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MEASURING THE EFFECT OF DIGITAL DISTRACTIONS ON ACADEMIC PERFORMANCE: A QUANTITATIVE STUDY OF UNIVERSITY STUDENTS PRODUCTIVITY AND ENGAGEMENT

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ABSTRACT:

The study, conducted at the Central University of Punjab, investigates how digital tools like smartphones, laptops, and smart watches distract university students, affecting their academic performance. Through a quantitative approach and in-depth interviews with 300 students, the research reveals that the simultaneous use of multiple digital devices hinders students' academic success. Most students were unaware of the concept of "digital detox," a method to break free from excessive digital habits. The study highlights the need for universities to educate students about digital detox and promote digital distraction awareness. Additionally, it suggests that the university implement strict rule and regulations regarding the use of digital devices in classrooms to improve academic performance. The findings emphasize the critical role institutions play in managing digital distraction and helping students develop healthier habits for better learning outcomes.

Keywords: Digital Distractions, Academic Performance, Quantitative Study, University Students

INTRODUCTION:

University students increasingly face digital distractions, such as games, social networking, messaging apps, and device notifications, particularly during lab classes. Research by Perez-Juarez et al. (2023) and Deepa et al. (2022) shows that male students are more likely than females to be distracted by digital devices, while older students are less affected than younger ones. Over half of American students reported being distracted by their peers' devices, and two-thirds admitted that their own device use impacted their academic performance. Social media is a significant distraction that hinders learning and focus, with multitasking in online classes making the issue worse.

These distractions negatively affect academic performance by reducing attention spans, which in turn lowers engagement and productivity. Both internal distractions, like spontaneous thoughts, and external distractions, such as notifications from devices, contribute to the problem. Solutions include promoting time management, creating

distraction-free environments, and fostering digital well-being. Educators can help by teaching students the dangers of media multitasking and encouraging self-regulation in technology use while integrating technology thoughtfully into lessons to minimize disruptions.

The study emphasizes the need for universities to implement strategies to manage digital distractions, such as creating technology-free zones and providing training on digital mindfulness. Further research is required to explore the long-term effects of digital distractions and determine the most effective interventions. By addressing these distractions, universities can improve academic performance and enhance learning experiences, both inside and outside the classroom.

OBJECTIVES:

1. To investigate the impact of digital tools on university students' academic performance.
2. To investigate the students' awareness on the concept of "digital detox" and its role in reducing digital distractions.
3. To explore the need for universities to implement strategies, such as strict rule and regulation regulations and organise digital distraction awareness programs, to improve students' academic success.

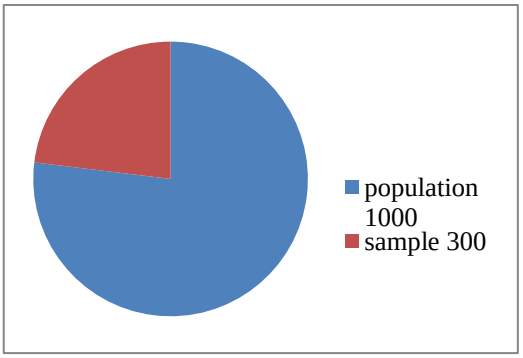
RESEARCH METHODOLOGY:

Design of the study:

The researcher used structured interviews to collect descriptive data on students' digital distraction experiences.

Population and Sample:

The researcher selected 300 university students from a population of 1,000 using purposive sampling to gather focused insights on digital distractions and their impact on academic performance.



Tools for Data Collection:

The researcher used structured interview schedule for collecting data from the selected sample.

Analysis and Interpretation:

Digital Distraction in Teaching and Learning:

Sub Item No:	Total responses	
1) Social Media and Entertainment	**Yes**	**No**
a) Are you using social media while studying at the university? Yes/No	255(75)	45(25)

2) Challenges with Self-Regulation	Yes	No
a) Are you using multiple digital devices at a time? Yes/No	235(78.33)	65(21.66)
b) Do you feel nervous when you are away from digital devices? Yes/No	121(40.33)	179(59.66)

It was observed that about sub-item No. 1(a). Out of 300 students, 255 (75 percent) responded that they used social media while studying at the university. Meanwhile, 45 (25 percent) answered that they do not use social media while studying at university. So, it can be concluded that the majority of the students responded that they use social media in the university teaching-learning process.

It was observed that about sub-item No: 2(a). Out of 300 students, 235(78.33 percent) responded that they use multiple digital devices simultaneously, whereas 65(21.66 percent) students answered that they don't use various devices. So, it can be concluded that the majority of the students use multiple devices at a time.

It was observed that about sub-item No: 2(b).out of 300 students,121(40.33 percent) responded that they feel nervous when they are away from their digital devices, whereas 179(59.66 percent) students answered that they don't feel nervous when they are away from their digital devices. So, it can be concluded that the majority of the students do not feel anxious when away from their digital devices.

Effect on Academic Performance:

Sub Item No:	Total responses	
1. Reduced Focus	**Yes**	**No**
a) Do you feel distracted while doing your academic task? Yes/No	200 (66.66)	100 (33.33)
2. Assessment of Distraction	**Yes**	**No**
a) Do you feel which digital device is more distracting while you are in class?	260 (86.66)	40 (13.33)

It was observed that about sub-item No. 1(a). Out of 300 students, 200 (66.66 percent) responded that they feel distracted when they doing their academic task. Meanwhile, 100 (33.33 percent) answered that they don't feel any type of digital distraction when they doing their academic task. So, the majority of the students responded that they had been distracted when doing their academic tasks.

It was observed that about sub-item No. 2(a). Out of 300 students, 260 (86.66 percent) responded that digital devices like mobile phones distract them more when they are in class.

Meanwhile, 40 (13.33 percent) answered that they do not use mobile phones when they are in class and that they don't distract. So, it can be concluded that the majority of the students responded that digital devices are a type of distraction when they are in class.

Problems with Digital Distraction:

Sub Item No:	**Total responses**	
1. Distraction during Reading Learning Material	**Yes**	**No**
a) Are you distracted by digital devices when you are reading any learning material? Yes/No	267 (89)	33 (11)
2. Digital Distractions during Exam Preparation	**Yes**	**No**
a) While preparing for exams, are you facing any digital distractions? Yes/No	247 (82.33)	53 (17.66)
3. Network Issues	**Yes**	**No**
a) Are you facing any problems with the use of digital devices? Yes/No	257 (85.66)	43 (14.33)

It was observed that about sub-item No. 1(a). Out of 300 students, 267 (89 percent) responded that digital devices distract them when they read or learn any study material. Meanwhile, 33 (11 percent) answered that they are not distracted with their digital devices when they read or learn any study materials. So, it can be concluded that the majority of the students responded that they distracted from their digital devices when they read or learn any study materials.

It was observed that about sub-item No. 2(a). Out of 300 students, 247 (82.33 percent) responded that they used their digital devices while preparing for exams and got distracted. Meanwhile, 53 (17.66 percent) answered that they did not use their mobile devices and prepared for the exams without any distractions. So, the majority of the students responded that they face digital distractions when preparing for the exams because they use their digital devices and are habituated to this.

It was observed that about sub-item No. 3(a). Out of 300 students, 257 (85.66 percent) responded that they face many problems with the use of digital devices, like network issues, which were the common problems they faced simultaneously. Meanwhile, 43 (14.33 percent) answered that they do not face any problems because they use their digital devices only for essential purposes. So, it can be concluded that the majority of the students responded that they are facing lots of problems with using digital devices.

Key Factors Contributing to Digital Distractions:

Sub Item No:	Total responses	
1. Social Media	**Yes**	**No**
a) Are you using social media while studying at the university? Yes/No	250 (83.33)	50 (16.66)
2. Lack of Self-Control	**Yes**	**No**
a) Are you using multiple digital devices at a time? Yes/No	253 (84.33)	47 (15.66)
b) Do you feel nervous when you are away from digital devices? Yes/No	264 (88)	36 (12)

It was observed that about sub-item No. 1(a). Out of 300 students, 250 (83.33 percent) responded that they used social media while studying at the university. Meanwhile, 50(16.66 percent) answered that they did not use social media or any digital devices when studying at the university. So, the majority of the students responded that they use their digital devices and social media platforms when studying at the university.

It was observed that about sub-item No. 2(a). Out of 300 students, 253 (84.33 percent) responded that they used multiple devices (computer, laptop, smart watch, tablet and smartphone) at a time. Meanwhile, 47 (15.66 percent) answered that they do not have multiple digital devices and they do not use multiple devices at a time. So, it can be concluded that the majority of the students responded that they used multiple digital devices at a time.

It was observed that about sub-item No. 2(b). Out of 300 students, 190 (63.33 percent) responded that they feel nervous when away from their digital devices. Meanwhile, 110 (36.66 percent) answered that they do not when away from their digital device. So, it can be concluded that the majority of the students responded that they feel nervous when they are away from their digital devices.

Awareness of Overcoming Digital Distraction:

Sub Item No:	Total responses	
1. Awareness	**Yes**	**No**
a) Are you aware of digital detox? Yes/No	240 (80)	60 (20)

It was observed that about sub-item No. 1(a). Out of 300 students, 240 (80 percent) responded that they are aware of digital devices and that they practised them daily in their daily life. Meanwhile, 60 (20 percent) answered that they are not aware of digital devices also they do not hear the word digital detox. So, it can be concluded that the majority of the students responded that they are aware of these

digital devices and use them most of the time.

MAJOR FINDINGS:

The study, conducted with 300 university students, examined digital distractions and their impact on academic performance. Findings revealed that 75% of students used social media while studying, demonstrating a high prevalence of engagement with digital platforms during the learning process. Moreover, 78.33% of students reported using multiple digital devices simultaneously, reflecting widespread multitasking.

Regarding digital device dependency, 40.33% of students felt anxious when away from their devices, though 59.66% did not experience such anxiety. Notably, 66.66% of students admitted to being distracted by digital devices while performing academic tasks, and 86.66% felt mobile phones distracted them during class. Similarly, 89% of students acknowledged being distracted by digital devices while reading or learning study materials.

Exam preparation was also hindered by digital distractions, with 82.33% of students admitting they used digital devices while preparing for exams, which affected their focus. Additionally, 85.66% faced issues with digital device usage, such as network problems, though 14.33% reported limited problems due to more restrained use of devices.

The study also highlighted general patterns of device usage, with 83.33% of students using social media and digital devices during their university studies, and 84.33% using multiple devices like smartphones, laptops, and tablets simultaneously. A notable 63.33% felt nervous when away from their devices, indicating a high level of dependency.

Lastly, 80% of students were aware of digital devices and used them daily, but only 20% were familiar with the concept of "digital detox." These findings underscore the need for greater awareness of digital distraction and its impact on academic performance, as well as strategies like digital detox to promote healthier device use.

CONCLUSION:

The study conducted at the Central University of Punjab highlights the significant impact of digital distractions on the academic performance of university students. The findings demonstrate that a majority of students (75%) engage with social media while studying, and 78.33% multitask by using multiple digital devices simultaneously. This widespread use of technology negatively affects their focus and learning efficiency, with 66.66% of students reporting feeling distracted during academic tasks and 86.66% acknowledging distractions in class, primarily due to mobile phones.

Digital device dependency is also prevalent, with 40.33% of students feeling anxious when away from their devices, and 63.33% expressing nervousness without access to digital tools. These distractions extend to exam preparation, where 82.33% of students admitted to using devices, leading to reduced focus.

Despite the high dependency on digital devices, only 20% of students were aware of the concept of "digital detox," underscoring a lack of understanding of strategies to manage digital distractions. The study concludes that universities must play an active role in educating students about digital detox and implementing stricter regulations regarding digital device usage in classrooms. Promoting digital distraction awareness and creating technology-free zones are essential steps in helping students develop healthier habits, ultimately leading to improved academic performance and learning outcomes.

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