both generations' experiences and challenges in navigating the digital landscape. Research indicates a direct correlation between increased smartphone usage and negative outcomes like mental health issues, social isolation, and addictive behaviours. Parents also face challenges in navigating the digital landscape and monitoring their children's online activities. The generational gap in digital literacy and evolving technology adds complexity to the parent-child relationship, raising concerns about privacy, safety, and family dynamics. In conclusion, while smartphones and digitalization offer many opportunities, they also present significant challenges, particularly regarding youth well-being and family dynamics.

Recommendations for Parents

1. Designated Device-Free Time or Zones in the house: If parents establish specific areas in the house, such as the dining room or living room, where smartphone usage is prohibited, it will allow the child to be away from their phone for a while

2. Time constraints on device usage: If parents implement designated time slots during the day when the child can access their phones or use their devices, even for their study time, kids will realise the importance of using their devices only in the designated time period.

3. Parental Role Modelling: Parents can lead by example by demonstrating healthy smart phone habits themselves. When parents themselves restrict screen time, especially when in social situations and prioritise face to face interactions, naturally as the kids grow up, they will acknowledge the same behaviour.

4. Interactive Outdoor Activities: Encourage outdoor activities that promote physical exercise and social interaction. Organize family outings to parks, playgrounds, or nature trails where children can engage in active play, explore their surroundings, and interact with peers in a screen-free environment.

Recommendations for Youth

1. Creating a Digital Detox Plan: Developing a personalized digital detox plan outlining specific times and activities to help one abstain from using their smartphones.

2. Setting Screen Time Limits: Using built-in screen time management features or third-party apps to set daily limits on smartphone usage. Establishing boundaries for screen time can help one regulate usage habits and prioritize offline activities that contribute to your well-being. There is also an option of blocking certain website or application use for the day.

3. Practicing Mindful Smartphone Use: Cultivating awareness of smartphone usage patterns and their impact on mental and emotional well-being. Before reaching for the phone, pausing and assessing whether the usage is necessary or habitual.

4. Engaging in Offline Activities: Exploring alternative activities that do not involve smartphone usage, such as reading, drawing, cooking, or playing musical instruments. Engaging in offline hobbies and interests provides opportunities for personal growth, creativity, and relaxation away from digital screens.

5. Charging stations not near the bed: One of the unique solutions which people can follow, only if feasible, is to have charging points for all devices, outside the bedrooms and not near the bed.

These are some of the solutions and recommendations formulated for parents and youth, who themselves want to take it up and maintain healthier digital habits.

REFERENCES

[1]. 2017. YouTube: Home. https://www.google.com/search?q=how+do+childrens+expectations+from+parents+due+to+social+media+cause+aprental+guilt+&newwindow=1&sca_esv=3b7dfdd0f4a7b3ea&rlz=1C1CHBF_enIN1048IN1048&sxsrf=ACQVn0_Jj0G4hurm7alA_Fcz2Z1LxHOsXg%3A1709736419851&ei=44HoZc-5M6fh2ro.

[2]. Adair, Catherine S., and Teresa H. Barker. n.d. "The Big Disconnect Protecting Childhood and Family Relationships in the Digital Age." Wikipedia. Accessed April 13, 2024. https://www.google.co.in/books/edition/The_Big_Disconnect/_k2dKQmwkzoC?hl=en&gbpv=0.

[3]. Agarwal, Pankhuri. 2023. "A Concurrent and Longitudinal Examination of Interpersonal Relations and Depressive Symptoms Among Young Adults in India." ProQuest. https://www.proquest.com/openview/a1ce3e71d3943cce6534507f6e23e509/1?pq-origsite=gscholar&cbl=18750&diss=y.

[4]. Alyonzo, Rea, Junayd Hussain, Saverio Stranges, and Kelly S. Anderson. 2020. "Interplay between social media use, sleep quality, and mental health in youth: A systematic review." Science Direct. https://www.sciencedirect.com/science/article/abs/pii/S108707922030157X.

[5]. Barrie, Courtney K., John Bartkowski, and Timothy Haverda. 2019. "The Digital Divide among Parents and Their Emerging Adult Children: Intergenerational Accounts of Technologically Assisted Family Communication." MDPI. https://www.mdpi.com/2076-0760/8/3/83.

[6]. Bhardwaj, Akashdeep, Vinay Avasthi, and Sam Goundar. 2018. "(PDF) Impact of Social Networking on Indian Youth-A Survey." ResearchGate. https://www.researchgate.net/publication/322538324_Impact_of_Social_Networking_on_Indian_Youth-A_Survey.

[7]. Bloemen, Noor, and David Connick. 2020. "Social Media and Fear of Missing Out in Adolescents: The Role of Family Characteristics." Research Gate. https://journals.sagepub.com/doi/epub/10.1177/2056305120965517.

[8]. Challies, Tim. 2015. "The Next Story: Faith, Friends, Family, and the Digital World." Wikipedia. https://books.google.co.in/books?id=oPR9BAAAQBAJ&dq=family+relationships+in+the+digital+world+&lr=&source=gbs_navlinks_s.

[9]. Chandran, Suhas, Supriya Mathur, and Kishor Rao. 2019. "Media and the role of digital psychiatry in mental health." Taylor and Francis Online. https://www.tandfonline.com/doi/full/10.1080/2575517X.2019.1651625.

[10]. Choliz, Mariano. 2012. "Mobile-phone addiction in adolescence: The Test of Mobile Phone Dependence (TMD)." Googlr Scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.researchgate.net/profile/Mariano-Choliz/publication/284690452_Mobile-

phone_addiction_in_adolescence_The_Test_of_Mobile_Phone_Dependence_TMD/links/5b4d6e5ca6fdcc8da e247112/Mobile-phone-addictio.

[11]. Dar, Showkat A., and Dolly Nagrath. 2022. "The Impact that social media has had on Today's Generation of Indian Youth: An Analytical Study." ResearchGate. https://www.researchgate.net/publication/362072284_The_Impact_that_social_media_has_had_on_Today's_ Generation_of_Indian_Youth_An_Analytical_Study.

[12]. Dash, Preeti, and Suhasini Dash. 2023. "OTT or Over-the-Top Profanity ? A Study on Language and Young Adult Perceptions." Google Scholars. https://efaidnbmnnnibpcajpcglclefindmkaj/https://scope-journal.com/assets/uploads/doc/a7159-1772-1782.202317582-doi.pdf.

[13]. Dash, Preeti, and Suhasini Dash. 2023. "OTT or Over-the-Top Profanity? A Study on Language and Young Adult Perceptions." Google Scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://scope-journal.com/assets/uploads/doc/a7159-1772-1782.202317582-doi.pdf.

[14]. Devamani, Sara, Hyvi Paul, Josmi George, Sameera Begum, Sharin D'souza, and Melba Lobo. 2019. "Parent's perception regarding mobile phone usage led behaviour changes in children." SciSpace. https://typeset.io/papers/parent-s-perception-regarding-mobile-phone-usage-led-2u4ra7ebei.

[15]. Domoff, Sarah, Aubrey Borgen, Ryan Foley, and Anissa Maffet. 2019. "Excessive Use of mobile devices and Childrens physical health." Wiley Online Library. https://onlinelibrary.wiley.com/doi/epdf/10.1002/hbe2.145.

[16]. Duarlap, Enver, and Lügen Güneş. 2023. "Exploring of Parental Attitudes in the Context of the Digitalized Family." Google Scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://dergipark.org.tr/en/download/article-file/2923046.

[17]. Foerster, Milena, Andrea Henekke, Shala Mhlanga, and Martin Roosli. 2019. "Impact of Adolescents' Screen Time and Nocturnal Mobile Phone-Related Awakenings on Sleep and General Health Symptoms: A Prospective Cohort Study." MDPI.COM. https://www.mdpi.com/1660-4601/16/3/518.

[18]. "FOMO and Its Fallout: How Social Medias Impact Your Mental Health." 2023. Varthana. https://varthana.com/student/fomo-and-its-fallout-how-social-medias-impact-your-mental-health/.

[19]. Gangopadhay, Saswati, and Debarati Dhar. 2014. "SOCIAL NETWORKINGSITES AND PRIVACYISSUES CONCERNING YOUTHS." Google Scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://d1wqtxts1xzle7.cloudfront.net/55143502/A_2-libre.pdf?1511938783=&response-content-disposition=inline%3B+filename%3DSOCIAL_NETWORKING_SITES_AND_PRIVACY_ISSU.pdf&Expi res=1712471318&Signature=YCy2~7V.

[20]. Kaspersky. 2021. "Raising the smartphone generation: New research into how parents and children manage their digital habits." Kaspersky. https://www.kaspersky.com/blog/digital-habits-report-2021/.

[21]. Kemp, Simon. 2024. "India rising — DataReportal – Global Digital Insights." DataReportal. https://datareportal.com/reports/digital-2024-deep-dive-india-rising.

[22]. Kemp, Simon. 2024. "Digital 2024: India — DataReportal – Global Digital Insights." DataReportal. https://datareportal.com/reports/digital-2024-india.

[23]. Livingstone, Sonia, and Jasmine Byrne. 2018. "Parenting in the Digital Age The Challenges of Parental Responsibility in Comparative Perspective." Google Scholar. https://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1535895&dswid=-8705.

[24]. Lodha, Pragya. 2018. "Internet Addiction, Depression, Anxiety and Stress among Indian Youth." Research Gate. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://indianmentalhealth.com/pdf/2018/vol5-issue4/OR5%20PRAGYA%20LODHA.pdf.

[25]. Malik, Lipilka, Ghazi Shehnawaz, Usama Rehman, Pragyendu, Ritika Unniyal, and Mark Griffiths. 2023. "Mediating Roles of Fear of Missing Out and Boredom Proneness on Psychological Distress and Social Media Addiction Among Indian Adolescents." NCBI. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10242220/.

[26]. Mittal, Aditi, and Nitin Bansal. 2019. "The Impact of Technological Advancement on Digital Addiction Level of Youth in India." Google Scholar chrome-

extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.researchgate.net/profile/Nitin-Bansal-9/publication/358286018_The_Impact_of_Technological_Advancement_on_Digital_Addiction_Level_of_Youth_in_India/links/61fbb3564393577abe0acda3/The-Impact-of-.

[27]. Mittal, Aditi, and Nitin Bansal. 2022. "The Impact of Technological Advancement on Digital Addiction Level of Youth in India." Google Scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.researchgate.net/profile/Nitin-Bansal-9/publication/358286018_The_Impact_of_Technological_Advancement_on_Digital_Addiction_Level_of_Youth_in_India/links/61fbb3564393577abe0acda3/The-Impact-of-.

[28]. Nagpal, Namita, and Survesh D. Tripathi. 2019. "(PDF) New media, youngsters and family: An emerging culture of changing communication practices in Indian families – a study in Delhi and NCR." ResearchGate. https://www.researchgate.net/publication/337237289_New_media_youngsters_and_family_An_emerging_culture_of_changing_communication_practices_in_Indian_families_-_a_study_in_Delhi_and_NCR.

[29]. "95% of Indian parents concerned about screen addiction of children survey." 2017. YouTube: Home. http://en-survey-124012400247_1.html.

[30]. Onyeator, Ijeoma, and Ngozi Okpara. 2019. "Human Communication in a Digital Age: Perspectives on Interpersonal Communication in the Family." Research Gate. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.researchgate.net/profile/Ijeoma-Onyeator/publication/342773123_Human_Communication_in_a_Digital_Age_Perspectives_on_Interpersonal_Communication_in_the_Family/links/5f05beaa299bf188160a4db1/Hum.

[31]. Orpenas, Pamela. 2010. "Social Competence." Social Competence. https://www.researchgate.net/publication/319588343_Social_Competence#:~:text=Abstract,adaptive%20ways%20in%20social%20settings.

[32]. Patra, Ankit, and Suravi Patra. 2022. "Working Parents and Child Screen Media Use: A Tightrope Walk." Wikipedia. https://www.researchgate.net/publication/363615701_Working_parents_and_child_screen_media_use_A_tightrope_walk.

[33]. Prasad, Aarathi, Ruben Ruiz, and Timothy Stablein. 2024. "https://link.springer.com/chapter/10.1007/978-3-030-22351-9_12." YouTube. https://link.springer.com/chapter/10.1007/978-3-030-22351-9_12.

[34]. Rajaram, Daitkar A. 2022. "Effect of social meida on emotional intelligence and effect on college students." Google Scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://jcprpub.org/storage/media/dynamic_values/LqF_Nwc1651919250xz5q.pdf.

[35]. Rasmussen, Eric, Shawna White, King Andy, Steven Holiday, and Rebecca Densley. 2016. "Predicting Parental Mediation Behaviors: The Direct and Indirect Influence of Parents' Critical Thinking About Media and Attitudes about Parent-Child Interactions." Wikipedia. https://eric.ed.gov/?id=EJ1125597.

[36]. Rather, Mudasir, and Shabir Rather. 2019. "Impact of Smartphones on Young Generation." ResearchGate. https://www.researchgate.net/publication/333104023_Impact_of_Smartphones_on_Young_Generation.

[37]. Rawat, Neelu, Sunil Yadav, and Nidhi Dinker. 2019. "Transforming Family structure and Mindsets in India: The Impact of Social Media - A Sociological Study." Buletin De Literatura Oral. https://www.boletindeliteraturaoral.com/index.php/bdlo/article/view/302/178.

[38]. Rideout, Foehr, and Roberts. 2010. "Media in the Lives of 8- to 18-Year-Olds." Research Gate. https://www.researchgate.net/publication/234774626_Generation_Msuperscript_2_Media_in_the_Lives_of_8-_to_18-Year-Olds.

[39]. RUBIO, JOSSELYN G. 2018. "Advantages and disadvantages of mobile phones in our daily lives." Wikipedia. https://www.academia.edu/40198976/Advantages_and_disadvantages_of_mobile_phones_in_our_daily_lives .

[40]. Sharma, Aditya. n.d. "Fear of missing out: A brief overview of origin, theoretical underpinnings and relationship with mental health." NCBI. Accessed March 21, 2024. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8283615/.

[41]. Singh, Dr. V. 2019. "Impact of Social Media on Social Life of Teenagers in India: A Case Study." Resarch Gate. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://dergipark.org.tr/tr/download/article-file/683176.

[42]. SK, Kiran, Sanjana J, and Reddy Naik. 2019. "Mobile Phone Addiction: Symptoms, Impacts and Causes - A Review." Google Scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.researchgate.net/profile/Kiran-Sk/publication/330521664_Mobile_Phone_Addiction_Symptoms_Impacts_and_Causes-A_Review/links/5c45ea6d92851c22a385f460/Mobile-Phone-Addiction-Symptoms-Impacts-and-C.

[43]. Subramanyachary, Dr. P. 2017. "Digitalization in India: A Needed Gadget for Business Environment." Google scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.researchgate.net/profile/Dr-Palakonda/publication/314098800_Digitalization_in_India_A_Needed_Gadget_for_Business_Environment/links/5fa288ce458515b7cfba7f32/Digitalization-in-India-A-Needed-Gad.

[44]. tamble, Swapnil. 2018. "Digital Age: Study of Mobile Phone and Internet Usage among Youth." Google Scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.mahratta.org/CurrIssue/2018_Janurary/Paper5%20Jan2018.pdf.

[45]. Thillagam, Poomari. 2023. "PARENTS, CHILDREN, AND SMARTPHONES: A STUDY ON PARENTS' PERCEPTION OF THEIR CHILDREN'S SMARTPHONE USAGE IN RURAL FAMILIES IN INDIA." Google scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.eurchembull.com/uploads/paper/31f9cb7d6a793c915feec31942ead3e3.pdf.

[46]. Varghese, Titto. 2014. "(PDF) Indian Teenagers and their Family Relations in the Social Networking Era." ResearchGate. https://www.researchgate.net/publication/277957632_Indian_Teenagers_and_their_Family_Relations_in_the_Social_Networking_Era.

[47]. "Youth in India 2022." n.d. Publication reports of youth in india. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://mospi.gov.in/sites/default/files/publication_reports/Youth_in_India_2022.pdf.

[48]. Zhang, Cai, Yiru Jiang, Chengwei Jhu, Mian Li, Zi Quan, and Fumei Chen. 22. "Parent-child relationship and problematic smartphone use among chinese adolescents: a moderated mediation model." PubMed Central. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9364301/.

[49]. The jamovi project (2024). *jamovi*. (Version 2.5) [Computer Software]. Retrieved from https://www.jamovi.org.

[50]. R Core Team (2023). *R: A Language and environment for statistical computing*. (Version 4.3) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from CRAN snapshot 2024-01-09).

[51]. "Testing for Normality using SPSS Statistics when you have only one independent variable." n.d. Laerd Statistics. Accessed April 30, 2024. https://statistics.laerd.com/spss-tutorials/testing-for-normality-using-spss-statistics.php.

[52]. Haddock, Aaron, Nadia Ward, Rondy Yu, and Nicole O'dea. 2022. "Positive Effects of Digital Technology Use by Adolescents: A Scoping Review of the Literature." PubMed Central. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9658971/#:~:text=Internet%20use%20increases%20the%20ability,perception%20of%20social%20support%2C%20connectedness.

[53]. Commission, United N. 2017. "Building digital competencies to benefit from existing and emerging technologies with special focus on gender and youth dimensions." Google Scholar. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://unctad.org/system/files/official-document/CSTD2018_Issues02_Digital_en.pdf.