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**DIGITAL DETOX AND MENTAL HEALTH OUTCOMES AMONG
YOUNG ADULTS**



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Abstract

The present study examine the effects of digital detoxing in young adults. Quantitative correlational design and convenient sampling used to select a sample of young adults (N=300) comprising men (n =150) and women (n =150). To measure all of the variables standardized tools were applied which include (DASS-21) by Lovibond and Lovibond (1995) that measures stress anxiety and depression, and Digital detox practices questionnaire by Alanzi et al. (2024) are used to measure Digital detox in young adults. The results showed that digital detox reduce stress and anxiety in young adults. These findings help to build the existing body of knowledge on digital wellness and provide viable implications to how mental health interventions can be tailored to fit into more healthy societies.

Keywords: Digital Detox, Mental Health, Self-Regulation, Anxiety, Stress, Depression

Introduction

Mental Health

Mental health is fundamentally defined as a state of well-being in which individuals realize their own potential, can cope with normal life stresses, work productively, and contribute to their community (World Health Organization, 2022). In contemporary research, this extends beyond the mere absence of mental disorders to encompass positive dimensions of psychological functioning, including emotional stability, psychological resilience, and social well-being. Within the specific context of digital intervention studies, mental health is operationalized as a multidimensional construct sensitive to behavioral and environmental modifications, such as digital detoxification.

Attention Restoration Theory is a neuro cognitive theory of how digital restores may be useful in mental health outcomes through the process of cognition. According to this theory, the modern digital environment constantly requires concentrated attention, and this factor leads to cognitive fatigue and the absence of a meaningful relationship (Ohly et al., 2016).

Digital Detox

Digital Detox which will be voluntary non-use of non-essential digital tools and programs. This is a facilitated behavioral change framework according to which the participants must make a conscious attempt to disidentify themselves with specific digital stimuli in order to understand measurable changes in mental health outcomes (Abeele, 2021). The success of the intervention is based on three basic variables, namely, the duration (temporal length), the area (technologies involved), and the intensity (degree of restriction), which must be controlled in a systematic way to ensure that a valid measure of causal relationships with mental health outcomes is achieved (Huang, 2022). The theoretical basis of the concept is that once the digital stressors are dropped continuously, cognitive recovery will be achievable and the behavioral repatterning will occur, and can lead to the positive changes in the different factors in mental health (Whitaker et al., 2021).

The theoretical basis of digital detox interventions is extensive stimulus-control principles in behavioral psychology. The applications and smartphones serve as conditioned stimuli arousing automatic checking behaviors using variable schedules of reinforcement (Wilmer & Chein, 2019).

It has been shown that a short-term intervention consisting of making digital stimuli unavailable is capable of decreasing compulsive technology use, as it interferes with environmental stimuli that perpetuate automatic behavioral patterns (Hofmann et al., 2020).

Digital detox and Mental health

Liu et al., (2023) also contributed to the theoretical comprehension of the association between the use of technologies and well-being, as they brought a critical moderating variable, mindfulness, which was studied using a large-scale cross-sectional survey design. The duality of smartphone abstinence using a 24-hour smartphone abstinence RCT with mood, anxiety, and craving pre- and post-test and supplemented with qualitative data entries (Brown & Kuss, 2020). Their approach showed that although a brief period of complete abstinence resulted in a significant change in positive mood and a decrease of anxiety, it also caused clinically significant cravings and the desire to use the device, which points to its addictive nature. Specializing in the effectiveness of a controllable intervention period showed that the duration of one week of abstinence of social media could be very effective as the results of a randomized controlled trial comparing self-reported emotional well-being and sleep quality were measured (Tandon et al. (2022). Vally and D'Souza (2019) directly tested the effects of a self-administered social media break in the course of a one-week period on well-being in a randomized controlled trial.

Theoretical Model

Self-Determination Theory (SDT)

The Self-Determination Theory are the broad framework in which to observe the physiological mechanism, within this framework of which it is possible to visualize the impact a digital detox can potentially have on the state of mental health. The theory argued that the statement psychological well-being and intrinsic motivation depend on three universal and innate psychological needs, which include autonomy (sense of control over what one does), competence (sense of efficacy in whatever one does), and relatedness (sense of connection with people). The social media platform is often built in a systematic way to frustrate such requirements, as found in the research carried out today (Radcliffe & Klein 2020).

The Fear of Missing Out (FoMO) Framework

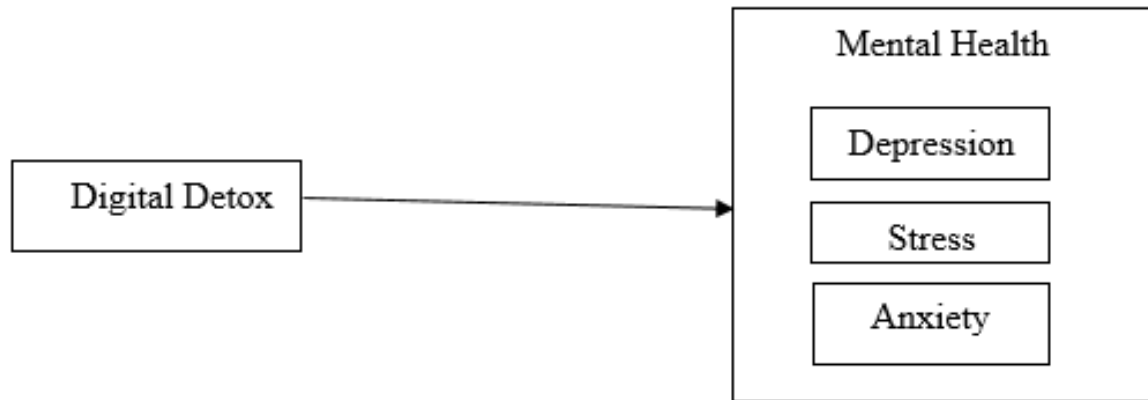
The Fear of Missing Out (FoMO) model can provide a particular theoretical framework as to why the digital detox interventions can result in some mental improvement. FoMO is a particular form of anxiety in the digital age, which is related to the obsessive fear that people are doing something pleasant to which they are not associated (Przybylski et al., 2013). Modern literature suggests that FoMO has already been shown to mediate the association between the use of social media and poor mental health and in particular in young adults (Wegmann et al., 2020). The presence of social information at any time through the digital media creates a feedback loop whereby the users are coerced by the necessities to make sure that they are continually linked to their social information to prevent being outdone in terms of being socially relevant.

Rationale

The excessive usage of digital technology in our day-to-day life, especially in young adults has been a point of extreme worry with respect to the effects it has on the mental health. There exist equally large research works that have attributed heavy use of digital media to heightened mental distress, such as anxiety, depression, and sleeping issues (Twenge, 2018). The idea of voluntary non-use of digital devices or so-called digital detox has later become a trendy intervention practice of inverting the adverse effects. Nevertheless, very little empirical data exists regarding

its efficacy as well as the mechanisms of its positive action are not completely known. The study aims to fill this gap by evaluating the effects of a digital detox on the mental health of young adults. Based on existing metrics of the psychological distress, the aim of the study is to comprehend how digital detoxification works, as well as what types of users it is most effective with. The results are supposed to be used in coming up with practical tools to enhance mental health and digital wellbeing of an ever-connected society.

The Conceptual framework of the study



Objectives

The main objectives of the study are given below:

To find out the predictive role of digital detox on mental health in young adults

Hypotheses

H1: Digital detox will predict mental health among young adults.

H1 (a): Digital detox will negatively predict stress in young adults.

H1 (b): Digital detox will negatively predict anxiety in young adults.

H1 (c): Digital detox will negatively predict depression in young adults.

Research Design

A quantitative correlational research design was used in the current study.

Sample

The sample of the study is 300 participants, selected by using the convenient sampling technique men (n = 150) and women (n = 150). Data collection was done from different Universities of Punjab. The participants in the present study were young adults aged between 18 to 29 years. This was done so that the final sample would reflect the behavioural patterns required in analyzing the psychological impact of a decrease in digital consumption.

Instruments

Depression, Anxiety, Stress Scale

Mental health was assessed by DASS-21 developed by Lovibond and Lovibond, (1995). This scale measures the levels of depression, anxiety, and stress. The answers are given on 4-point

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Likert scale with the range of 0 = did not apply to me at all, 1= some of the time, 2= good part of the time, 3=most of the time. It has good internal consistency .85.

Digital Detox Practice Questionnaire

Digital detox was assessed by Digital detox practices questionnaire developed by Alanzi et al., (2024). Digital detox questionnaire consist of 5 items 5-point Likert scale (1=Strongly Disagree, 2=Disagree=, 3=Neutral, 4=Agree, 5=Strongly Agree). It has good internal consistency .84.

Procedure

Before implementing the current study plan the consent from the institutional administrator and the supervisor was obtained before data collection, and organization representatives was directly reach out to heads of departments. They were briefed about the objective and importance of the study being conducted. With the consent of the individual, young adults were contacted in an academic setting and the young adults were informed of the nature and purpose of the study. Participants were requested to provide their written consent. Participants were instructed on how to fill up the questionnaire correctly and honestly. In addition to the questionnaire, there was a demographic sheet attached to each questionnaire in order to collect the needed demographic information. At the end participants were given blessings and appreciation for their support. All the participants were assured that their personal data will be kept private. Data was loaded into SPSS and analysis were performed to find the outcomes.

Results

Table 1

Mean, Standard Deviation, Alpha Reliabilities and correlation for all Study Variables

Variables	<i>M</i>	<i>SD</i>	α	Range	1	2	3	4	5
1.Digital Detox	18.96	3.72	.60	2–9	–				
2.DASS	60.68	8.40	.73	35–75	-.12*	–			
3.Stress	19.97	4.35	.60	9–30	-.12*	.68**	–		
4.Anxiety	20.57	3.80	.60	12–30	-.13*	.68**	.18**	–	
5.Depression	20.14	4.10	.62	8–30	.01	.69**	.16**	.28**	–

Note. (*N* = 300) DASS = Depression, Anxiety, Stress Scale

Table 1 shows the mean, the standard deviations, the reliability coefficients as well as the range of all the variables in the study. Alpha reliability of all variables used in current study was satisfactory ranging from .60 to .73. The Pearson correlation coefficients between all study variables in young adults. It shows that digital detox shows significant negative correlation with stress and anxiety and non-significant positive correlation with depression and also shows significant negative correlation with overall mental health.

Table 2

Regression Coefficients of Digital Detox Predicting Mental Health outcomes in young adults

Variables	B	SE	T	p	95% CI
Constant	63.58***	1.46	43.50	.000	[60.71, 66.46]
Digital Detox	-.57*	.28	-2.05	.041	[-1.12, -.02]
R ²	.01				

Note. (N = 300)

* $p < .05$, *** $p < .001$.

Table 2 shows the findings of the regression model the use of the digital detox as a predictor of the overall mental health. It shoes 1% variance in mental health explained by a predictor variable digital detox. Overall the model was significant $\{F(1,297) = 4.20, p < .05\}$ and the predictor digital detox ($\beta = -.12, p < .05$) were significant negative predictor of mental health outcomes.

Table 3

Regression Coefficients of Digital Detox Practice Predicting Stress in young adults

Variables	B	SE	T	P	95%CI
Constant	21.53***	.76	28.28	.000	[20.03, 23.03]
Digital Detox	-.31*	.15	-2.14	.033	[-.60, -.03]
R ²	.02				

Note. (N = 300)

* $p < .05$, *** $p < .001$.

Table 3 presents the outcome of the regression analysis that was performed to determine the role of digital detox as a predictor of stress. It shows 2% variance in stress explained by a predictor variable digital detox. Overall the model was significant $\{F(1,297) = 4.56, p < .05\}$ and the predictor digital detox ($\beta = -.12, p < .05$) were significant negative predictor of stress.

Table 4

Regression Coefficients of Digital Detox Predicting Anxiety in young adults

Variables	B	SE	t	p	95%CI
Constant	22.03***	.66	33.23	.000	[20.73, 23.34]
Digital Detox	-.29*	.13	-2.30	.022	[-.54, -.04]
R ²	.02				

Note. (N = 300)

* $p < .05$. *** $p < .001$.

The table 4 present the outcomes of the regression analysis on the digital detox as anxiety predictors. It shows 2% variance in anxiety explained by a predictor variable digital detox. Overall the model was significant $\{F(1,297) = 5.30, p < .05\}$ and the predictor digital detox ($\beta = -.13, p < .05$) were significant negative predictor of anxiety.

Table 5
Regression Coefficients of Digital Detox Practice Predicting Depression in young adults

Variables	B	SE	t	p	95%CI
Constant	20.02***	.72	27.78	.000	[18.60, 21.44]
Digital Detox Practice	.03	.14	.22	.824	[-.24, .30]
R ²	.00				

Note. (N = 300)

***p < .001.

The table 5 shows the results that digital detox was not a significant predictor of depression. It shoes 0% variance in depression explained by a predictor variable digital detox. Overall the model was non-significant $\{F(1,297) = .05, p > .05\}$ and the predictor digital detox ($\beta = .13, p > .05$) were non-significant positive predictor of depression.

Discussion

The first Hypothesis of our study “digital detox will predict mental health among young adults”. Results of the present research indicate that digital detox is significantly related to mental health among young adults. The first hypothesis was supported, with greater digital detox predicting better mental health. This could be due to the fact that the deliberate reduction of digital engagement reduces the amount of information overload, constant notifications, social comparison, and pressure to be constantly online, giving people more room for psychological recovery and the opportunity to engage in offline activities. The results are in line with Schmuck (2020), who emphasized that digital detox and self-regulation are important factors for wellbeing. Wilcockson et al. (2023) concluded that the period of social media digital detox for 2 weeks had a significant effect on mental health outcomes, such as stress, sleep, and life satisfaction. In the same way, Hunt et al. (2024) found a substantial decrease in depression and anxiety after a 7-day digital detox among young adults

The second hypothesis was confirmed as well, digital detox negatively predicting stress. Lower digital exposure can help to reduce the constant demands of being in the online world and the level of cognitive stimulation, which can offer the opportunities necessary for psychological detachment and recovery. In turn, the third hypothesis was also confirmed, suggesting that digital detox will negatively predict anxiety among young adults. Reducing digital interaction could reduce the amount of negative online content and constant checking of digital interactions, all of which can lead to anxiety. Liu et al. (2022) found that the effect size of digital detox is moderate in reducing anxiety symptoms, which aligns with the results of the current study that digital disengagement can be an effective intervention tool to reduce anxiety

However, the fourth hypothesis was not supported as there was no significant negative relationship between digital detox and depression. The result could be attributed to the complex etiology of depression, which is affected by biological, psychological, interpersonal, and environmental factors. Thus, simply reducing digital engagement does not seem to be enough to significantly impact depressive symptoms. However, stress and anxiety might be more directly affected by time demands related to digital technologies, like information overload and notifications. This is supported by empirical evidence as well, in that there is variation in the effect of social media abstinence as seen in controlled studies on depression symptoms. For instance, Hall et al. (2024) found that people who did not use social media experienced a decrease in depression; however, the decrease was not statistically different from the control group. This non-significant finding is theoretically plausible, and implies that there is potentially a stronger association between digital detox and stress or anxiety.

Limitations of the Study

One of the weaknesses of the study is that the data are self-reported and, in this case, it is possible to introduce such types of biases as social desirability or inaccuracy in recollecting the utilization of digital media and mental health symptoms. Although psychological distress and self-regulation were determined by way of utilizing the standardization scales, the manners of how these individuals view their acts may vary and it may create a disparity between things that are stated and things that are actually accomplished in the digital media use. The second weakness is that the somehow digital detox may be too short to be capable of recording the long-term effects of digital abstinence on the psychological health results. Moreover, such a number as 300 participants is enough to be statistically powerful, not to mention that it may not be truly representative of the variability of the digital habits and the psychological state of all young adults, in particular those who belong to different cultural or socio-economic groups. Moreover, the research is largely informed by young adults, which cannot be applied in the context of older people or individuals with varying degrees of addiction to digital media. Lastly, the study fails to acknowledge the role individual differences play in establishing mental health norms of an underlying problem in baselines to the effectiveness of a digital detox.

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