

Impact of Excessive Smartphone Usage on Face to Face Communication Skills Among Students and Young Professionals— A Comparative Study

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Abstract: This research delves into the consequences of excessive smartphone use on the ability to communicate face-to-face among students and young professionals. Given the ubiquitous nature of smartphones in today's society, it is imperative to comprehend how they impact interpersonal interactions. The primary objective of this study is to evaluate the usage patterns of smartphones, the proficiency of face-to-face communication skills, and the contributing factors within these two demographic groups. Utilizing quantitative methods, data was collected from a diverse sample of students and young professionals. Results show that participants were heavily dependent on their smartphones, and that frequent use was associated with a decline in face-to-face communication abilities. Despite the fact that both groups understand the value of face-to-face communication, issues like loneliness and anxiety while they are without cellphones are common. The report emphasizes the significance of encouraging safe smartphone usage practices and developing in-person communication skills to mitigate adverse effects on social engagement and emotional well-being.

In addition, it is essential to cultivate a well-rounded approach to using smartphones and encourage meaningful interactions in person. This is vital for strengthening social bonds and improving overall happiness. By highlighting the significance of maintaining healthy smartphone habits and developing effective face-to-face communication skills, people can successfully overcome the difficulties associated with excessive smartphone usage. This, in turn, enables them to foster deeper and more satisfying relationships in various academic and professional settings.

Keywords - Communication proficiency, Digital habits, Excessive usage, Face-to-face communication, Smartphone usage

I. INTRODUCTION

In a time marked by remarkable advancements in technology, smartphones have emerged as omnipresent tools that have a profound impact on various aspects of everyday life. From facilitating immediate communication to providing access to a vast amount of information, smartphones have become indispensable companions for people of all ages. Their significance in modern society cannot be emphasized enough, as they function as versatile devices that shape how individuals work, socialize, and interact with the world around them.

The importance of smartphones lies in their unmatched convenience and adaptability. These portable devices enable users to stay connected with friends, family, and colleagues regardless of their physical location, fostering a sense of interconnectedness in an increasingly interconnected world. Furthermore, smartphones act as gateways to extensive repositories of knowledge and resources, empowering individuals to effortlessly access information, engage in learning, and pursue personal interests with unparalleled ease and efficiency.

Despite the numerous advantages that smartphones offer, they also bring about various challenges and disadvantages, especially in terms of their detrimental effects on individuals' mental, emotional, and social well-being. The excessive use of smartphones has been linked to negative consequences such as reduced productivity, disrupted sleep schedules, and increased levels of stress and anxiety. Additionally, the widespread presence of smartphones has raised concerns about their potential to encourage addictive

behaviors and contribute to feelings of social isolation and loneliness.

One of the key areas impacted by smartphone usage is interpersonal communication, particularly in-person interactions. Face-to-face communication is essential for fostering human connections, allowing individuals to express emotions, establish rapport, and form meaningful relationships with others. However, the prevalence of smartphones has resulted in changes in communication habits, with some research indicating a decline in face-to-face interactions in favor of digital communication platforms.

This study will delve into the effects of excessive smartphone use on the ability of young adults to engage in face-to-face conversations effectively. By analyzing both the advantages and disadvantages of smartphone use and how they impact interpersonal communication, the study will pinpoint the factors that lead to shifts in communication patterns among young adults. Furthermore, the research will distinguish between the experiences of young adults in educational environments and those in professional settings, taking into account the varying degrees of smartphone use in these different contexts.

Ultimately, the goal of this research is to highlight the consequences of spending too much time on smartphones on the development of face-to-face communication skills and to provide insights that can help individuals navigate the challenges of maintaining meaningful relationships in an increasingly digital world. Through this exploration, the study seeks to offer practical recommendations for fostering more effective face-to-face interactions in both personal and professional spheres.

- A. Aim: The study's goal is to assess how excessive smartphone use impacts face-to-face communication abilities in students and young professionals
- B. Objectives:
 - 1. To compare smartphone usage patterns and frequency between students and young professionals.
 - 2. To assess and compare face-to-face communication skills of students and young professionals.

II. REVIEW OF LITERATURE

According to research (Johnson et al., 2019) the impact of smartphone presence on face-to-face (f2f) interactions, utilizing two theoretical frameworks: expectation violation theory and cognitive load theory. In the study, individuals had pre-planned, two-way interactions with a confederate in which the confederate either utilized or did not use a smartphone. In addition, participants had to decide whether to text simultaneously throughout the chat using a smartphone or not. Following that, participants were required to complete a conversation recognition test and socially assess the conversational behaviour of their confederate partner. The findings showed that when using their personal smartphones, individuals did worse on the conversation recognition test and gave more unfavourable social ratings for their confederate partners. These results point to social and cognitive justifications for discouraging smartphone use.

According to the research (Dissing et al., 2019) it looks at how young adults' high levels of perceived stress affect how they connect with others in person and on smartphones. An analysis was done using data from the Copenhagen Network Study, which included 535 first-year students. In addition to reporting their stress levels, the participants' interactions were tracked using Bluetooth recordings that were played back every three months. Results indicated that higher frequencies and larger call/text networks were present in high-stress individuals. Spending less time in face-to-face contacts was the tendency.

According to the study, those who are under stress could turn to smartphone interactions for social support or find it difficult to fit in with big networks. (Stenly, 2021) Using Maslow's hierarchy of needs as a guide, the study investigates the connection between using smartphone applications and interpersonal communication self-esteem. It recognizes the growing popularity of smartphones, especially among younger people who depend on a variety of apps for quicker communication and information access. These programs, which fall into six categories—social networking, gaming, business, education, entertainment, and travel—serve various functions to satisfy the values, inclinations, and feelings of its users. A questionnaire was used to gather data from current smartphone users for the study, which was

carried out utilizing quantitative-descriptive research methods. Relevant literature was also read. The results indicate that the use of smartphone applications is correlated with self-esteem in interpersonal communication, and that different applications might boost one's self-esteem in communication situations. (Jameel et al., 2019) Using a qualitative methodology, the study looks into smartphone addiction among college students. After screening forty participants, six were found to be addicted and the remaining six to be non-addicted. Interviews with a semi-structure were done using the components model of addiction as a basis. The concept is supported by the results, which indicate differences in addiction aspects between the two groups. Those who are not addicted to smartphones show more self-control when using them.

III. Research gap

While much research has been done on the effects of smartphone addiction on interpersonal communication skills, there is still a significant gap in the literature concerning comparative studies focusing on students in educational settings versus young professionals in the workforce. While there have been numerous studies that have looked at the impact of smartphone addiction on communication skills, there has yet to be a large-scale comparative analysis that looks at the different experiences and challenges faced by these two groups of people. Too much of the research has focused on general populations or age groups, neglecting the unique dynamics that young professionals and students face.

Some studies look at the individual impacts of smartphone usage on students or young professionals, there is a lack of comparative research that explicitly compares the experiences of different groups. Such a comparative approach is critical for understanding the various effects of smartphone use on face-to-face communication abilities in educational and professional contexts.

Additionally, previous material frequently fails to address the changing nature of smartphone technology and its impact on communication practices among students and young professionals. With the rapid expansion of smartphone applications and social media platforms, there is an urgent need for research into how these technological breakthroughs impact

communication patterns and preferences across broad demographic groups.

Furthermore, little attempt has been made to investigate potential interventions or techniques for minimizing the harmful effects of excessive smartphone usage on face-to-face communication skills among students and young professionals. Addressing this study gap is critical for generating targeted interventions and methods customized to these populations' individual requirements, resulting in healthier digital habits and improved interpersonal communication in educational and professional settings.

IV. Research Questions

1. How does smartphone usage differ between students in educational settings and young professionals in the workforce?
2. What are the variations in face-to-face communication skills between students and young professionals?
3. How do perceptions of the importance of face-to-face interaction vary between students and young professionals?

V. Research Hypothesis

1. Excessive smartphone usage negatively impacts face-to-face communication skills among both students in educational settings and young professionals in the workforce.
2. Students in educational settings engage in face-to-face social activities more frequently than young professionals in the workforce.
3. Students in educational settings experience higher levels of loneliness or social isolation compared to young professionals in the workforce

VI. Methodology

This study employed a comparative research design to investigate the effects of excessive smartphone usage on face-to-face communication skills among young adults aged between 18-30. The research focused on two distinct demographic groups: students in educational settings and young professionals in the workforce. Quantitative data were collected using an online survey tailored for this research, specifically assessing smartphone usage and face-to-face communication skills.

VII. Data analysis

The dataset encompasses a broad spectrum of ages and genders among both students and young professionals. Students range from 18 to 30 years old, while the working professional cohort consists of individuals

aged between 20 to 24 years. This diversity extends to educational backgrounds and occupations, with students pursuing degrees in psychology, commerce, medicine, and engineering, while young professionals are employed in fields like software engineering, marketing, and psychology.

1. Smartphone Usage Patterns:

Hours Spent on Smartphone Daily	Students (%)	Young professionals (%)	More Impacted
More than 6 hours	35.5	30.8	Students
4-6 hours	32.3	46.2	Young Professionals
2-4 hours	22.6	19.2	Students
1-2 hours	9.7	3.8	Students

Both students and young professionals exhibit significant smartphone usage, with a majority spending more than 4 hours per day on their devices. Young professionals show a slightly higher percentage in the 4-6 hours category.

2. Primary Smartphone Activities:

Activity	Students (%)	Young professionals (%)	More Impacted
Social media	88.7	94.9	Young Professionals
Texting/messaging	83.9	91.0	Young Professionals
Browsing the internet	77.4	81.0	Young Professionals
Watching videos	67.7	71.8	Young Professionals
Gaming	48.4	38.5	Students

Social media, texting, internet browsing, and video watching are dominant activities for both groups, indicating similar patterns of online engagement. Students show a slightly higher percentage in gaming.

3. Other Smartphone Activities:

Activity	Students (%)	Young professionals (%)
Gym	9.7	7.7
Playing Cricket	3.2	7.7
Basic mundane tasks	6.5	3.8
None	16.1	11.5
Others	12.9	15.4

Additional activities such as fitness, leisure, and productivity tasks are engaged in by both groups, with similar percentages.

4. Face-to-Face Communication Preferences:

Preference	Students (%)	Young professionals (%)	More Impacted
With Family Members	51.6	48.7	Students
With Friends	41.9	48.7	Young Professionals
With Strangers	6.5	0.0	Students
With Colleagues/Classmates	9.7	5.1	Students

Students show a higher preference for face-to-face communication with family members compared to young professionals. On the other hand, young professionals exhibit a higher preference for communication with friends. Additionally, students demonstrate a slight inclination towards communication with strangers compared to young professionals. However, young professionals engage more with colleagues or classmates compared to students.

5. Confidence Level in Face-to-Face Communication Skills:

Skill	Students (%)	Young Professionals (%)	More Impacted
Initiating conversations	3.0	3.2	Young Professionals
Maintaining eye contact	3.0	3.4	Young Professionals
Active listening	3.5	3.8	Young Professionals
Expressing thoughts clearly	3.3	3.6	Young Professionals
Non-verbal communication	3.8	3.8	Equal Impact

Young professionals generally exhibit higher confidence levels in face-to-face communication skills compared to students, especially in initiating conversations and maintaining eye contact.

6. Frequency of Engaging in Face-to-Face Social Activities:

Frequency	Students (%)	Young Professionals (%)	More Impacted
Once a week	42.9	38.1	Students
Several times/week	33.3	38.1	Young Professionals
Rarely	19.0	14.3	Students
Daily	4.8	9.5	Young Professionals

Students are more impacted in engaging in face-to-face social activities once a week and rarely, whereas young professionals engage more frequently several times per week and daily.

7. Feelings of Loneliness or Social Isolation:

Frequency	Students (%)	Young Professionals (%)	More Impacted
Occasionally	19.0	14.3	Students
Rarely	52.4	47.6	Students
Never	28.6	38.1	Young Professionals

Students are more impacted by occasional and rare feelings of loneliness or social isolation, while young professionals experience slightly higher levels of never feeling lonely or socially isolated.

8. Anxiety without Smartphone for Extended Periods:

Frequency	Students (%)	Young Professionals (%)	More Impacted
Yes	71.4	61.9	Students
No	28.6	38.1	Young Professionals

Students are more impacted by anxiety when without their smartphones for extended periods compared to young professionals.

9. Engagement in Non-screen Activities with Others:

Frequency	Students (%)	Young Professionals (%)	More Impacted
Weekly	71.4	42.9	Students
Daily	28.6	57.1	Young Professionals

Students are more impacted in engaging in non-screen activities with others on a weekly basis, while young professionals do so daily.

10. Importance of Face-to-Face Interaction for Relationships:

Importance Level	Students (%)	Young Professionals (%)	More Impacted
Very important	85.7	95.2	Young Professionals
Important	14.3	4.8	Students

Both groups highly value face-to-face interaction for relationships, but young professionals show a higher percentage in rating it as very important.

11. Primary Source of Social Support and Interaction:

Source	Students (%)	Young Professionals (%)	More Impacted
Friends	85.7	71.4	Students
Family	14.3	28.6	Young Professionals

Students primarily seek social support and interaction from friends, while young professionals rely more equally on both friends and family.

Conclusion of analysis:

Understanding the subtle distinctions in face-to-face communication, social engagements, and smartphone utilization between students and young professionals is essential for meeting their unique social and emotional needs. Despite engaging in similar smartphone activities, these two groups differ in their levels of confidence in face-to-face communication, frequency of social interactions, and strategies for managing feelings of loneliness and anxiety. Students tend to use smartphones more frequently and depend on friends for social support, whereas young professionals display higher levels of confidence in face-to-face communication and rely on both friends and family for social connections. Acknowledging these differences can guide targeted interventions and support systems tailored to the specific requirements of each group, ultimately promoting healthier interpersonal relationships and overall well-being.

VIII. Results and Discussion:

The research findings underscore the pervasive reliance on smartphones among both students and young professionals, illuminating their integral role in daily activities such as social networking, messaging, and entertainment. Despite a moderate level of confidence in face-to-face communication skills exhibited by participants, there exists a notable scope for enhancement, particularly in initiating conversations and articulating ideas clearly. Moreover, the study reveals a spectrum of engagement in face-to-face social interactions among respondents, accompanied by occasional reports of feelings of loneliness or isolation. The prevalence of smartphone dependence emerges as a significant observation, with a considerable proportion expressing anxiety when

separated from their devices for prolonged durations. In spite of this digital connectedness, participants recognize the critical value of face-to-face interactions in fostering relationships, with friends and family acting as the main sources of social support. This emphasizes how important it is to create a harmonious balance between virtual and in-person encounters in order to develop meaningful relationships and emotional health.

IX. Conclusion

This study provides insight into the complex relationship between smartphone usage, face-to-face communication skills, social engagement, and emotional well-being among students and young professionals. The results emphasize the significant role that smartphones play in our daily lives, serving as essential tools for communication, accessing information, and entertainment. However, excessive smartphone use is associated with negative consequences such as feelings of loneliness, social isolation, and anxiety when disconnected.

Additionally, the research highlights the importance of developing face-to-face communication skills, which are crucial for establishing and maintaining meaningful relationships. Individuals who are confident in initiating conversations, maintaining eye contact, actively listening, expressing their thoughts clearly, and utilizing non-verbal communication tend to have more satisfying social interactions and higher levels of well-being.

Furthermore, the study emphasizes the value of engaging in offline social activities to combat feelings of isolation and enhance emotional resilience. Participating in non-screen activities with others fosters genuine connections and strengthens social

bonds, ultimately contributing to overall happiness and satisfaction. In conclusion, it is essential to promote awareness of healthy smartphone usage habits, nurture face-to-face communication skills, and encourage regular offline social interactions in order to cultivate a balanced and fulfilling lifestyle for students and young professionals. By finding a harmonious balance between digital connectivity and in-person interactions, individuals can develop deeper connections, improve their emotional well-being, and lead more satisfying lives in today's digital era.

X. Reference

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XI. APPENDIX

Impact of excessive smartphone usage on face to face communication skills among students and young professionals

Hello! I am Vidushi Chaudhary, a first year postgraduate student at Pearl Academy, Delhi, studying Interaction Design (UI/UX). I'm conducting a research survey on "Impact of excessive smartphone usage on face to face communication skills among students and young professionals". I'd greatly appreciate your participation in the survey. I assure you the responses will remain anonymous and are for academic purposes only. Thank you for your time!

Age *

Short answer text

Gender *

Option 1

Educational background *

Short answer text

Occupation *

Short answer text

How many hours per day do you spend on your smartphone? *

Less than 1 hour

1-2 hours

2-4 hours

4-6 hours

More than 6 hours

What activities do you primarily use on your smartphone? (Select all that apply) *

Social media

Gaming

Texting/messaging

Browsing the internet

Watching videos

Other...

Any Other activity (please specify) *

Short answer text

With whom are you most comfortable talking face-to-face? *

Family members

Friends

Colleagues/classmates

Strangers

On a scale of 1 to 5, rate your confidence level in the following face-to-face communication skills *

1. Initiating conversations

Very less 1 2 3 4 5 Very high

○ ○ ○ ○ ○

2. Maintaining eye contact *

Very less 1 2 3 4 5 Very High

○ ○ ○ ○ ○

3. Active listening *

Very less 1 2 3 4 5 Very high

○ ○ ○ ○ ○

4. Expressing thoughts and ideas clearly *

Very less 1 2 3 4 5 Very high

○ ○ ○ ○ ○

5. Non-verbal communication (e.g., body language) *

Very less 1 2 3 4 5 Very high

○ ○ ○ ○ ○

How often do you engage in face-to-face social activities (e.g., gatherings, outings) with friends or family?

Daily

Several times per week

Once a week

Rarely

Never

Do you ever feel lonely or socially isolated? If yes, how often? *

Frequently

Occasionally

Rarely

Never

Do you feel anxious or uneasy when you are without your smartphone for an extended period of time? *

Yes

No

How often do you engage in non-screen activities (e.g., outdoor activities, hobbies, sports) with others? *

Daily

Weekly

Monthly

Rarely

Never

How important do you think face-to-face interaction is for building and maintaining relationships? *

Very important

Important

Neutral

Not very important

Not important at all

Where do you primarily seek social support and interaction? *

Family

Friends

Online communities

Other...