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Analyzing SELF-detox measures AND DETOX APPS for digital detoxification

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Abstract
Today technology is an integral part of our lives, so maintaining a balance between our digital devices and personal well-being has become vital. The purpose of the study aims to explore the current underlying problem of digital addiction, its symptoms, and its measures.
A study has been conducted among a wide scope of mobile internet users aged from 6 to 65 years. The study shows the extend of activities the users on smart mobile devices. An extensive use of them have become a menace causing internet addiction. Without the end user being aware this has slowly crept into individual growth, physical, mental, and economic wellbeing.
The study helps us to find, how self-help measures and the digital detox apps implementation help in overcoming digital addiction. The usage time and abstinence time plays an important role in achieving detoxification. The investigation reveals an individual should be aware of the addiction pointer, measures taken for digital detoxification were assertive to achieve abstinence from digital devices.

Keywords: digital addiction, digital detoxification, Techostress, digital diet

Introduction:
Technology is an emergent need but demands to maintain parity between devices and personal well-being has become essential. Many individuals are experiencing the negative effects of excessive screen time, such as decreased productivity, stress, anxiety, and disrupted sleep patterns. To address this issue, there are many self-help solutions as well as digital detox apps that help individuals regain control over their technology usage and promote overall well-being.
A digital detox app is a software application that offers a range of features and strategies to encourage users to disconnect from their smartphones, tablets, and computers for designated periods. It assists users in taking breaks from their digital devices and reducing their reliance on technology and focus on self-care and improving their physical and mental health.

Emergent need to reduce digital addiction:
It has been observed smart devices like the smart mobile phone have been used by 85.98 %, 6.92 billion people of the World population. By Statista [3]out of which 1.55 billion will be Indian by 2024. An average in the world a person spends 3-hour 15 min on their phone per day and checkup their phone 58 times each day, as of the first quarter of 2023, internet users spent six hours and forty minutes online daily. Compared to the preceding quarter, there is an increase of 0.8 percent., the average daily internet use has increased by 16 minutes.in the last 8 years.[3]
In India a person spends 4 hours and 5 mins on smart phone per day. Compared to an average it has increased +22 min that is increase by 9% [4]. Bases on [3] it is notice that the uses of the internet have been increased tremendously since the time of COVID lock down till today.

Review of Literature
The author Markus Loachtefed et al., upon learning for digital addiction created an app named APPDetox, released it in the Play Store, and tracked the app's usage, The application was utilized by about 11,700 people overall, both male and female users of varying ages. The principles of detoxification were developed for 20 of the most utilized apps by users, and once the app was launched, the rules were applied. The restrictions established by app detox prevent unnecessary programs from starting, saving users' time. In the end, the author recommended that they add more jobs based on place and time in the future. [5]
The authors, Milad Mirbabaie, Stefan Stieglitz, and others, focused on Digital Detox Research and Strategies through a technostress lens after realising how pervasive the use of information technology is in society [3]. Developed a “The role of digital detox in the model of organisational technostress “[1]. Recent definitions of digital detox, which describe a process in which a person abstains from things once exposure to them exceeds a particular point, reflect this [7] Additional phrases include "digital diet" and "media diet" [2]. Similar phenomena to digital detox, which makes reaching agreements more difficult.

Objectives

The main objectives of the study are as follows:
1) To study and the measure effect of using smart devices on physical, emotional, and professional wellbeing.
2) To assess the impact of the digital detox app attributes and personal prerogative on reducing digital device usage.
3) To evaluation user experiences and perceptions of the app.
4) The impact of time of usage of the app and abstinence for the accessibility to smart devices for confirmation of the successful detoxification.
5)To identify potential improvements and recommendations for the app's future development

Research Methodology

Research method: used online survey as a questionnaire.

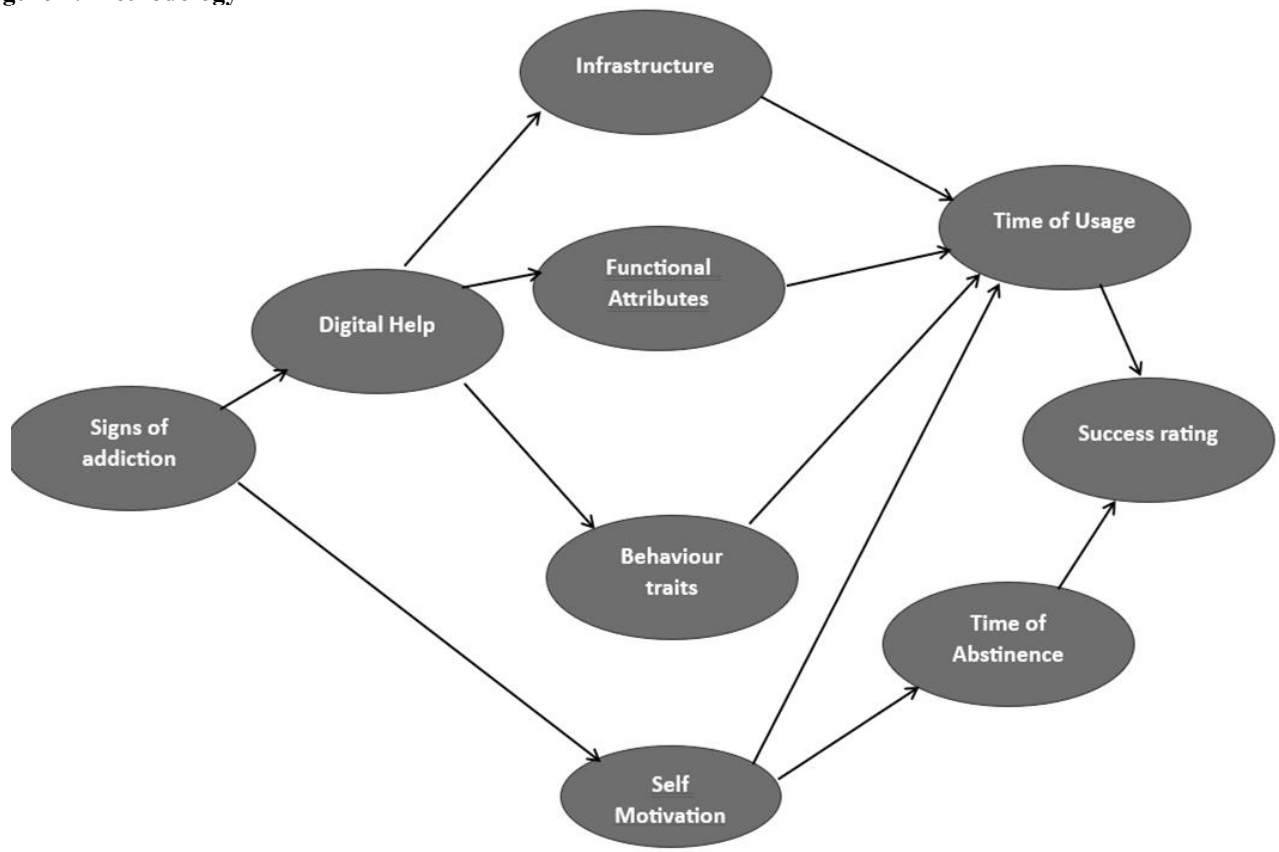
Sample: The sample 115 individuals from the age between 6 to 64years.

Questionnaire:

The questionnaire was segmented into section that collected:1. Personal details. 2. Personal activities on smart mobile. 3. Awareness of digital and internet addiction. 4. Self-help detoxing habits . 5. Use of detox to help in the process of detoxification. 6. Abstinence time. The analytics study from that data acquired for the survey prominent inferences have been concluded.

Proposed Methodology Model:

Figure 1: Methodology



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Result and discussion:

1. Demographic Data:

Gender	percentage	Age Group	percentage	Status :Student /Employment	percentage	Educational qualification	percentage
Male	47.80%	6 to 13	nil	Student	54.80%	Higher secondary	10.40%
Female	52.20%	14 to 17	2%	Not Employed	5.20%	Diploma	3.50%
		18-25	59.1 %	Employed	35.70%	Bachelor	51.30%
		26- 34	10.4 %	Self employed	2.60%	Masters	21.70%
		35-50	21.7 %			PhD	12.20%
		above50	7 %				

Table1: Demographic Data

The demographic data represent male to female ratio of 47.80 % to 52.2 %. 18 to 50 years were proactive which were dominated by educated students and the employed.

2. The digital media platform and chat app activities at least once a week.

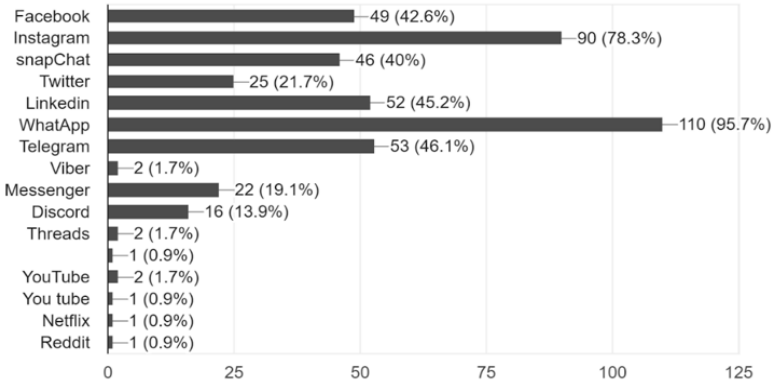


Chart1: Messaging Apps and social media platforms

WhatsApp and Instagram are used by 95.7 % and 78.3%. Messaging apps have been more popular apps then social media platforms.

3. Analysis of Personal activities on smartphones.

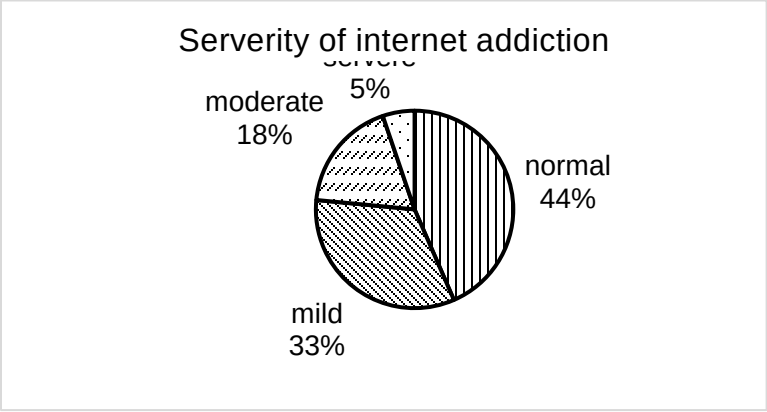


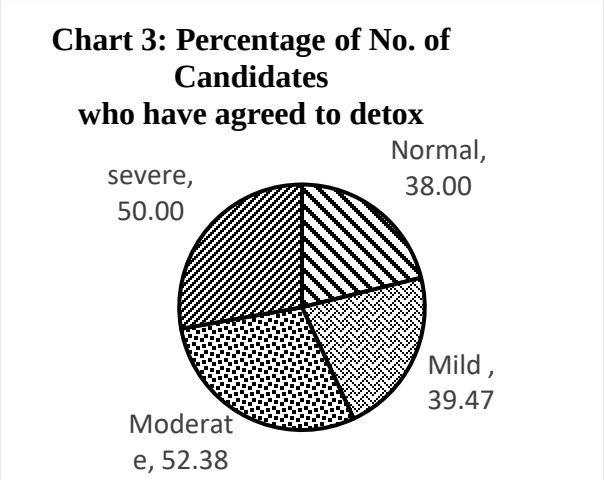
Chart2: Severity of internet addiction

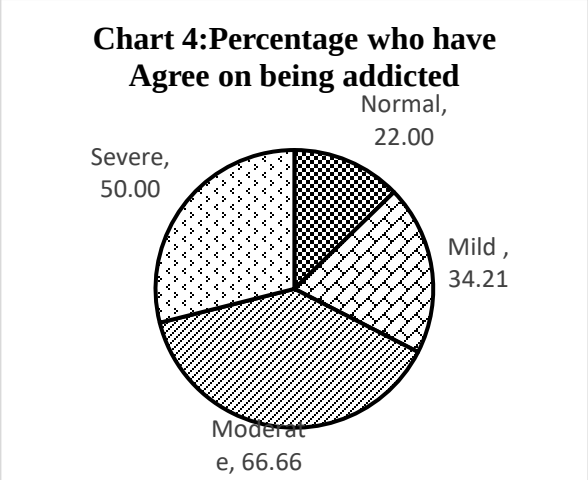
Based 15 questions to find out the personal activities on the smart mobile devices.
A Likert scale from 0 to 5 grades an activity on smartphones where 0 not applicable, 1 was Rarely, 2 Occasionally, 3 Frequently, 4 Often and 5 indicated Always. It provides individual information to show how often an individual was using smart mobile devices.
From 115 respondents 44 % of usages was normal, 33% were in the mild usages, 18% has moderate usages and only 5 % has a severe dependency on the internet.

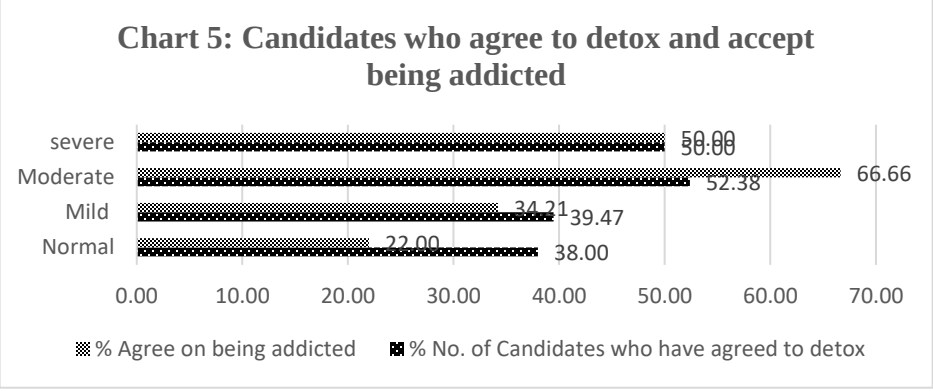
4. Awareness of digital and internet addiction

Degree of Addiction	No. of Candidates	No. of Candidates who have agreed to detox	% No. of Candidates who have agreed to detox	Agree on being addicted	% Agree on being addicted
Normal	50	19	38	11	22.00
Mild	38	15	39.47	13	34.21
Moderate	21	11	52.38	14	66.66
Severe	6	3	50	3	50.00

Table 2: Study on Degree of Addiction







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Candidates who have the moderate and severe dependency on the smart mobile devices have agreed to be addicted and willingness take countermeasure for self-help.

5. Self-help detoxing habits:

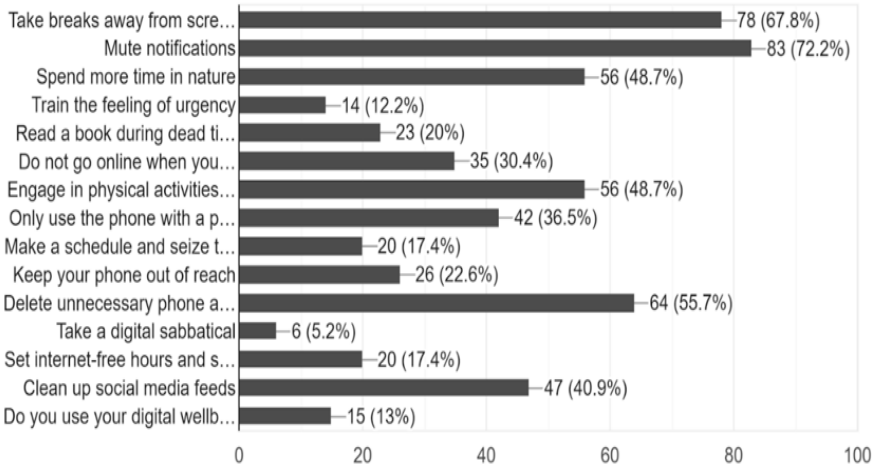

Chart 6: Self-help detoxing habits

Based on the 15 suggestion opened to the candidate , they prefer muting notification, taking breaks for screen, deleting unnecessary phone apps. 50% of them choose to spend time with nature and exercise.

6. Use of detox to help in the process of detoxification.

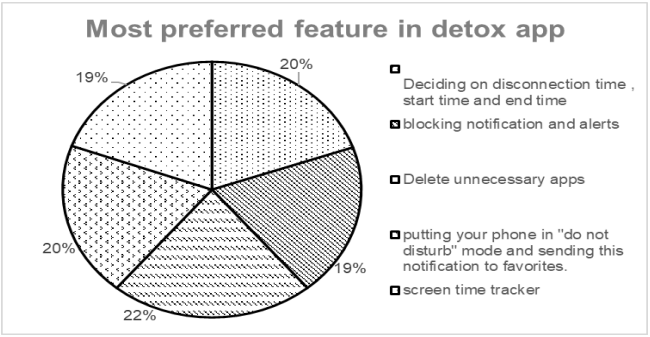

Chart 7: Preferred Feature in a Detox App

Based 12 suggestion to find out the feature which help to detox and in what scale on a Detoxification App. A Likert scale from 1 to 5 grades an activity where 1 was poor, 5 indicated essential. The sum of individual scale was taken and greater than 360 were considered. The attributes mentioned below are preferred in increasing order. a) Delete unnecessary apps. b) Deciding on disconnection time, start time and end time". c) Putting your phone in "do not disturb" mode and sending this notification to favourites. d) Screen time tracker e) Blocking notification and alerts.

7. Coefficient of Correlation with usage time and abstinence time

Degree	Preferred usage period of the Detox App(x)	How long you feel you would abstain from constant mobile use (y)	Xy	x^2	
(min)1	76	50	3800	5776	2500
2	13	16	208	169	256
3	13	33	429	169	1089
4	0	3	0	0	9

(max)5	13	12	156	169	144
Sum	115	114	13110	13225	12996
n = 5		**r = 1**			

Table 3: Coefficient of Correlation

If coefficient of correlation is 1 that shows, there is direct relation between the Preferred usage period of the Detox App(x) and abstinence time (y). Detox app help in increasing the abstinence time hence helping in digital detoxification.

Conclusion: Based on the research, it is noticed that the age group between 18 to 50 years were the more techno savvy. Most of them had good academic background to their credit. The time spent on smart mobile activities was overlooked by many of them bringing them to a point of awareness and severity of addiction. The Digital detox apps can be valuable tools for individuals looking to regain control over their digital lives, improve their mental and physical health, and create a more balanced and mindful lifestyle. However, the effectiveness of these apps depends on individual commitment and the willingness to make lasting changes to digital habits.

Future Enhancement: We can anticipate is the integration of advanced AI algorithms and machine learning models that personalize detox plans. These algorithms will analyze users' habits and preferences, adapting detox programs to their specific needs. Additionally, augmented reality (AR) and virtual reality (VR) technologies will likely play a pivotal role in creating immersive detox experiences, making it easier for individuals to disconnect from their devices.

References:

[1] Adam MTP, et.al (2017) “Design blueprint for stress-sensitive adaptive enterprise systems.”, Bus Inf Syst Eng 59: PP 277–291. https://doi.org/10.1007/s12599-016-0451-3

[2] Andersen K, et.al (2016), “Measuring media diet in a high-choice environment – testing the list-frequency technique.”, Commun Methods Meas 10: PP 81–98. https://doi.org/10.1080/ 19312458.2016.1150973

[3] Ani Petrosyan, (27tth July,2023), https://www.statista.com/statistics/1380282/daily-time-spent-online-global/#statisticContainer.
https://explodingtopics.com/blog/smartphone-usage-stats

[4] Markus Löchtefeld et.al, (2013)”AppDetox: Helping Users with Mobile App Addiction”,ACM978-1-450326483/13/12.http://dx.doi.org/10.1145/2541831.2541870

[5] Milad Mirbabaie et.al, ,(2022) “Digital Detox”, Bus Inf Syst Eng 64(2):PP 239–246),https://doi.org/10.1007/s12599-022-00747-x

[6] Syvertsen T, et.al (2019) “Digital detox: media resistance and the promise of authenticity.” Converg Int J Res into New Media Technol. https://doi.org/10.1177/1354856519847325