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A Review of the Clinical Utility and Psychometric Properties of the Digital Stress Scale (DSS): Norms, Percentile Rankings, and Qualitative Descriptors

The Digital Stress Scale (DSS), developed by Hall et al. (2021), is a 24-item self-report measure that assesses five distinct dimensions of stress associated with digital technology use and social media engagement. This technical review synthesises current research on the DSS's psychometric properties and provides clinicians with comprehensive scoring frameworks and qualitative descriptors. We present an interpretive system that enhances the clinical utility of the DSS through evidence-based guidelines and practical implementation strategies. The document outlines the dimensional structure of digital stress and its relationship with psychological wellbeing across different domains, while addressing important considerations for assessment and intervention planning. This framework enables clinicians to effectively incorporate DSS findings into case conceptualisation and treatment planning for clients experiencing technology-related distress.

View the DSS on NovoPsych.com.au

April 2025

Developer

The Digital Stress Scale (DSS) scale was developed by Hall and colleagues (2021):

> Hall, J. A., Steele, R. G., Christofferson, J. L., & Mihailova, T. (2021). Development and initial evaluation of a multidimensional digital stress scale. *Psychological Assessment*, 33(3), 230–242. https://doi.org/10.1037/pas0000979

This document was developed by NovoPsych to review contemporary literature and to describe original scoring methodologies and to provide interpretation material, enhance normative data and provide qualitative descriptors.

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Description

The Digital Stress Scale (DSS) is a 24-item self-report measure designed to assess the subjective experience of stress associated with digital technology use, particularly mobile and social media (Hall et al., 2021). The DSS can be used with adolescents or adults (ages 14+). Developed within a communication and psychological framework, the DSS evaluates five distinct but related dimensions of digital stress:

1. Availability Stress - assesses the pressure and social obligation to be constantly accessible and responsive via digital means, reflecting internalised expectations from peers about maintaining continuous online presence.
2. Approval Anxiety - measures nervousness and anxiety about how others will respond to social media posts and digital self-presentation, including the effort put into creating content that will receive positive feedback.
3. Fear of Missing Out - measures anxiety about being excluded from rewarding social experiences, persistent concern about what others are doing, and fear that peers are having more fulfilling experiences.
4. Connection Overload - evaluates feelings of being overwhelmed by the volume of digital communications and notifications, including the subjective experience of receiving excessive input from digital sources.
5. Online Vigilance - assesses preoccupation with staying connected to digital devices, including compulsive checking behaviours and discomfort when separated from one's phone.

For clinicians, the DSS offers several distinct advantages, particularly in understanding how digital technology use may be contributing to psychological distress in clients who use smartphones and social media. Research consistently demonstrates that digital stress—not merely time spent online—plays a crucial role in explaining the varied associations between digital media use and psychosocial outcomes (Steele et al., 2020; Hall et al., 2021; Khetawat & Steele, 2023).

The DSS aids in clinical formulation, treatment planning, and therapeutic interventions. As a formulation tool, it helps clinicians identify patterns of digital technology use that may be contributing to presenting problems, facilitating a more nuanced approach to case conceptualisation. This can be particularly valuable in understanding the aetiology of conditions such as depression, anxiety, and interpersonal difficulties, all of which have demonstrated associations with various dimensions of digital stress (Hall et al., 2021; Khetawat & Steele, 2023).

In treatment planning, elevated scores on specific DSS dimensions may indicate the need for targeted interventions addressing particular aspects of digital technology use. For example, high scores on the Connection Overload subscale might suggest interventions focused on digital boundaries and notification management, while elevated Approval Anxiety might indicate the need for addressing maladaptive cognitions related to social evaluation online.

During therapy, understanding a client's DSS score can inform the focus of interventions. The DSS can also facilitate psychoeducation about the impact of digital technology use on psychological wellbeing, helping to normalise experiences, reduce self-blame, and validate the client's experiences (Hall et al., 2021).

Psychometric Properties

The DSS was developed through a four-phase process involving focus groups with adolescents and young adults, exploratory factor analyses with multiple samples, and confirmatory factor analyses with both adolescent and young adult populations (Hall et al., 2021).

The internal consistency of the DSS has been demonstrated, with Cronbach's alpha coefficients for the total scale ($\alpha = 0.85$) and subscales showing excellent reliability: Approval Anxiety ($\alpha = 0.93$), Connection Overload ($\alpha = 0.91$), Availability Stress ($\alpha = 0.88$), Fear of Missing Out ($\alpha = 0.87$), and Online Vigilance ($\alpha = 0.86$) (Hall et al., 2021). These values indicate strong internal consistency across all dimensions of the measure.

Factor analysis supports the five-dimension structure of the DSS. Confirmatory factor analysis demonstrated excellent fit for the five-factor model (RMSEA = .044, CFI = .973, TLI = .969, SRMR = .040), with all items loading significantly on their respective factors (Hall et al., 2021). Furthermore, analysis supported a higher-order factor

structure, indicating that the five dimensions contribute to an overall digital stress construct while maintaining their distinct characteristics.

Construct validity of the DSS is supported by its theoretically consistent relationships with measures of psychological distress and wellbeing. As predicted by theoretical models of digital stress, the DSS demonstrates significant positive associations with perceived stress (r = .47 for total score), anxiety (r = .45 for young adults, r = .52 for adolescents), and depressive symptoms (r = .35 for young adults, r = .50 for adolescents) (Hall et al., 2021). Khetawat amd Steele (2023) conducted a meta-analysis of the five-factors of digital stress and psychological distress, and reported weighted mean effect size estimates (Fisher's Z) for each factor: Availability Stress (*r* = .29), Approval Anxiety (*r* = 30), FoMO (*r* = 35), Connection Overload (*r* = 26), and Online Vigilance (*r* = .34).

Convergent and divergent validity has been established through the differential patterns of associations between subscales and measures of psychosocial functioning. For example, the social dimensions of digital stress (Approval Anxiety and FoMO) show stronger negative correlations with measures of social relationships and functioning than do the technological dimensions (Connection Overload and Online Vigilance) (Hall et al., 2021).

Of particular note for clinical interpretation, research indicates that different dimensions of digital stress show different patterns of relationships with psychosocial outcomes. For example, approval anxiety and FoMO show stronger associations with depressive symptoms (*r* = .32 and *r* = .43, respectively) than do availability stress and connection overload (*r* = .09 and *r* = .21, respectively) among young adults. These differential patterns of associations support the clinical utility of examining specific dimensions of digital stress rather than relying solely on a total score.

The research also reveals developmentally sensitive relationships, with adolescents showing generally stronger associations between digital stress dimensions and measures of anxiety, depression, and social functioning compared to young adults (Hall et al., 2021). This finding is consistent with theoretical models suggesting that adolescents may be particularly vulnerable to the negative impacts of digital stress due to developmental factors including identity formation, heightened sensitivity to social evaluation, and ongoing development of self-regulation capacities (Nesi et al., 2018; Steele et al., 2020).

For clinical interpretation, DSS scores are typically evaluated dimensionally, with higher average scores indicating greater digital stress in specific domains. While formal clinical cutoffs have not been established, scores can be interpreted relative to sample means. Based on the combined sample from Hall et al. (2021), the following means and standard deviations provide reference points for interpretation:

- Availability Stress: M = 2.65, SD = 1.04
- Approval Anxiety: M = 2.79, SD = 1.08
- Fear of Missing Out: M = 2.57, SD = 1.05
- Connection Overload: M = 2.49, SD = 0.93
- Online Vigilance: M = 3.22, SD = 1.04
- Total Digital Stress: M = 2.74, SD = 0.81

These means and standard deviations are used to calculate percentiles which are then used to create descriptive categories for each subscale and the total score:

- Very Low (10th percentile or below): Indicates significantly less digital stress than most individuals.
- Low (11th to 25th percentile): Indicates less digital stress than most individuals.
- Average (26th to 75th percentile): Indicates a typical level of digital stress compared to peers.
- High (76th to 90th percentile): Indicates more digital stress than most individuals.
- Very High (91st percentile or above): Indicates significantly elevated levels of digital stress.

Scoring & Interpretation

The Digital Stress Scale (DSS) items are typically averaged to provide subscale scores and a total score, with higher average scores (1-5) indicating greater digital stress. The Total Score provides an overall indication of the level of digital distress experienced by the client but the subscales of the DSS provide clinically useful information about the dimensions of digital stress:

1. Availability Stress (Items 1, 8, 16, 18): Availability Stress measures the distress, guilt, and anxiety resulting from perceived expectations to be constantly accessible and responsive via digital means. Unlike other dimensions of digital stress, availability stress shows a more complex relationship with social outcomes, as it can be associated with both greater social connectedness and increased subjective distress.
2. Approval Anxiety (Items 3, 9, 17, 20, 22, 24): Approval Anxiety measures the nervousness and anxiety about how others perceive and respond to one's digital self-presentation, particularly on social media. High scores on this subscale suggest that concerns about digital self-presentation may be a significant source of psychological distress.
3. Fear of Missing Out (Items 5, 10, 13, 21): Fear of Missing Out measures the anxiety, worry, and distress resulting from concerns about being excluded from rewarding social experiences. High scores on this subscale suggest that fear of social exclusion may be driving problematic patterns of technology use.
4. Connection Overload (Items 2, 6, 11, 14, 19, 23): Connection Overload measures the subjective experience of being overwhelmed by the volume and pace of digital communications. High scores on this subscale indicate that the sheer volume of digital communication may be exceeding the individual's psychological resources.
5. Online Vigilance (Items 4, 7, 12, 15): Online Vigilance measures the persistent preoccupation with staying connected to digital devices and online content. High scores on this subscale suggest that digital connectivity has become a dominant psychological need that may interfere with present-moment engagement in offline activities and relationships.

Average scores for each subscale and the total score are converted to percentiles based upon a sample of 735 adolescents and young adults (Hall et al., 2021). These percentiles are then used to derive descriptive categories that aid in clinical interpretation. The descriptive categories for each subscale and the total score are:

- Very Low (10th percentile or below): Indicates significantly less digital stress than most individuals.
- Low (11th to 25th percentile): Indicates less digital stress than most individuals.
- Average (26th to 75th percentile): Indicates a typical level of digital stress compared to peers.
- High (76th to 90th percentile): Indicates more digital stress than most individuals.
- Very High (91st percentile or above): Indicates significantly elevated levels of digital stress.

Research indicates that the pattern and impact of digital stress may vary by developmental stage, with adolescents showing stronger associations between digital stress dimensions (particularly Approval Anxiety and FoMO) and psychosocial outcomes compared to young adults (Hall et al., 2021). When interpreting DSS scores for adolescents, consider the heightened importance of peer evaluation and social connectedness during this developmental period (Nesi et al., 2018).

On first administration a plot is presented displaying the total DSS and the subscale percentiles. The percentiles are presented with the qualitative descriptors in the background for ease of interpretation. When administered on multiple occasions, a longitudinal plot is displayed showing the subscale percentiles over time. When DSS scores are available from multiple timepoints, changes in scores can provide valuable information about the effectiveness of interventions or developmental changes in digital stress. For comparative interpretation, changes of at least 0.5 standard deviations in raw scores are considered clinically meaningful (the minimally important difference) (Norman et al., 2003; Turner et al., 2010). When interpreting changes, attention should be paid to both the total score and the patterns of change across subscales.

Supporting Information

Percentile Calculations

The percentile rankings for the Digital Stress Scale (DSS) were derived through statistical analysis of the normative sample reported in the scale development study (Hall et al., 2021). For both subscale and total scores, data from the combined sample ($N = 735$) of adolescents and young adults were analysed. The original study reported item-level means on a 5-point scale (1 = never to 5 = always). The current implementation of the DSS uses average scores to maintain the original 1-5 scale, whilst calculating percentiles to facilitate more intuitive interpretation and comparison across subscales with different numbers of items.

The distribution of average scores in the normative sample was used to establish percentile rankings. For each subscale and the total score, the mean (μ) and standard deviation (σ) from the normative sample were:

- Availability Stress: $\mu = 2.65$, $\sigma = 1.04$
- Approval Anxiety: $\mu = 2.79$, $\sigma = 1.08$
- Fear of Missing Out: $\mu = 2.57$, $\sigma = 1.05$
- Connection Overload: $\mu = 2.49$, $\sigma = 0.93$
- Online Vigilance: $\mu = 3.22$, $\sigma = 1.04$
- Total Digital Stress: $\mu = 2.74$, $\sigma = 0.81$

To derive the percentile lookup tables for each subscale and the total score, the following approach was taken. For each possible average score value (ranging from 1.00 to 5.00, with finer increments where needed for clinical discrimination), the corresponding z-score was calculated:

$$z = (X - \mu) / \sigma$$

where X is the average score, μ is the mean for that subscale from the normative sample, and σ is the standard deviation. These z-scores were then converted to percentiles using the cumulative normal distribution function:

$$\text{percentile} = \Phi(z) \times 100$$

where Φ is the standard normal cumulative distribution function.

The resulting pairs of average scores and percentiles were compiled into lookup tables (see Tables 1-5) for efficient implementation in clinical settings. In the practical implementation, when a client completes the DSS, their average scores for each subscale and the total scale are calculated. These average scores are then matched to the nearest value in the lookup tables. The percentiles are then categorised into descriptive ranges to aid clinical interpretation:

- Very Low (≤10th percentile): Indicates significantly less digital stress than most individuals.
- Low (11th-25th percentile): Indicates less digital stress than most individuals.
- Average (26th-75th percentile): Indicates a typical level of digital stress compared to peers.
- High (76th-90th percentile): Indicates more digital stress than most individuals.
- Very High (≥91st percentile): Indicates significantly elevated levels of digital stress.

This methodology ensures that the percentile rankings reflect both the statistical properties of the scale and its clinical utility. Using average scores rather than summed scores maintains the original metric of the items (1-5 scale), allowing for more intuitive interpretation and direct comparison between subscales with different numbers of items.

Table 1. Availability Stress

Descriptor	Average Score	Percentile
Very Low	1	6
	1.25	9
Low	1.5	13
	1.75	19
Average	2	27
	2.25	35
	2.5	44
	2.75	54
	3	63
	3.25	72
High	3.5	79
	3.75	85
	4	90
Very High	4.25	94
	4.5	96
	4.75	98
	5	99

Table 2. Approval Anxiety

Descriptor	Average Score	Percentile
Very Low	1	5
	1.17	7
	1.33	9
Low	1.5	12
	1.67	15
	1.83	19
	2	23
Average	2.17	28
	2.33	34
	2.5	39
	2.67	46
	2.83	51
	3	58
	3.17	64
	3.33	69
	3.5	74
High	3.67	79
	3.83	83
	4	87
	4.17	90
Very High	4.33	92
	4.5	94
	4.67	96
	4.83	97
	5	98

Table 3. Fear of Missing Out

Descriptor	Average Score	Percentile
Very Low	1	7
	1.25	10
Low	1.5	15
	1.75	22
Average	2	29
	2.25	38
	2.5	47
	2.75	57
	3	66
	3.25	74
High	3.5	81
	3.75	87
Very High	4	91
	4.25	95
	4.5	97
	4.75	98
	5	99

Table 4. Connection Overload

Descriptor	Average Score	Percentile
Very Low	1	5
	1.17	8
Low	1.33	11
	1.5	14
	1.67	19
	1.83	24
Average	2	30
	2.17	37
	2.33	43
	2.5	50
	2.67	58
	2.83	64
	3	71
High	3.17	77
	3.33	82
	3.5	86
	3.67	90
Very High	3.83	93
	4	95
	4.17	96
	4.33	98
	4.5	98
	4.67	99
	4.83	99.4
	5	99.7

Table 5. Online Vigilance

Descriptor	Average Score	Percentile
Very Low	1	2
	1.25	3
	1.5	5
Low	1.75	8
	2	12
	2.25	18
	2.5	24
Average	2.75	33
	3	42
	3.25	51
	3.5	61
	3.75	69
High	4	77
	4.25	84
	4.5	89
Very High	4.75	93
	5	96

Table 5. Total Score

Descriptor	Average Score	Percentile
Very Low	1.00	1.6
	1.04	1.8
	1.08	2.0
	1.13	2.3
	1.17	2.6
	1.21	2.9
	1.25	3
	1.29	3.7
	1.33	4.1
	1.38	4.6
	1.42	5.1
	1.46	5.7
	1.50	6
	1.54	7
	1.58	7.7
	1.63	8.4
	1.67	9
	1.71	10
Low	1.75	11
	1.79	12
	1.83	13
	1.88	14
	1.92	15
	1.96	17
	2.00	18
	2.04	19
	2.08	21
	2.13	22
	2.17	24
Average	2.21	26
	2.25	27
	2.29	29
	2.33	31
	2.38	33
	2.42	34
	2.46	36
	2.50	38
	2.54	40
	2.58	42
	2.63	44
	2.67	46
	2.71	48
	2.75	50
	2.79	53
	2.83	55
	2.88	57
	2.92	59
	2.96	61
	3.00	63
	3.04	65
	3.08	66
	3.13	68
	3.17	70
	3.21	72
	3.25	74
	3.29	75
High	3.33	77
	3.38	78
	3.42	80
	3.46	81
	3.50	83
	3.54	84
	3.58	85
	3.63	86
	3.67	87
	3.71	88
	3.75	89
	3.79	90
Very High	3.83	91
	3.88	92
	3.92	93
	3.96	93.4
	4.00	94
	4.04	94.6
	4.08	95
	4.13	95.6
	4.17	96
	4.21	96.5
	4.25	97
	4.29	97.2
	4.33	97.5
	4.38	97.8
	4.42	98
	4.46	98.3
	4.50	98.5
	4.54	98.7
	4.58	98.9
	4.63	99
	4.67	99.1
	4.71	99.2
	4.75	99.3
	4.79	99.4
	4.83	99.5
	4.88	99.6
	4.92	99.64
	4.96	99.69
	5.00	99.74

Interpretive Text

The interpretive report for the Digital Stress Scale (DSS) is constructed from several components that are conditionally displayed based on the client's scores and assessment history. The report follows a structured format designed to provide clinicians with meaningful insights into the client's digital stress profile.

If the client has completed the DSS previously, the report begins with a comparison of current results to previous scores:

- "Since the client first completed the Digital Stress Scale (DSS) on [date], their total average score (on a 1-5 scale) has [significantly improved/significantly deteriorated/shown minimal change/not changed at all] by [X] points (from [initial score] to [current score]). It has [changed/not changed] from the [previous descriptor] level to the [current descriptor] level. At the subscale level, [subscale names] [have/has] shown significant improvement, [subscale names] [have/has] shown significant deterioration, and [subscale names] [have/has] shown minimal or no change."

For comparative interpretation, changes of at least 0.5 standard deviations in average scores are considered clinically meaningful (the minimally important difference). The specific half-standard deviation values used for determining significant change are:

- Total Score: 0.405
- Approval Anxiety: 0.54
- Availability Stress: 0.52
- Connection Overload: 0.465
- Fear of Missing Out: 0.525
- Online Vigilance: 0.52

The report always includes an interpretation of the total DSS score:

- "The client's total Digital Stress Scale (DSS) average score is [score] (on 1-5 scale), which falls at the [percentile][ordinal suffix] percentile and this [interpretation based on descriptor]."

The interpretation text varies based on the descriptor categories, which are defined as:

- Very Low (≤10th percentile): "suggests the client experiences minimal stress associated with digital technology use. Scores in this range indicate the lowest level of subjective distress related to notifications, social media use, and digital communications. While most individuals experience some degree of digital stress in today's connected environment, the client reports substantially less than average."
- Low (>10th to ≤25th percentile): "indicates the client experiences less digital stress than most individuals. Individuals with low levels of digital stress often have effective boundaries around technology use or may experience fewer pressures related to digital social connections. The client appears to have developed strategies to manage technology-related demands."
- Average (>25th to ≤75th percentile): "indicates the client experiences a typical level of digital stress compared to peers. Most individuals in today's digitally connected environment report some degree of stress related to technology use, notifications, and social media engagement. The client's experience is consistent with normative patterns of digital stress in contemporary society."
- High (>75th to ≤90th percentile): "indicates the client experiences more digital stress than most individuals. Individuals with high digital stress may be experiencing challenges with boundaries around technology use, heightened responsiveness to notifications, anxiety about social approval, or difficulty disconnecting. These patterns of digital stress may impact daily functioning and well-being."
- Very High (>90th percentile): "indicates the client experiences significantly elevated levels of digital stress. Individuals with very high digital stress often experience significant psychological burden related to their digital technology use. This high level of distress may contribute to or exacerbate symptoms of anxiety, depression, and reduced well-being."

If at least one subscale is rated High or Very High, the report includes an analysis of specific items:

- "Specific Item Endorsement:

  Within the [highest subscale] dimension, the client most strongly endorsed the following items:

  [List of most strongly endorsed items]"

Developer

Hall, J. A., Steele, R. G., Christofferson, J. L., & Mihailova, T. (2021). Development and initial evaluation of a multidimensional digital stress scale. *Psychological Assessment*, 33(3), 230–242. https://doi.org/10.1037/pas0000979

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Turner, D., Schünemann, H. J., Griffith, L. E., Beaton, D. E., Griffiths, A. M., Critch, J. N., & Guyatt, G. H. (2010). The minimal detectable change cannot reliably replace the minimal important difference. Journal of Clinical Epidemiology, 63(1), 28–36. https://doi.org/10.1016/j.jclinepi.2009.01.024

Translations

The DSS has been translated into several languages. The following translations used the original DSS to translate items and contacted the first author (J. A. Hall) for approval prior to translation.

Arabic

Krägeloh, C.U., Medvedev, O.N., Alyami, H. *et al.* (2023). Translation and validation of the Arabic version of the Digital Stress Scale (DSS-A) with three Arabic-speaking samples. *Middle East Current Psychiatry, 30,* 118. https://doi.org/10.1186/s43045-023-00387-1

Chinese

Kei, L. C., Jiabao, S., Shijuan, W., Xiaoyan, Y., & Guangyu, Z. (2023). Psychometric validation of the revised Chinese Digital Stress Scale in college students. *Acta Scientiarum Naturalium Universitatis Pekinensis*, *59*(6), 1025-A2. https://doi.org/10.13209/j.0479-8023.2023.055

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Turkish

Aracı, F. G. İ., Oyar, E., & Tan, Ş. A Cross-cultural validation of Multidimensional Digital Stress Scale in Türkiye. *Kastamonu Education Journal*, *32*(2), 247-259. https://doi.org/10.24106/kefdergi.1473539

Sarıçam, H., & Günaydın, N. (2024). Üniversite Öğrencileri için Dijital Stres Ölçeğinin Türkçeye Uyarlanması: Geçerlilik ve Güvenirlik Çalışması. *Yükseköğretim Dergisi*, *14*(3), 11-24. https://doi.org/10.53478/yuksekogretim.1381953

Urdu

Khan, A., & Ilyas, U. (2024). Urdu adaptation and validation of Multidimensional Digital Stressor Scale. *Media Asia*, *52*(2), 285–300. https://doi.org/10.1080/01296612.2024.2368344

For additional commentary on transnational application of the DSS:

Krägeloh, C. U. (2022). Digital Stress Scale (DSS). In *International Handbook of Behavioral Health Assessment* (pp. 1-12). Cham: Springer International Publishing.

Assessment Questions

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Digital Stress Scale (DSS)

Instructions:

The following statements are about how people feel about their media use. Please indicate how frequently you have felt this way over the past 7 days.

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

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		Never	Rarely	Sometimes	Often	Always
17	I feel nervous after I share a post or photo to see how others responded to it	1	2	3	4	5
18	I feel a social obligation to be constantly available online	1	2	3	4	5
19	I feel stress because I must sift through a lot of unimportant notifications to get to the important ones	1	2	3	4	5
20	I put a lot of effort into composing messages and posts I share online	1	2	3	4	5
21	I get anxious when I don't know what my friends are up to	1	2	3	4	5
22	I put a lot of effort into finding or creating a photo that others will approve of when I post it online	1	2	3	4	5
23	I spend too much time responding to notifications/messages	1	2	3	4	5
24	I feel nervous about how others will respond when I post new updates on social media	1	2	3	4	5

Developer Reference:

Hall, J. A., Steele, R. G., Christofferson, J. L., & Mihailova, T. (2021). Development and initial evaluation of a multidimensional digital stress scale. Psychological Assessment, 33(3), 230–242. https://doi.org/10.1037/pas0000979

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Sample Result

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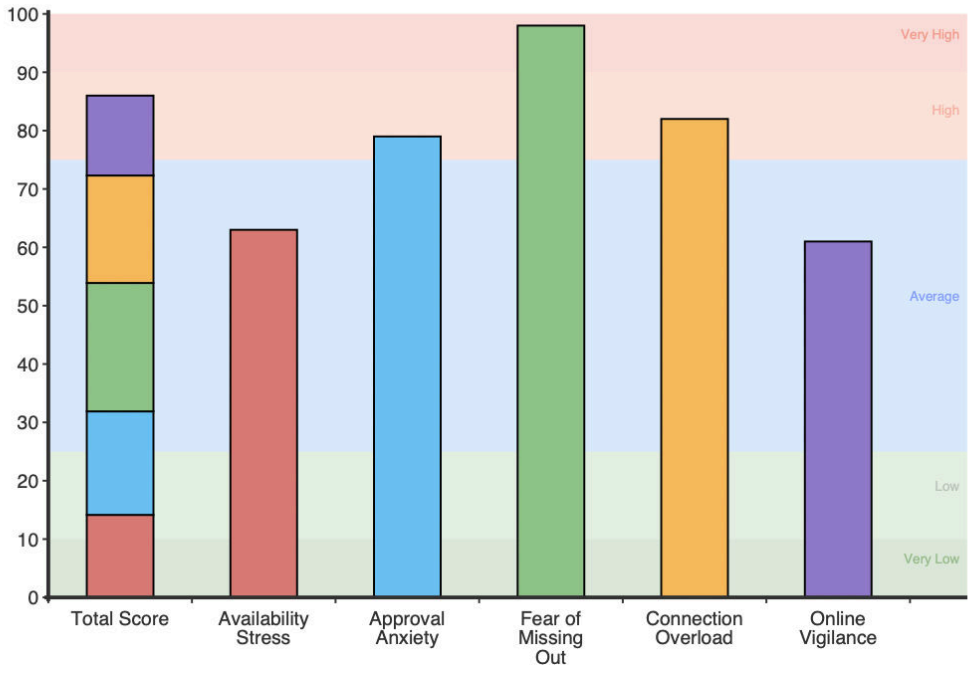
Digital Stress Scale (DSS)

Client Name	Generic Client	*Date administered*	8 Apr 2025
Date of birth (age)	17 Feb 1975 (50)	*Time taken*	21 min 53s
Assessor	Dr David Hegarty		

Results

	Average Score (1-5)	Percentile	Descriptor
Total Score	3.63	86	High
Availability Stress	3	63	Average
Approval Anxiety	3.67	79	High
Fear of Missing Out	4.75	98	Very High
Connection Overload	3.33	82	High
Online Vigilance	3.5	61	Average

Digital Stress Scale (DSS) Percentiles



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Client Name	Generic Client

Interpretation

The client's total Digital Stress Scale (DSS) average score is 3.63 (on 1-5 scale), which falls at the 86th percentile and this indicates the client experiences more digital stress than most individuals. Individuals with high digital stress may be experiencing challenges with boundaries around technology use, heightened responsiveness to notifications, anxiety about social approval, or difficulty disconnecting. These patterns of digital stress may impact daily functioning and well-being.

Subscale Pattern Analysis:
The client's digital stress profile shows the highest levels in Fear of Missing Out (percentile: 98) and Connection Overload (percentile: 82), with the lowest levels in Online Vigilance (percentile: 61).

Specific Item Endorsement:
Within the Fear of Missing Out dimension, the client most strongly endorsed the following items:
- *10. I fear that others have more rewarding experiences than me (Always)*
- *13. I get worried when I find out my friends are having fun without me (Always)*
- *21. I get anxious when I don't know what my friends are up to (Always)*
- *5. I fear my friends are having more rewarding experiences than me (Often)*

Scoring and Interpretation Information

For comprehensive information on the Digital Stress Scale (DSS), see here.

The Digital Stress Scale (DSS) items are typically averaged to provide subscale scores and a total score, with higher average scores (1-5) indicating greater digital stress. The Total Score provides an overall indication of the level of digital distress experienced by the client but the subscales of the DSS provide clinically useful information about the dimensions of digital stress:

1. Availability Stress (Items 1, 8, 16, 18): Availability Stress measures the distress, guilt, and anxiety resulting from perceived expectations to be constantly accessible and responsive via digital means. Unlike other dimensions of digital stress, availability stress shows a more complex relationship with social outcomes, as it can be associated with both greater social connectedness and increased subjective distress.
2. Approval Anxiety (Items 3, 9, 17, 20, 22, 24): Approval Anxiety measures the nervousness and anxiety about how others perceive and respond to one's digital self-presentation, particularly on social media. High scores on this subscale suggest that concerns about digital self-presentation may be a significant source of psychological distress.
3. Fear of Missing Out (Items 5, 10, 13, 21): Fear of Missing Out measures the anxiety, worry, and distress resulting from concerns about being excluded from rewarding social experiences. High scores on this subscale suggest that fear of social exclusion may be driving problematic patterns of technology use.
4. Connection Overload (Items 2, 6, 11, 14, 19, 23): Connection Overload measures the subjective experience of being overwhelmed by the volume and pace of digital communications. High scores on this subscale indicate that the sheer volume of digital communication may be exceeding the individual's psychological resources.

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Client Name	Generic Client

Scoring and Interpretation Information (cont.)

5. Online Vigilance (Items 4, 7, 12, 15): Online Vigilance measures the persistent preoccupation with staying connected to digital devices and online content. High scores on this subscale suggest that digital connectivity has become a dominant psychological need that may interfere with present-moment engagement in offline activities and relationships.

Average scores for each subscale and the total score are converted to percentiles based upon a sample of 735 adolescents and young adults (Hall et al., 2021). These percentiles are then used to derive descriptive categories that aid in clinical interpretation. The descriptive categories for each subscale and the total score are:
- Very Low (10th percentile or below): Indicates significantly less digital stress than most individuals.
- Low (11th to 25th percentile): Indicates less digital stress than most individuals.
- Average (26th to 75th percentile): Indicates a typical level of digital stress compared to peers.
- High (76th to 90th percentile): Indicates more digital stress than most individuals.
- Very High (91st percentile or above): Indicates significantly elevated levels of digital stress.

Research indicates that the pattern and impact of digital stress may vary by developmental stage, with adolescents showing stronger associations between digital stress dimensions (particularly Approval Anxiety and FoMO) and psychosocial outcomes compared to young adults (Hall et al., 2021). When interpreting DSS scores for adolescents, consider the heightened importance of peer evaluation and social connectedness during this developmental period (Nesi et al., 2018).

On first administration a plot is presented displaying the total DSS and the subscale percentiles. The percentiles are presented with the qualitative descriptors in the background for ease of interpretation. When administered on multiple occasions, a longitudinal plot is displayed showing the subscale percentiles over time. When DSS scores are available from multiple timepoints, changes in scores can provide valuable information about the effectiveness of interventions or developmental changes in digital stress. For comparative interpretation, changes of at least 0.5 standard deviations in raw scores are considered clinically meaningful (the minimally important difference) (Norman et al., 2003; Turner et al., 2010). When interpreting changes, attention should be paid to both the total score and the patterns of change across subscales.

Client Responses

		Never	Rarely	Sometimes	Often	Always
1	My friends expect me to be constantly available online	1	**2**	3	4	5
2	On top of the other things I must do, keeping up with notifications is a chore	1	**2**	3	4	5
3	I am nervous about how people will respond to my posts and photos	1	**2**	3	4	5
4	I feel socially unavailable when I do not have my phone	**1**	2	3	4	5

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Client Name	Generic Client

Client Responses (cont.)

		Never	Rarely	Sometimes	Often	Always
5	I fear my friends are having more rewarding experiences than me	1	2	3	**4**	5
6	I have to check too many notifications	1	2	3	**4**	5
7	I must have my phone with me to know what is going on	1	2	3	4	**5**
8	For my friends, it is important that I am constantly available online	1	2	3	**4**	5
9	I feel anxious about how others will respond when I share a new photo on social media	1	2	3	4	**5**
10	I fear that others have more rewarding experiences than me	1	2	3	4	**5**
11	I feel overwhelmed with the flow of messages/notifications on my phone	1	2	3	**4**	5
12	I feel lost or “naked” without my phone	1	2	3	**4**	5
13	I get worried when I find out my friends are having fun without me	1	2	3	4	**5**
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	1	2	**3**	4	5
15	I am constantly checking my phone for messages/notifications	1	2	3	**4**	5
16	Most of my friends approve of me being constantly available online	1	2	**3**	4	5
17	I feel nervous after I share a post or photo to see how others responded to it	1	2	**3**	4	5
18	I feel a social obligation to be constantly available online	1	2	**3**	4	5
19	I feel stress because I must sift through a lot of unimportant notifications to get to the important ones	1	2	**3**	4	5
20	I put a lot of effort into composing messages and posts I share online	1	2	**3**	4	5
21	I get anxious when I don’t know what my friends are up to	1	2	3	4	**5**
22	I put a lot of effort into finding or creating a photo that others will approve of when I post it online	1	2	3	4	**5**
23	I spend too much time responding to notifications/messages	1	2	3	**4**	5

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Client Name	Generic Client

Client Responses (cont.)

		Never	Rarely	Sometimes	Often	Always
24	I feel nervous about how others will respond when I post new updates on social media	1	2	3	4	5