Development and Psychometric Properties of Digital Detoxification Scale

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ABSTRACT

The study aimed to create and validate a digital detoxification scale, using Lazarus and Folkman's Stress Model as the framework. digital devices their well being implication, this research addresses the necessity of deliberate digital disengagement, hypothesizing of three factors Primary Appraisal Need (PAN), Secondary Appraisal Need (SAN), and Coping Strategies Need (CSN) to gauge attitudes toward digital tools and coping mechanisms. A mixed methods approach, including interviews, pilot studies was employed from *n= 268* Pakistani teachers. The scale demonstrated strong internal consistency and reliability. CFA further validated identified factors. The final administration of the 10 items scale involved *n=214* participants, including EFA, CFA, and reliability analysis. Findings affirmed a robust model fit indicating structural validity and significance. Additionally, indices such as GFI, TLI, CFI, IFI, and RMSEA confirmed a good fit. Future research could investigate integrating practices and digital literacy programs for innovative strategies.

| **KEYWORDS** | Digital, Detoxification, Scale Development, Validation, Teachers |

Introduction

In our contemporary landscape, dominated by the ubiquitous presence of digital devices like smartphones and computers, the integration of technology into our daily lives has brought about unprecedented convenience, connectivity, and efficiency. While these digital tools offer transformative advantages, concerns have arisen about the potential consequences for individual well-being and the delicate balance between work and personal life. This research embarks on a comprehensive exploration of the concept of "digital detoxification," signifying the intentional withdrawal from digital tools to provide individuals with a respite from continuous digital engagement (Chang, Weng & Lai, 2023).

The digital detoxification scale, operationally defined for research purposes, refers to the quantifiable measure of individuals' perceived necessity for intentional breaks from digital tools, encompassing smartphones, computers, and electronic platforms (Lesebo, 2022). The scale comprises items that gauge respondents' attitudes towards periodic disengagement, emphasizing the importance of intentional breaks to counter the potential negative effects of continuous digital connectivity. Additionally, it explores how these breaks contribute to cognitive recovery and overall well-being, as established by (Turel & Qahri, 2016). Respondents provide quantitative responses on a Likert scale, allowing for a standardized and systematic evaluation of the digital detoxification scale in empirical research. This operational definition ensures clarity and consistency in measuring and interpreting the concept within a specific research context.

The relentless march of technological progress has undoubtedly shaped our existence, offering tools that enhance communication, productivity, and access to information (Hidaja 2023). However, this symbiotic relationship with digital tools has prompted scrutiny regarding its impact on mental and emotional well-being. The need for a digital detoxification emerges as a critical dimension within this discourse, acknowledging that while digital tools bestow undeniable benefits, prolonged engagement may carry the risk of inducing stress and compromising overall resilience. This study seeks to unravel the intricacies of the digital detoxification scale, recognizing it as an imperative facet of the evolving relationship between individuals and their digital environments (Rodriguez, 2023).

The theoretical foundation of this research draws inspiration from Lazarus and Folkman's Transactional Model of Stress and Coping (1984), providing a conceptual framework to understand how individuals dynamically appraise stressors associated with digital engagement and deploy coping mechanisms (Obbarius & Rose, 2021). The model posits that individuals engage in a continuous process of assessing stressors and adopting coping strategies, making it an suitable lens through which to explore the nuanced dimensions of the digital detoxification scale (Raper, 2021).

This research is propelled by a dual objective to deepen our theoretical understanding of the relationship between individuals and digital tools and to contribute to the practical realm by developing a tool that resonates with diverse populations (Junaedi & Sudarno, 2023). The subsequent sections of this study will delve into the existing literature, laying the groundwork for the comprehensive development of the digital detoxification scale. This scale, once realized, holds the promise of not only enriching our understanding of the intricate interplay between individuals and digital engagement but also providing a practical instrument for enhancing well-being in an era dominated by digital technology.

As digital tools have become an integral part of daily life globally, the implications of their use transcend geographical boundaries (Vahtivuori & Kynäslahti, 2016). However, recognizing that perceptions of digital tools and the need for breaks may vary across different cultures, this study places a particular emphasis on cultural sensitivity. The cultural landscape of Pakistan, with its unique blend of traditions, familial values, and work practices, offers a distinctive context within which to explore the digital detoxification scale.

Literature Review

The advent of the digital era has brought about transformative changes in the way we live, work, and connect with the world. As digital tools seamlessly integrate into the fabric of our daily lives, concerns surrounding the potential impact of constant digital engagement on individual well-being have gained prominence. At the heart of this discourse lies the concept of the digital detoxification scale a burgeoning area of research that delves into the perceived necessity for intentional breaks from the ever-present world of smartphones, computers, and electronic devices (Iivari, Sharma, & Ventä-Olkkonen, 2020).

The ramifications of continuous digital engagement on mental and emotional well-being form a cornerstone of the literature surrounding the digital detoxification scale. Pioneering studies by Barley, 2011 and Mark, 2008 shed light on the dual nature of digital tools, acknowledging their manifold benefits while underscoring the need to manage the potential downsides, such as stress and burnout. As we navigate this digital landscape, characterized by constant connectivity, the digital detoxification scale emerges as a response to the stressors induced by prolonged engagement with these omnipresent technologies (Chen, 2023).

This research fills a critical void by introducing the digital detoxification scale, which focuses on intentional breaks from digital engagement and incorporates cultural sensitivity (Virtanen, 2021). It synthesizes existing knowledge to conceptualize digital detoxification as

a coping strategy against stressors arising from continuous digital use (Liu & Green, 2023). Recent literature underscores the significance of periodic disengagement, emphasizing cognitive recovery and overall well-being (Turela & Qahri, 2023). The scale's development aligns with evolving perspectives on digital well-being, highlighting the need for nuanced measurement tools (Liu & Green, 2023). By addressing this gap, the research contributes to both theoretical understanding and practical applications in the realm of digital well-being (Virtanen, 2021).

Theoretical Framework for Digital Detoxification Scale Development

The study's theoretical framework rooted in Lazarus and Folkman's Transactional Model of Stress and coping, elucidates three key factors: Primary Appraisal Need (PAN), Secondary Appraisal Need (SAN), and Coping Strategies Need (CSN). Questions align with stages of the model, capturing initial evaluations of stressors, detailed assessments, and coping mechanisms related to digital tool use in the workplace. This framework offers a comprehensive understanding of individuals' cognitive appraisals and coping processes in navigating challenges associated with digital tools in professional settings.

Transactional Theory of Stress and Coping (TTSC)

Dr. Richard Lazarus developed the transactional theory of stress and coping in 1966, emphasizing cognitive appraisal and coping strategies in response to life events (Lazarus & Folkman, 1987). The model assesses primary appraisal (harm or threat) and secondary appraisal (coping abilities), influencing coping mechanisms and emotional distress levels. Factors like personality traits and social support shape coping abilities, while cognitive behavior therapies aid in identifying and addressing ineffective coping strategies.

Theoretical Framework

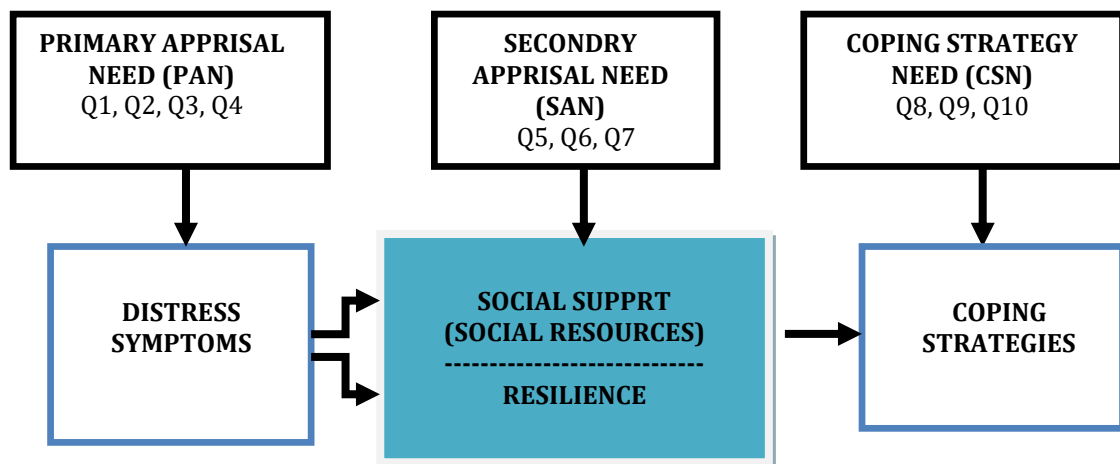**Possible- Suggested Factors for Digital Detoxification Scale (TTSC Model)**

Fig 1 Models of Stress and Coping

Material and Methods

The design of the study was a mixed quali- quantitative study in pilot study 1, focus group approach came under the qualitative method of research and the main study came under the quantitative methodology of the research in the month of August- September, 2023 with *n= 214* participants through convenient sampling. At initial stage an item pool of 80 questions were generated through a dynamic process involving interviews, literature review, and focus groups with the target audience, an initial collection of 80 items were drafted. Following refinement via a committee approach, pilot studies, and exploratory and confirmatory factor analyses, 13 items were retained, representing three factors. In the

phase 1, one pilot studies and 1 committee approach were followed to obtain the testable items of the digital detoxification scale (DDS) from the developed item pool for the purpose of scale development and validation. In pilot study 1, the variables present in the literature review such as cell phone fixation, accomplishment, benefit ,sensation of mental overload, perceived work performance, well-being, consumption of social networking sites (SNSs) on cell phones, problematic smartphone use (PSU), view and behavioral intentions of users about using digital detoxification applications, Performance and effort expectancy to use digital media for workplace, Techno-stress in social life, and, Relaxation time period were taken in account to form a formal number of open- ended questions 12 questions to interview teachers *n= 15* about what they think and feel about digital detoxification . A focus group of the PhD Scholars including the researchers himself were conducted and the result of that focus group was to exclude the 19 items from the scale and only keep the 12 items. The sample for the main study was *n= 214* teachers in Pakistani educational institutes form Universities, Colleges and Schools. The design of the study was a mixed method comprises on pilot study 1, focus group approach came under the qualitative method of research the main study came under the quantitative methodology of the research. The total sample of main study was *n= 214*. The pilot study 1 was done on the sample of *n=54*, for the pilot study mean age of the participants was *N= 106*. The male participants were and female participants were *n=108* .The govt. Job holders were *M= 115* and *F=99*. The study included newly appointed Pakistani teachers aged 23 to 33 from both government and private educational institutes within the past 5-8 years, while excluding foreign teachers and those from special education institutes.

Results and Discussion

The analysis of the data was done first by data arrangement on Excel files from where the data was transferred and arranged on SPSS- 26 for further Exploratory factor analysis (EFA), and Confirmatory Factor Analysis (CFA).

Results Pilot Study

Table 1
Descriptive Statistics of Pilot Study 1 Variable

Variables	M	SD	Skewness	(α)
Digital Detoxification Scale Total	30.03	7.33	-0.96	.844

n= 54. Digital Detoxification Scale Total (M= 30.03± 7.33).

From the table 1 of descriptive statistics, the mean total scores of the participants *n=54*. The total score from the 5- point likert type scale. The alpha reliability for the scale came out to be .844 which indicated an excellent reliability.

Table 2
Descriptive Statistics of KMO Values

Variables	KMO Values	*df*	sig
Digital Detoxification	0.786	66.0	.000

Table 2 presents digital detoxification scale variable exhibited a mean score of M = 30.03 (SD = 7.33), representing the central tendency of the data. The standard deviation of 7.33 indicated a moderate level of variability or dispersion around the mean. The skewness value of -0.96 suggested a slight leftward asymmetry in the distribution, indicative of a longer tail on the left side. The reliability coefficient (α) for the digital detoxification scale was calculated as .844, signifying a good level of internal consistency. This alpha value underscores the reliability of the scale in measuring the intended construct, with higher values indicative of increased consistency among the scale items.

The dataset's appropriateness for factor analysis was assessed using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO), yielding a value of .768, indicating good sampling adequacy. This suggests that the data is suitable for factor analysis. Bartlett's Test of Sphericity was statistically significant (χ^2 = 476.329, *df* = 66, p = .000), indicating that the observed correlation matrix significantly deviates from an identity matrix

Table 3
Exploratory Factor Analysis results

S. No	Question	F1	F3	F2
PAN1	I sense the urge to take a break from utilizing digital tools for my professional tasks.	.583		
PAN2	I aspire to eliminate digital tools when receiving official task notifications.	.745		
PAN3	I wish I could go back to a time without digital devices.	.942		
PAN4	I need to step back from digital tools because I feel like I am on duty around the clock.	.874		
PAN5	I need to take a break from using digital tools at work to prioritize more time for my family.	.693		
SAN6	I need to break away from using digital tools at work since other aspects of my life is being neglected.	.612		.630
SAN7	I want to take a break from using digital tools at work because constantly seeing official notifications is stressing me out.			.935
SAN8	I want to take a break from using digital tools for work so I don't have to constantly check my devices for messages from the or work place.			.738
CSN9	I want to take a break from using digital tools for work to maintain afresh and positive mood.		.773	
CSN10	I want to take a break from using digital tools for work because they have made my job more complex.		.875	
CSN11	I want to take a break from using digital tools to lessen the pressure of completing online tasks for my institute.		.656	
CSN12	I need a break from using digital tools at work to improve my strained relationship with my colleagues due to unsatisfactory performance in completing online tasks.		.795	

The results of component matrix revealed 3 factors with 12 items

The table 3 presents the questions (items) along with their factor loadings for each of the three factors (F1, F2, F3) derived from factor analysis. For Factor 1 (F1), which represents Primary Appraisal Need (PAN), the items demonstrate varying factor loadings, with PAN3 showing the highest loading of .942. These items reflect individuals' sentiments regarding the desire to return to a time before the pervasive use of digital devices and the feeling of being constantly on duty due to digital tool usage. Factor 2 (F2), corresponding to Secondary Appraisal Need (SAN), exhibits strong factor loadings for items related to stress induced by constant notifications (SAN7), with a factor loading of .935. Additionally, the item SAN6 also shows moderate loading on F2 (.630), highlighting the need to break away from digital tools due to neglect of other life aspects. Factor 3 (F3), representing Coping Strategies Need (CSN), displays strong factor loadings for items related to reducing job complexity (CSN10), maintaining a positive mood (CSN9), and improving strained relationships with colleagues (CSN12), with factor loadings of .875, .773, and .795, respectively. These items underscore the coping mechanisms individuals employ to manage the challenges associated with digital tool usage in the workplace.

Table 4
Alpha Reliability Analysis for the Scale

S. No	Items Cronbach's Alpha		Factors Cronbach's Alpha
PAN1	.838		
PAN2	.837		
PAN3	.832		
PAN4	.835		
PAN5	.833		
SAN6	.826		
SAN7	.825		
SAN8	.818		
CSN9	.818		
CSN10	.820		
CSN11	.863		
CSN12	.845		
F1	PAN1, PAN2, PAN3, PA4		.883
F2	SAN5, SAN6, SAN7		.861
F3	CSN8, CSN9, CSN10		.824

The table 4 presents the Cronbach's Alpha reliability coefficients for both the individual items and the factors derived from factor analysis. For the Primary Appraisal Need (PAN) factor, consisting of items PAN1 through PAN5, the Cronbach's Alpha values range from .832 to .838, indicating good internal consistency reliability among these items. Factor 1 (F1), comprising these PAN items, demonstrates a higher Cronbach's Alpha of .883, suggesting strong reliability. Similarly, for the Secondary Appraisal Need (SAN) factor, including items SAN6, SAN7, and SAN8, the Cronbach's Alpha values range from .818 to .826, indicating acceptable internal consistency reliability. Factor 2 (F2), consisting of these SAN items, exhibits a Cronbach's Alpha of .861, indicating good reliability. For the Coping Strategies Need (CSN) factor, comprising items CSN9, CSN10, CSN11, and CSN12, the Cronbach's Alpha values range from .818 to .863, with a slightly higher variation. Factor 3 (F3), consisting of these CSN items, shows a Cronbach's Alpha of .824, suggesting acceptable reliability.

Table 5
Validity Analysis of the Pilot Study 2 (Item- Correlations)

S. No	Items											
	1	2	3	4	5	6	7	8	9	10	11	12
PAN1	-											
PAN2	.606**	-										
PAN3	.569**	.766**	-									
PAN4	.507**	.613**	.859**	-								
SAN5	.424**	.584**	.687**	.671**	-							
SAN6	.297*	.444**	.557**	.604**	.732**	-						
SAN7	.313*	.410*	.450*	.480**	.515**	.770**	-					
SCN8	.269*	.269*	.381*	.404**	.399**	.613**	.833**	-				
SCN9	.249	.199*	.277*	.300*	.246	.408*	.366**	.544**	-			
CSN10	.183	.120	.912	.061	.113	.326**	.455**	.614**	.736**	-		
CSN11	.211	-.037	-.056	.111	.149	.089	.058	.200	.461**	.477**	-	
CSN12	-0.15	.204	-.035	-.175	-.022	.057	.226	.411**	.618**	.362**	.0.72	-

Table 5 presents the Positive Affect (PAN) variables demonstrate positive associations, notably with the strongest correlation observed between PAN3 and PAN4 (r = 0.859). Within the Social Affect Negative (SAN) variables, positive correlations are discernible, with SAN5 showing notable associations. The Strong Negative Affect (SCN) variables also exhibit positive correlations, particularly between SCN8 and SCN9 (r = 0.544).

The Conscientiousness (CSN) variables present a mix of positive and negative correlations, with CSN12 demonstrating negative associations.

Results and Discussion

Table 6
Descriptive Statistics of Pilot Study 2 Variables

Variables	Mean	SD	Skewness	Alpha Reliability (α)
Digital Detoxification Scale Total	25.80	4.463	.263	.606

N- Valid n = 214. Digital Detoxification Scale Total (M= 25.80± 4.463).

Table 6 of descriptive statistics, the mean total scores of the participants who filled the digital detoxification scale online was (M= 25.80± 4.463). The total score from the 5-point likert- type scale was 50. In the main study, for the Exploratory Factor Analysis (EFA), the criteria for the direct varimax rotation (as in the rotated component matrix, no value exceeded than .32), and the minimum factor loading (0.40) was kept the same as was kept for the Pilot- Study 2 analysis. The communality of the scale items indicating the variance on relevant factors were determined for all items > 0.40 The Kaiser–Meyer–Olkin (KMO) value was .739 which indicated that the sample size was quite adequate to get an appropriate factor- analysis. The Bartlett's Test of Sphericity $x2$ (*n=214*) = 1259.53 with a significance of p<.01 indicated the irrelevance of identity matrix and a good suitability of the variables for the analysis. The determinant values were close to 0.001 which indicated that the variables in the correlation matrix had a reasonable level of multi- co-linearity to each other.

Table 7
Factor Loading of Items in EFA analysis

S. No	Question	F1	F2	F3
PAN1	I sense the urge to take a break from utilizing digital tools for my professional tasks.	.875		
PAN2	I aspire to eliminate digital tools when receiving official task notifications.	.782		
PAN3	I wish I could go back to a time without digital device.	.754		
PAN4	I need to step back from digital tools because I feel like I'm on duty around the clock.	.814		
SAN5	I need to take a break from using digital tools at work to prioritize more time for my family.		.925	
SAN6	I need to break away from using digital tools at work since other aspects of my life is being neglected.		.894	
SAN7	I want to take a break from using digital tools for work so I don't have to constantly check my devices for messages from the workplace.		.854	
CSN8	I want to take a break from using digital tools for work because they have made my job more complex.			.869
CSN9	I want to take a break from using digital tools to lessen the pressure of completing online tasks for my institute.			.907
CSN10	I need a break from using digital tools at work to improve my strained relationship with my colleagues due to unsatisfactory performance in completing online tasks.			.903

The results of component matrix revealed 3 factors with 10 items.

Table 7 presents the questions (items) along with their factor loadings for each of the three factors (F1, F2, F3) derived from factor analysis. For Factor 1 (F1), which represents Primary Appraisal Need (PAN), all items demonstrate strong factor loadings, with PAN1 having the highest loading of .875. These items reflect the urgency felt by

individuals to take breaks from digital tools, whether due to constant connectivity or the desire to return to a time before their widespread use. Factor 2 (F2), representing Secondary Appraisal Need (SAN), shows high factor loadings for items related to prioritizing time for family (SAN5) and addressing neglected life aspects (SAN6), with factor loadings of .925 and .894, respectively. These items highlight the need to break away from digital tools at work to focus on other essential life domains. Factor 3 (F3), corresponding to Coping Strategies Need (CSN), exhibits strong factor loadings for items related to reducing the complexity of job tasks (CSN8), relieving pressure from completing online tasks (CSN9), and improving strained relationships with colleagues (CSN10), with factor loadings of .869, .907, and .903, respectively. These items underscore the coping strategies employed by individuals to manage the challenges associated with digital tool usage in the workplace.

Reliability Analysis

Table 8
Alpha Reliability Analysis for the 10- itemed Scale

Scale	Items Cronbach's Alpha	Factors Cronbach's Alpha
PAN1	.731	
PAN2	.721	
PAN3	.697	
PAN4	.732	
SAN5	.770	
SAN6	.680	
SAN7	.766	
CSN8	.718	
CSN9	.637	
CSN10	.709	
Factor 1		.837
Factor 2		.898
Factor 3		.877

The three obtained factors got a good reliability

Table 8 presents the reliability analysis is shown for the main study. The overall alpha reliability for all the 10 items were very acceptable (α= .606). PAN and SAN scale showed good reliability (PAN α = 0.697-0.732, SAN: α = 0.680-0.770), while CSN scale indicated acceptable to good reliability (CSN α = 0.637-0.718). Extracted factors exhibited notably strong reliability (Factors: α = 0.837, 0.898 and .877), affirming the robustness of the study's measures.

Validity Analysis for the Main Study

Table 9
Convergent and Divergent Validity of Scale Items

S. No	1	2	3	4	5	6	7	8	9	10
PAN1	-									
PAN2	.660**	-								
PAN3	.537**	.470**	-							
PAN4	.744**	.503**	.474**	-						
SAN5	-.393**	-.345**	-.204*	-.317**	-					
SAN6	-.394**	-.282**	-.144*	-.315**	.852**	-				
SAN7	-.275**	-.220**	-.168*	-.268**	.748**	.632**	-			
CSN8	.006	.037	.172*	-.138*	.123	.037	.179**	-		
CSN9	-0.18	-.038**	-.152*	-.080	.058	.002	.051	.664**	-	

| CSN10 | -.026 | -.019 | .106 | -.112 | .167* | .149* | .107 | .687*** | .766** | - |

Table 9presents that PAN1 is positively and significantly correlated with PAN2 (r = .660, p < .01), PAN3 (r = .537, p < .01), and PAN4 (r = .744, p < .01), indicating strong positive associations among these variables within the Positive Affectivity construct. Similarly, PAN2 shows positive and significant correlations with PAN1 (r = .660, p < .01), PAN3 (r = .470, p < .01), and PAN4 (r = .503, p < .01). Negative Affectivity variables (SAN5, SAN6, and SAN7) are negatively correlated with each other, with moderate to strong associations. SAN5 and SAN6 show a negative correlation of r = -.393 (p < .01), while SAN5 and SAN7 exhibit a correlation of r = -.275 (p < .01). SAN6 and SAN7 have a negative correlation of r = -.394 (p < .01). Conscientiousness variables (CSN8, CSN9, and CSN10) demonstrate weak to moderate correlations. CSN8 and CSN9 have a negligible correlation of r = .006, while CSN8 and CSN10 exhibit a modest correlation of r = -.026. CSN9 and CSN10 are weakly positively correlated (r = .106, p < .05).

CFA Main Study

Table 10
CFA Analysis (Fit Indices) Table for Main Study Factors

	χ^2	df	χ^2/df	GFI	CFI	TLI	IFI	RMSEA
Model	78.178	32	1.77	.959	.963	.948	.963	0.04

Model indices indicate a good model fit for main study analysis

Table 10 presents that model fit indices a good model fit for all the three factors obtained in the main study with set parameters. The model fit appears to be strong based on the provided indices. The χ^2/df ratio of 1.77 is indicating good fit. The GFI value of .959 suggests fit, while all comparative fit indices (CFI, TLI, IFI) exceeding .95 indicate strong fit. The RMSEA value of .05 is acceptable range, suggesting reasonably close fit. Overall, these results suggest that the model fits the data very well, with strong goodness of fit and comparative fit indices, along with a very low RMSEA value indicating excellent fit.
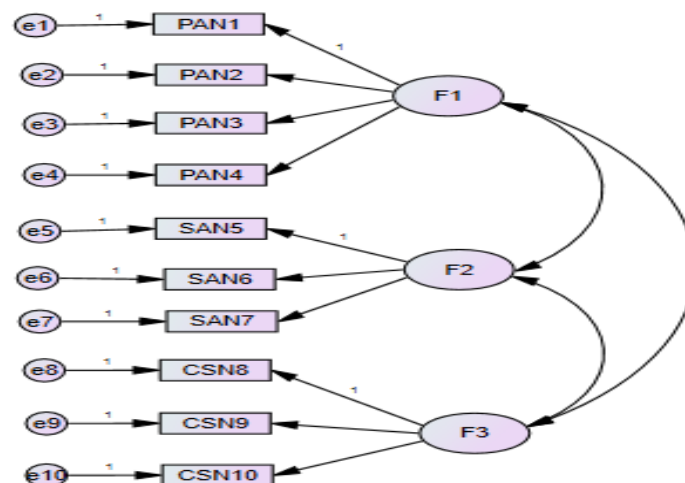

Fig. 1 CFA Measurement Model (for scale)

Discussion

The main hypothesis consisted of 10 items distributed across three domains: primary appraisal, secondary appraisal, and coping, with proposed factors of primary

appraisal need (PAN) for items 1, 2, 3, and 5, secondary appraisal (SAN) for items 5, 6, and 7, and coping strategy need (CSN) for items 8, 9, and 10. The exploratory factor analysis (EFA) conducted in the pilot study yielded clear loadings on three distinct factors: PAN, SAN, and CSN. However, due to discrepancies between the factor loadings and theoretical expectations, items PAN5 and SAN9 were modified to enhance clarity for participants. The resulting 10-item scale for the main study aimed to establish reliability and validity within the Pakistani educational context.

Descriptive statistics from the pilot study revealed a moderate level of perceived need for a digital detoxification among participants, with a mean total score of 30.03. The high alpha reliability coefficient of .844 indicated strong internal consistency, instilling confidence in the scale's reliability. The three-factor solution identified through EFA Positive Affect, Social Affect Negative, and Conscientiousness provided a comprehensive understanding of individuals' attitudes towards digital tool usage.

In the main study, the mean total score slightly decreased to 25.80, suggesting a potential shift in participants' perceptions over time. However, the reliability coefficient remained acceptable at .606, indicating consistent internal consistency. Confirmatory factor analysis (CFA) confirmed the three-factor structure identified in the pilot study, with fit indices supporting the model's adequacy.

The results contribute valuable insights into the multidimensional nature of the digital detoxification scale, providing evidence for its reliability and validity. The scale's robust psychometric properties support its utility for assessing digital-related stressors in organizational settings. Further research is warranted to explore its applicability across diverse populations and contexts, as well as its predictive validity in relation to job satisfaction and performance.

Future research should explore the applicability of the digital detoxification scale across diverse educational contexts and populations. Interventions and policies should be developed based on the identified factors to address teachers' digital well-being and job satisfaction. Longitudinal studies can investigate the impact of digital clogging interventions on teachers' well-being and professional performance over time.

Conclusion

In conclusion, this study focused on the development and validation of a digital detoxification scale among university teachers. Through a rigorous process of exploratory factor analysis and refinement, the study identified three key factors Primary Appraisal Need (PAN) and Secondary Appraisal Need (SAN) and Coping Strategies Need (CSN). The findings shed light on nuanced aspects of Digital Detoxification Scale, emphasizing the importance of addressing factors related to self-regulation, technology overload, life satisfaction, and various emotional and well-being dimensions. While acknowledging limitations such as a small pilot study sample size and the need for cross-cultural validation, the study's scale demonstrated excellent reliability, making it a practical tool for assessing Digital Detoxification Scale in the academic context. The implications extend to educational settings, offering insights for tailored interventions to enhance overall well-being and job satisfaction among university teachers. This study contributes to the growing literature on Digital Detoxification by providing a refined and applicable measurement instrument for understanding and addressing the digital detoxification needs of educators.

Recommendations

Moving forward, it is essential to validate and refine the digital detoxification scale across diverse educational contexts and populations to ensure its relevance and effectiveness. Tailored interventions and policies should be developed based on the specific factors identified by the scale, aiming to address teachers' digital well-being and job satisfaction. Longitudinal studies are crucial to assess the sustained impact of digital detox interventions on teachers' overall well-being and professional performance. Additionally, further exploration of factors influencing digital detoxification, such as organizational culture and support systems, is warranted. Collaboration with educational institutions can facilitate the integration of digital literacy and mindfulness practices into ongoing professional development programs. Continuous evaluation and updates to the scale is necessary to keep pace with evolving technology and digital usage patterns, ensuring its continued utility in assessing digital-related stressors in organizational settings.

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