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Research Paper

Living Online: Assessing Digital Stress in Contemporary Educational Contexts Through the Digital Stress Scale

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Abstract

The first quarter of the twenty-first century witnessed the rapid growth of digital technologies, yet their psychological impact on students and teachers is not fully understood. This research paper examines the prevalence of digital stress among students and presents the results of a pilot study using a multidimensional Likert Scale. Developed by Hall et al. (2021), the Digital Stress Scale consists of five components: Availability Stress, Approval Anxiety, Fear of Missing Out, Connection Overload, and Online Vigilance. Using purposive sampling, a mixed group of students, teachers, and working professionals (N=106) reported on the 24-item scale. The study also evaluated the feasibility and appropriateness of the scale in the Indian classroom context. Across the five subscales, 42-47% of all respondents reported typical experiences of digital stress, and approximately 15-20% experienced elevated levels of digital stress. Cronbach's alpha coefficient demonstrated reliability and internal consistency of the subscales (α=0.83). The factor analysis (Principal Component Analysis) indicated digital stress as a common underlying construct and the Pearson correlation coefficient demonstrated the correlation between the five subscales. The findings suggest that DSS can function as an early, reliable psychometric tool that can inform and strengthen teacher observation of digital stress.

Keywords*:* Digital Stress, Student Anxiety, Digital Addiction, Connection Overload, Online Vigilance, Digital Technology for Education

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1. Introduction

We live in a digital era that has flooded the human brain with information, creating constant sensory stimulation in the form of words, visuals, and sounds. Compared to previous generations, the current one processes so much more information, leading to the coinage of terms such as 'attention economy' (Davenport & Beck, 2001). The impact of consistent use of digital technology on tertiary-level learners in and beyond the classroom needs urgent academic attention. Recent neurocognitive research has documented concerns about the long-term negative effects of excessive internet and social media use. A brain study using functional magnetic resonance imaging(fMRI) revealed changes in brain neural networks associated with internet addiction, resulting in maladaptive behaviour and developmental issues (Chang & Lee, 2024). Finland, Denmark, and Norway are the latest European countries to impose legal restrictions on cell phone use in schools, acknowledging the evidence of its negative impact on young people (Bryant, 2025). In contrast, as the country with the second-highest number of smartphone users in the world, India is poised to consume more of digital technologies (CIA, 2026).

Bawden and Robinson discuss the overload of information in quantity, choice, and the variety of formats and channels leading to infobesity (Bell, 2004 as cited in Bawden and Robinson, 2020), *information avoidance* (Sweeny, 2010 as cited in Bawden and Robinson, 2020), and *information anxiety* (Wurman, 1989). They associate the feeling of overload with ignoring information, attention deficit, or distractibility, all of which have consequences in learning and education. Information overload is not a specific challenge for educators alone, but all of society (Bawden & Robinson, 2020).

Steel et al. (2019) conceptualized the Digital Stress Scale, and later Hall et al. (2021) developed it into a multidimensional psychometric tool that assesses emotional and cognitive responses to digital engagement. Within the Indian educational context, large classes and infrastructural limitations often hinder the identification of learners experiencing high levels of anxiety or stress (Deb & Deb, 2025). In this research, we use the Digital Stress Scale on a pilot group of students and older adults in South India to diagnose levels of digital stress prevalent in the participants.

The study will evaluate the validity and reliability of DSS in measuring digital stress and examine the appropriateness of DSS as a psychometric tool for classroom use in a classroom setting in India. Despite global concerns regarding information and digital overload, quantitative studies using validated psychometric scales to measure digital stress, particularly in Indian educational contexts, are limited at present. The results will help determine how educators can use this tool to identify learners who struggle with digital overload and make decisions about the level of digital technology use in their classrooms. The scale could also function as a screening tool to inform educators of student wellbeing. This study provides a pragmatic approach using the DSS towards identifying learner fatigue and digital stress due to unregulated use of digital devices.

2. Review of literature

Learner well-being is integral in enhancing motivation, self-efficacy, and self-regulation (Resnik & Mercer, 2024). However, frequent use of smartphones and digital media has been linked to higher rates of anxiety, stress, and clinical depression among adolescents and young adults. The use of

digital devices is also associated with reduced concentration, academic performance, emotional and physical well-being (Hashemi et al., 2022; Višnjić et al., 2018; Thomée et al., 2011). A large-scale U.S. study examining the increase in psychological depression, mood disorders, and suicidal thoughts among 18 to 25-year-olds showed a 71% increase in anxiety and depression compared to other age groups. The study attributed this increase to the impact of digital media and electronic communication (Twenge et al., 2019). In addition, a systematic review of multiple cross-sectional quantitative studies showed consistent negative associations between psychological distress and social media use among adolescents (Keles et al., 2019).

A massive shift to online technologies during the 2019 COVID pandemic further augmented the potential for digital overload. Learning, entertainment, socialization, medicine, and even therapy shifted online, leading to a global surge in average screen time for both children and adults (Trott et al., 2022). This trend has prompted several scholars to warn about the physical and mental health risks associated with dysregulated screentime (Devi & Singh, 2023; Wong et al., 2021).

In India, several studies have examined the digital burnout post-COVID-19 pandemic and the rise in mental health concerns (Sharma et al., 2020). A quantitative study on digital stress among Indian adults (10-60 years) foregrounded the effects of prolonged digital technology consumption on both physical and mental health (Gaikwad & Bhattacharya, 2024). While most of the Indian studies have discussed the problems of excessive exposure to digital technology and social media use, the present study could not identify research employing standardized psychometric scales for measuring digital stress, particularly instruments appropriate for large-scale classroom implementation.

The Digital Stress Scale (DSS) developed by Hall et al. (2021) comprises five subscales- Availability Stress, Approval Anxiety, Fear of Missing Out, Connection Overload, and Online Vigilance to measure levels of digital stress. DSS is a multidimensional self-report scale, theorized by Steel et al. in 2020 (Hall, Steele, Christofferson, & Mihailova, 2021). When combined with classroom observation, counsellor support, and parental awareness, the scale has the potential to function as a preliminary diagnostic tool to identify learners experiencing stress and anxiety related to digital technology use.

Availability Stress is captured by the term "permanently online and permanently connected" (Vorderer et al., 2016). It underscores the blurred boundaries between digital engagements and offline life, and the exhausting pressure to remain perpetually reachable, especially via digital devices, leading to anxiety (Halfmann, 2019).

Fear of Missing Out (FoMO) refers to a foreboding sense of anxiety that others might be enjoying rewarding experiences without one's participation (Przybylski, K., DeHaan, & Gladwell, 2013). Compulsive checking behaviours, disrupted sleep cycles, and increased social anxiety stem from the Fear of Missing Out. These unhealthy behaviours are intensified by social media's design, which encourages constant validation-seeking and comparison, leading to what Hall et al. (2021) define as Approval Anxiety- stress arising from the desire for online affirmation through likes, comments, and shares.

The Connection or Digital Overload caused by simultaneous engagement in multiple digital environments is strongly associated with reduced well-being (Büchi, Festic, & Latzer, 2019).

Connection Overload results in cognitive strain, including fatigue, loneliness, anxiety, and sleep deprivation (Li, Go, & Ye, 2023). Despite its negative impact, young people still favourably consider cell phones and social media as technologies that aid in building peer relationships and connections (Hall, Miller, & Christofferson, 2021). Hall et al. (2021) identified Online Vigilance as the latest factor that impacts digital stress. It is a continuous mental preoccupation with online interactions even in offline settings, linked to attentional fragmentation and reduced mental health (Reinecke et al., 2018).

This study will contribute towards understanding the association between anxiety and digital technology using the DSS to assess the prevalence and dimensions of digital stress among students and professionals. Based on the Digital Stress scores and statistical analysis, the study will further bring to attention the need for increased awareness and purposeful interventions for individuals experiencing elevated levels of digital stress.

3. Methodology

The study employs quantitative methodology and analyses the DSS using descriptive and inferential statistical tools. A pilot survey was conducted with 106 participants between March 2025 and June 2025 to investigate their digital stress levels. In the second part of the study, the reliability and validity of the Digital Stress Scale and its results were examined and confirmed to support its future applications in large-scale classroom settings.

3.1 Aims of the present study

The study aims to

- Validate the Digital Stress Scale as a reliable psychometric tool for assessing digital stress in the Indian educational context through descriptive and inferential statistical analyses.
- Assess levels of digital stress among college students and working professionals through a pilot study.

The study also examines the following subscales of digital stress drawn from the works of Hall et al., (2021) and as modelled in NovoPsych (2025)-

- Availability Stress, which measures distress, including guilt and anxiety
- Approval Anxiety which assesses the anxiety about how others perceive, or judge one's digital image or footprint
- Fear of Missing Out that measures the distress which arises out of the fear of missing out on real or perceived socially rewarding experiences online
- Connection Overload indicating stress due to an overload of digital technology and communications; and
- Online Vigilance, which measures the inability to disconnect from online or digital devices affecting real-life engagements and relationships

3.2 Materials and methods

3.2.1 Participants

The pilot study consisted of 106 participants (N =106), mainly including engineering students from different semesters and a small number of working professionals, recruited using a heterogeneous purposive sampling approach. Participants received the DSS via a Google Form survey distributed through social media platforms. After the respondents consented to taking part in the study, they were asked to complete the 24-item questionnaire online. Participants responded using a five-point Likert Scale with the following options- Never (1), Rarely (2), Sometimes (3), Often (4), and Always (5) (Annexure 1).

The sample primarily consisted of urban participants, 55% participants were first-year engineering students, 31% were senior engineering students and 11% older adults, mainly working professionals, ranging from the age of 21 to 55 years. The remaining 3% were homemakers or stay-at-home parents. The heterogeneous group of participants was included to explore whether participants' responses varied according to their age, gender, and occupational status.

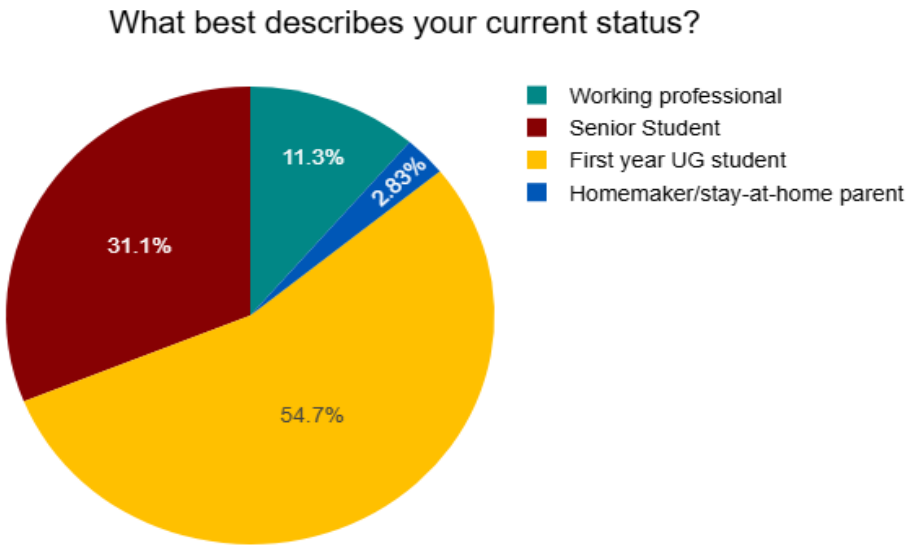

Figure 1- Occupational Status of DSS Participants

3.2.2 Methods

The Digital Stress Scale is a 24-item questionnaire designed to measure participants' stress levels resulting from the use of digital technology. The original scale was administered to all participants without any modifications. Additionally, participants were provided with a brief introductory note outlining the purpose of the research study and were asked for their permission to take part in the research.

3.3 Statistical Analysis

Descriptive statistics were used to summarise the data, including measures such as mean, standard deviation, frequency, minimum, maximum, range, and percentiles. The raw data were coded and ranked to calculate the percentile scores for each respondent across the five subscales, in addition

to the overall percentile score. Percentile scores are generally recommended for interpreting the stress levels, which may range from low to very high (NovoPsych, 2025). The descriptive statistics summarised the overall distribution of responses and provided insights into the participants' digital stress levels.

Inferential tools helped evaluate the reliability of the scale and its potential for large-scale deployment in future research. Cronbach's Alpha was used to assess the internal reliability of the scale. The Mann-Whitney U test was conducted to determine whether the mean difference in the stress scores between male and female participants was statistically significant. Pearson Correlation Coefficient (*r)* assessed the strength and direction of relationships between the subscales.

Principal Component Analysis (PCA) was conducted to examine whether the five subscale scores could be grouped to represent an overlaying construct of digital stress (Boateng, Neilands, & Frongillo, 2018). An online statistical analysis tool, DATAtab (2025), was used to generate both the descriptive and inferential statistical results for the study.

4. Results and Discussion

4.1 Descriptive Statistical Results

The detailed descriptive statistical analysis results are given in Annexure 2. The summary of the data shows that Working Professionals and homemakers have a slightly higher mean than students, as shown in Table 1. However, a larger sample size is required to determine whether these mean differences are statistically significant.

Respondents	Mean (Across 24 items)
Working Professionals	2.92
Home Makers	2.67
Senior Students	2.61
First Year Students	2.47

Table -1: Descending Trend in Perceived Digital Stress

Table -2 shows the summary of Frequency, Mean, Standard Deviation, and Variance based on the participants' occupational status.

Occupation/Status	Gender	Frequency	Mean	Std. Deviation	Variance
Working professional	female	10	2.88	0.72	0.53
	male	2	3.6	0.34	0.12
Senior Student	female	12	2.83	0.71	0.5
	male	19	2.8	0.69	0.47

	other	2	3.19	1.15	1.32
First year UG student	female	23	2.61	0.73	0.54
	male	34	2.46	0.69	0.48
	other	1	2.76	NaN	
Homemaker/stay-at-home parent	female	2	2.22	0.25	0.06
	male	1	2.92	NaN	
	other	0			

Table 2: Average Scores of All Participants (Occupation-wise)

The data indicate that male participants reported higher levels of digital stress than females. The gender differences are more pronounced among working professionals and homemakers compared to college students. Standard Deviation reflects the variations in responses in each group. Variance, which is the square of standard deviation, indicates the consistency of the responses. The lower variance here reflects the higher consistency between the responses and greater agreement among participants due to the minimal dispersion in the data.

4.1.1 Percentile Distribution Results

The DSS assesses the participants' stress levels using percentiles scores (NovoPsych, 2025). These scores were used to interpret the participants' over all digital stress as well as the scores across the subscales. Scores below the 25th percentile are categorized as experiencing low stress levels, while those in the 26th-75th percentile range were classified as having typical stress levels. Scores above 75th percentile indicated elevated levels of stress, much higher than that of the average participant.

Percentile-based interpretation	**Stress levels**
10th percentile and below	Very low levels of digital stress
11th-25th percentile	Low- less digital stress than most individuals
26th to 75th percentile	Average- typical levels of digital stress
75th to 90th percentile	High- more digital stress than the majority of individuals
91st percentile and above	Very high, significantly elevated levels of stress

Table 3: Interpreting Percentile values for DSS Hall et al. (2021)

Table 4 shows the percentile distribution of all the participants in the five subscales and the overall scores, providing a distributional overview of the percentile scores in the study.

DSS	10th percentile and below	11th-25th	26th to 75th	76th to 90th	91st percentile and above
Availability stress	10.37	16.98	47.16	14.15	10.37

Approval anxiety	10.38	15.09	42.45	16.04	8.49
FOMO	10.38	15.09	45.28	17.92	11.32
Connection overload	10.38	16.98	48.11	15.09	9.43
Online Vigilance	12.26	13.21	45.28	20.75	8.49
Overall	11.32	16.98	47.17	13.21	11.32

Table 4: Percentile Distribution Data

The results (Table 4) show 42-48% of the participants are clustered in the 26th-75th percentile, reflecting typical levels of digital stress, indicating that the majority of the respondents appeared to experience moderate stress levels. These respondents reported feeling pressured by aspects of digital technology and/or social media but had not yet reached an overwhelming point because of its impact. This implies that most participants experience some level of digital distress in their daily lives, which they need to overcome to have a healthy and functioning life.

Among all subscales, Fear of Missing Out and Online Vigilance showed the highest stress levels, with approximately 29% of participants recording high levels or very high levels of stress. These two subscales may be interrelated as individuals who fear missing out on enjoyable or important online experiences also tend to exhibit heightened vigilance towards staying constantly connected online.

Although Approval Anxiety is a common form of stress among digital technology users, it may be less likely to present at extreme levels as this type of anxiety is often expressed indirectly in real-life situations and may not be directly responsible elevate perceived stress scores. Low self-esteem or self-worth may lead individuals to seek validation through social media, which then would cause an increase in stress levels manifesting more rigorously in other subscales, as was observed in this study.

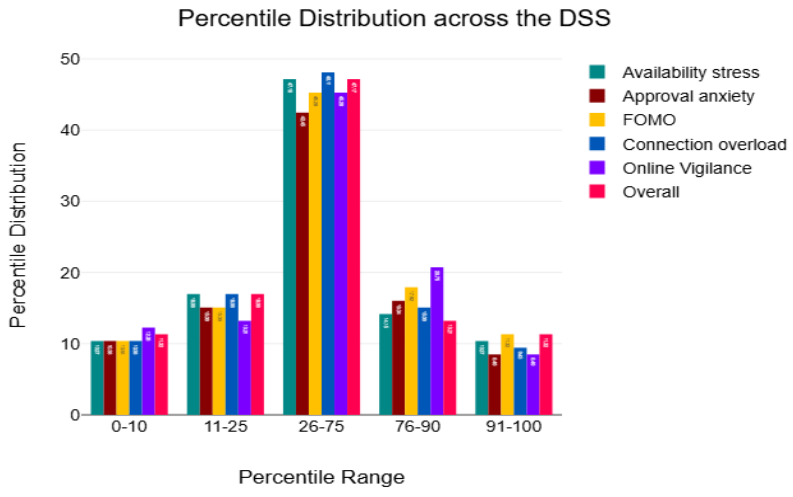

Figure 2- Percentile Distribution of Participant-Scores

4.2 Inferential Statistical Results

4.2.1 Cronbach's Alpha for Validating the Reliability of the Scale

Cronbach's alpha was calculated to assess the internal consistency and reliability of the five subscales within the DSS. This coefficient helps determine whether the items within the scale reliably assess the overall digital stress levels of participants. The high Cronbach's alpha value indicates strong internal consistency. According to George and Mallery (2003), 0.80 and above are considered highly reliable (Annexure 4). The present study reported α = 0.83 across the five subscales, suggesting that the items are consistent in measuring the intended construct.

Cronbach's Alpha	Number of Items
0.83	5

Table 6- Cronbach's Alpha Coefficient for the DSS Subscale Percentiles

All five subscales demonstrated strong correlations with the total score of the remaining subscales. Corrected Item-Total Correlation (CITC) values for each subscale showed a correlation above 0.5, confirming a moderate to strong relationship. Thus, removing any one of the subscales would reduce the overall reliability of the scale, supporting the need to retain all five subscales to assess overall digital stress.

CITC values ranged from 0.55-0.73 (Annexure 3), indicating the moderate to strong internal consistency with the overall scale. Among the five subscales, Connection Overload contributed the most to overall reliability (r=0.73), whereas Approval Anxiety indicated the least contribution (r=0.55) (DATAtab, 2025). The study concluded that all five scales are important to assess digital stress and none should be excluded for future DSS studies.

4.2.2 Mann-Whitney U Test -Statistical Significance of male and female stress scores

	Gender	Frequency	Mean	Std. Deviation	Variance
Average Scores	male	56	2.63	0.71	0.5
	female	47	2.71	0.71	0.51
	other	3	3.05	0.85	0.72

Table 7- Mean Average Scores by Gender

The descriptive statistics analysis (Table 3) indicated that female participants reported higher Mean scores when compared to male participants. The third category, 'Other', was excluded from analysis due to the inadequate sample size (N=3), which was insufficient for statistical inference.

To assess the statistical significance of the difference in mean scores, the Mann-Whitney U test was conducted. This non-parametric test is appropriate for small sizes and data without normal distribution as is the case in the present study. The test ranks the data and compares the distributions of male and female participants as two independent groups (DATAtab, 2025).

Hypotheses for the Mann-Whitney U Test.

Null hypothesis	Alternative hypothesis
The *female* group has smaller than or equal values as the *male* group for the dependent variable Average Score.	The *female* group has larger values as the *male* group for the dependent variable Average Score.

Table 8-Null Hypothesis and Alternative Hypothesis for the Mann-Whitney U test (DATAtab, 2025)

Table 9 shows the results of the Mann-Whitney U test. U is the raw value based on rank comparisons called the Mann-Whitney U statistic. The value of z is the standardized score of the U statistic. Asymptotic p is the p-value assuming a large sample size and normal approximation. Exact p is the p-value based on the exact distribution, and r is the Effect Size, which indicates Cohen's value and the effect of the score (DATAtab, 2025).

	U	z	asymptotic p	exact p	r
Average Score	1170.5	-1.1	.135	.136	0.11

Table 9- Results of the Mann-Whitney U Test

A p-value of 0.135 is above the common significance threshold of .05, suggesting that the result is not significant at the 5% level. The value of 0.11 indicates a small effect size. In summary, the Mann-Whitney U test results suggest a small effect size in the difference in Average Score between females and males, with the female group likely having higher values for Average Score. The difference is not statistically significant at a 5% significance level.

4.2.3 Correlation between subscales of the DSS

Pearson's Correlation Coefficient was calculated to explore the relationship between the five subscales. Table 10 shows that all correlations are positive and statistically significant with a p value less than 0.05. The results indicate a moderate to strong degree of association among the subscales.

Correlation Pairing of Subscales in DSS	r	p
Availability Stress and Approval Anxiety	0.37	<.001
Availability Stress and FOMO	0.54	<.001
Availability Stress and Connection Overload	0.55	<.001

Availability Stress and Online Vigilance	0.43	<.001
Approval Anxiety and FOMO	0.49	<.001
FOMO and Connection Overload	0.54	<.001
FOMO and Online Vigilance	0.45	<.001
Connection Overload and Online Vigilance	0.61	<.001

Table 10: Correlation between different subscales

	Availability Stress	Approval Anxiety	FOMO	Connection Overload	Online Vigilance
Availability Stress	1	0.37	0.54	0.55	0.43
Approval Anxiety	0.37	1	0.5	0.51	0.36
FOMO	0.54	0.5	1	0.54	0.45
Connection Overload	0.55	0.51	0.54	1	0.61
Online Vigilance	0.43	0.36	0.45	0.61	1

Table 11 - Correlation Matrix of DSS Subscales

The strongest correlation (r= 0.61) was between Connection Overload and Online vigilance, suggesting that individuals who are continuously online may feel overwhelmed by digital connectivity and may experience an inability to disconnect, leading to Connection Overload. Other subscale pairs showed a more moderate correlation, reinforcing the notion that the different dimensions are interconnected and collectively contribute to digital stress.

4.2.4 Principal Component Analysis (PCA)

The study has conducted an analysis of percentile distribution, correlation between the subscales, internal consistency, and summarized the descriptive results of the entire data. However, the validity and reliability of the study are only complete when it assures that all the subscales measure one underlying construct: digital stress. This validation step is essential for confirming unidimensionality in psychometric tools.

Using Eigenvalues greater than 1 as the extraction criterion, Principal Component Analysis was conducted with the percentile scores of the five subscales with and the first component accounting for 59% of the total variance (Table 12).

Component	Total	% of variance	Accumulated %
1	2.96	59.12	59.12
2	0.67	13.39	72.51
3	0.6	12.02	84.53
4	0.44	8.75	93.27
5	0.34	6.73	100

Table 12- Total Variance

PCA investigates whether one major factor (digital stress) can impact the shared variance of the five subscales and show unidimensionality of that construct. All items strongly correlate with each other and the first component most likely reflects the core construct- digital stress. This confirms that the construct has a unidimensional aspect and does not have multiple underlying constructs. The extracted factor also carries a variance of 59.12% which is above the 50% variance usually acceptable in social sciences research (UCLA, 2024).

	Extraction
Availability Stress	0.57
Approval Anxiety	0.5
FOMO	0.63
Connection Overload	0.72
Online Vigilance	0.55

Table 13- communalities

Communality shows the proportion of variance that is accounted for by the principal component. As presented in Table 13, all communalities exceed 0.50 suggesting that each subscale meaningfully contributes to the construct of digital stress.

	Component
	1
Availability Stress	0.75
Approval Anxiety	0.7
FOMO	0.79
Connection Overload	0.85
Online Vigilance	0.74

Table 14- Component Matrix

	Component
	1
Availability Stress	0.75
Approval Anxiety	0.7
FOMO	0.79
Connection Overload	0.85
Online Vigilance	0.74

Table 15- Rotated Component Matrix

The component matrix shows the initial loadings on each of the variables before rotation. After applying Varimax, the rotated components would ideally show the components more clearly by redistributing the variance. Since the PCA showed only Component 1(eigenvalue>1), both the component matrix and rotated matrix show similar loadings. All loadings are above .7, which shows a very strong relationship between the subscales and digital stress. The final results confirm that all the five subscales are aligned with the single latent construct- digital stress supporting the scale's validity and reliability for future research in a large-scale study.

5. Conclusion

Mercer (2021) points to the subjective and personal nature of wellbeing as a concept and the need for research in "diverse contexts and settings". While research on digital stress is expanding, the present study demonstrates the potential of DSS as a quantitative tool for informing learners and teachers of learner wellbeing. The findings confirm that digital stress is not an isolated issue but a growing concern across diverse age groups and genders. A significant number of participants in the study reported either typical or elevated levels of digital stress that can disrupt the daily functioning of these individuals. Although the study was based on a relatively small sample, the statistical findings suggest that the scale is valid and reliable for assessing digital stress in Indian academic and professional contexts. The study recommends the use of DSS in classroom settings, not only as a feedback tool to inform students about their digital stress levels but also to help learners decide when and how to receive the required support to reduce their stress and anxiety.

The scale can be an effective preliminary screening tool in providing support for educators in a classroom setting to measure digital stress and evaluate wellbeing. When combined with teacher observation, learner engagement, and academic performance, the results from the DSS scale can assist educators in deciding the level of digital engagement in the classroom. In the next stage, based on their overall analysis, which combines quantitative and qualitative approaches,

educators can recommend counsellor support to identify learners who may require mental health assistance.

Implementing the scale and discussing the results of the scale is a positive step towards bringing awareness among learners about digital stress and anxiety. In the future, the researchers plan to expand the study to larger and more diverse populations to enhance generalizability and statistical significance. Future research will also explore classroom interventions and coping techniques to address different types of digital stress stemming from digital overload.

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Annexure 1

Digital Stress Scale Hall et.al, (2021)

1)	My friends expect me to be constantly available online	Never	Rarely	Sometimes	Often	Always
2)	On top of the other things I must do, keeping up with notifications is a chore					
3)	I am nervous about how people will respond to my posts and photos					
4)	I feel socially unavailable when I do not have my phone					
5)	I fear my friends are having more rewarding experiences than me					
6)	I have to check too many notifications					
7)	I must have my phone with me to know what is going on					
8)	For my friends, it is important that I am constantly available online					
9)	I feel anxious about how others will respond when I share a new photo on social media					
10)	I fear that others have more rewarding experiences than me					
11)	I feel overwhelmed with the flow of messages/notifications on my phone					
12)	I feel lost or "naked" without my phone					
13)	I get worried when I find out my friends are having fun without me					
14)	It feels like there is always a reminder – like a flashing light or buzz – that there is some other message that I need to attend to					
15) 16)	I am constantly checking my phone for messages/notifications Most of my friends approve of me being constantly available online					
17)	I feel nervous after I share a post or photo to see how others responded to it					

18)	I feel a social obligation to be constantly available online					
19)	I feel stress because I must sift through a lot of unimportant notifications to get to the important ones					
20)	I put a lot of effort into composing messages and posts I share online					
21)	I get anxious when I don't know what my friends are up to					
22)	I put a lot of effort into finding or creating a photo that others will approve of when I post it online					
23)	I spend too much time responding to notifications/messages					
24)	I feel nervous about how others will respond when I post new updates on social media					

Annexure 2
Descriptive Statistical Results of DSS Responses

	What best describes your current status?	Frequency	Mean	Std. Deviation	Variance
1) My friends expect me to be constantly available online	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
2) On top of the other things I must do, keeping up with notifications is a chore	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43

	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
3) I am nervous about how people will respond to my posts and photos	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
4) I feel socially unavailable when I do not have my phone	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
5) I fear my friends are having more rewarding experiences than me	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
6) I have to check too many notifications	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43

	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
7) I must have my phone with me to know what is going on	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
8) For my friends, it is important that I am constantly available online	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
9) I feel anxious about how others will respond when I share a new photo on social media	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
10) I fear that others have more rewarding experiences than me	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43

	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
11) I feel overwhelmed with the flow of messages/notifications on my phone	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
12) I feel lost or “naked” without my phone	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
13) I get worried when I find out my friends are having fun without me	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
15) I am constantly checking my phone for messages/notifications	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43

	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
14) It feels like there is always a reminder – like a flashing light or buzz – that there is some other message that I need to attend to	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
16) Most of my friends approve of me being constantly available online	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
17) I feel nervous after I share a post or photo to see how others responded to it	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
18) I feel a social obligation to be constantly available online	Working professional	12	2.92	0.9	0.81

	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
19) I feel stress because I must sift through a lot of unimportant notifications to get to the important ones	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
20) I put a lot of effort into composing messages and posts I share online	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
21) I get anxious when I don't know what my friends are up to	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33

22) I put a lot of effort into finding or creating a photo that others will approve of when I post it online	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
23) I spend too much time responding to notifications/messages	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33
24) I feel nervous about how others will respond when I post new updates on social media	Working professional	12	2.92	0.9	0.81
	Senior Student	33	2.61	1.2	1.43
	First year UG student	58	2.47	1.05	1.1
	Homemaker/stay-at-home parent	3	2.67	0.58	0.33

Annexure 3
Cronbach's Alpha

For the interpretation of Cronbach's alpha, the following table from George and Mallery (2003) can be used for interpreting the results of the study.

Cronbach's Alpha	Interpretation
> 0.9	Excellent
> 0.8	Good
> 0.7	Acceptable
> 0.6	Questionable
> 0.5	Poor
< 0.5	Unacceptable

Item-Total Statistics

Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Availability Stress	0.6	0.8
Approval Anxiety	0.55	0.81
FOMO	0.65	0.78
Connection Overload	0.73	0.76
Online Vigilance	0.58	0.8

A high correlation here means that the Item aligns well with the total score of the other items, contributing significantly to the scale's internal consistency and a low correlation means that the item is not in such good agreement with the score of the other items (DATAtab, 2025).

CITC Value	Interpretation
≥ 0.7	Very strong contribution
0.5–0.69	Moderate/good contribution
< 0.5	Weak item

With 0.6 Availability Stress has a very strong correlation.
With 0.55 Approval Anxiety has a strong correlation.
With 0.65 FOMO has a very strong correlation.
With 0.73 Connection Overload has a very strong correlation.
With 0.58 Online Vigilance has a strong correlation.