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Effectiveness of CBT in Reducing Psychosocial Issues Due to Social Media Addiction among Young Adults

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ABSTRACT

Frequent and overuse of social media sites has remained a matter of concern for psychologists and psychiatrists due to multiple reported cases of social dysfunction, anxiety, depression, and stress. The goal of the current experimental research was to determine whether Cognitive Behavioral Therapy (CBT) is effective in reducing psychosocial issues among young adults due to social media addiction. This was an experimental study with a randomized control design. Participants (n=60) of the study were divided into two groups, i.e., experimental (n = 30) and control (n = 30). The experimental group received eight-week CBT sessions, whereas the control group did not receive any treatment; they were only engaged. Data were analyzed by SPSS (28). The results showed that the experimental group showed lower levels of social media addiction, anxiety, depression, stress, and social dysfunction after CBT intervention, compared to the results of the control group, which were the same before and after the intervention. Large effect sizes were seen across all main outcome variables, and the post-test mean scores of the experimental group were substantially lower than their pre-test scores. The results indicate that CBT is a successful technique for lowering psychosocial issues related to social media addiction among young adults.

Introduction

Social media has become a vital part of young adults' daily routines. They use different platforms for communication, entertainment, and sharing information (Andreassen et al., 2023). However, the misuse of social media apps like Facebook, Instagram, and TikTok can lead to negative psychological problems such as loneliness, depression, and anxiety. Research indicates that overusing social media is not just a waste of time or a form of entertainment but also a serious problem for psychosocial skills in young adults (Wang et al., 2022).

This excessive use of social media has been linked to low performance of students, poor interpersonal interaction, increased stress, and loneliness. Social media addiction is giving rise to several social problems. It has also been found that gender differences have been observed, and male young adults might be more prone to have behavioral addiction, and female young adults often report more emotional agony linked with social comparison (Marino et al., 2023). Also, there is an intermediate influence of family systems and socioeconomic status; individuals with low socioeconomic status or broken family backgrounds have a higher risk of psychosocial issues regarding social media use (Sampasa-Kanyinga & Lewis, 2022).

One of the most scientifically proven psychotherapeutic treatments for a variety of psychological issues, including depression, anxiety, and stress, is cognitive behavioral therapy (CBT), which is the most effective therapy. CBT aims at enhancing coping patterns, promoting self-regulation, and restructuring maladaptive thought patterns and behaviors (Hofmann et al., 2023). As per the research done through experiments, CBT can minimize social media dependence and psychosocial issues that are commonly observed among young adults. CBT provides practical solutions to alleviating the psychological issues of addiction to social media (Kuss & Griffiths, 2023).

Experimental studies by Baqir et al. (2022) have indicated that structured CBT has a significant effect in reducing the symptoms of anxiety, depression, and social disconnection amongst social media addicted young adults. Cognitive behavioral therapy (CBT) consists of cognitive restructuring, behavioral activation, and self-monitoring techniques to help people regain control over their psychosocial disorders and improve psychological and social functioning.

Research Gap

The literature on major CBT interventions specifically aimed at young adults struggling with social media addiction and their psychosocial issues does not have much empirical support. Although Cognitive Behavioral Therapy (CBT) has been widely used to treat a variety of behavioral addictions and mental health conditions, there is still a lack of data on CBT's efficacy in treating social media addiction and associated psychosocial issues. The majority of current research is descriptive or correlational, and it lacks systematic experimental designs that assess CBT's effectiveness in lowering symptoms like social isolation, anxiety, depression, stress, social comparison, and cyberbullying brought on by excessive social media use.

Rationale

Due to rapidly growing, detrimental psychosocial issues among young adults, there is an urgent need to focus on structured interventional studies to reduce psychosocial issues due to social media addiction. Emphasis on recognizing and altering dysfunctional thought patterns and behaviors, cognitive behavioral therapy (CBT) presents a strategic role for assisting people in regaining control over their social media use and enhancing the solution of psychosocial issues. The effort intends to close the information gap and give counselors and clinicians scientifically backed strategies to deal with this new psychosocial issue by experimentally assessing CBT's effectiveness.

Scope of the Study

This study emphasizes young adults (18–30 years old) who fit the criteria for social media addiction according to validated screening instruments. It looks at how well an organized cognitive behavioral therapy administered over a predetermined amount of time (e.g., 8–12 weeks) reduces psychosocial symptoms like loneliness, anxiety, and depression, etc. The focus of this study is to improve not only psychological health and social lifestyle, but also to improve educational

performance. As social media is changing the daily life pattern rapidly, its preventive measures are a basic need to overcome the consequences of social media addiction.

Literature Review

According to research by Ahmad et al. (2020), social media addiction is linked to mood disorders, low tolerance, social withdrawal, conflict, and relapse, which are common to other behavioral addictions. Additionally, there is a strong correlation between psychosocial issues and extreme use of social media. Social media addiction is associated with higher levels of anxiety, depression, sleep disruptions, and poor academic performance among young adults Ding et al., 2023).

Similarly, research conducted by Twenge and Campbell (2019) stated that psychosocial problems brought on by excessive social media use have been well established in modern research on psychology. Social media platforms such as Facebook, Instagram, and TikTok may cause social comparison, FOMO, and low self-worth in young adults due to a lot of time spent on these sites. Furthermore, Zemb et al. (2023) found that adolescents and young adults who frequently use social media have a higher probability of developing social isolation, loneliness, and depressive symptoms.

Beck et al. (2020) stated that cognitive behavioral therapy (CBT) helps individuals to recognize the issues and replace negative behaviors with positive ones. Cognitive restructuring, behavioral activation, self-observation of online behavior, and development of time-management skills are common methods of CBT therapies to change the addicted habit (Lam et al. 2015). These approaches are useful for enabling individuals to regain control over their use of technology and reduce psychological and social issues.

A meta-analysis by Potenza et al. (2022) shows that CBT is effective in reducing internet and social media addiction. Similarly, it is also shown that structured CBT interventions designed to treat social media addiction enhance social relations and self-regulation and reduce anxiety, despair, and loneliness. On the other hand, Keles et al. (2020) found that those from the control group did not show any change in their social media addiction and its consequences. These findings indicated significant evidence of the effectiveness of cognitive behavior therapy to reduce the psychosocial issues due to social media addiction among young adults.

In Pakistan, CBT-based interventions are still in their initial stage. Several empirical studies demonstrate the cognitive and emotional mechanisms that CBT particularly addresses (Anwar et al., 2025). For example, studies in Lahore and other parts of Pakistan reveal a strong correlation between social media addiction and low self-esteem, anxiety, sadness, and maladaptive coping mechanisms (Dawra et al., 2025).

Moreover, the necessity for structured psychological interventions is further supported by data from Pakistani populations that show excessive social media use predicts violence, dissatisfaction, and poor psychological well-being (Fareed et al. 2025). Pakistani researchers contend that CBT is especially appropriate for tackling these underlying processes of social media addiction because treatment focuses on modifying negative thought patterns and enhancing behavioral regulation (Naveed et al., 2023).

Research Objectives

The objective of this study was:

- To evaluate the effectiveness of CBT in reducing anxiety, depression, and social dysfunction in young adults due to social media addiction.

Hypothesis

H1: CBT will significantly reduce psychosocial issues due to social media addiction among young adults in the experimental group as compared to the control group.

Methodology

Research Design

It was an experimental study with a pre-test and post-test design to assess the effectiveness of CBT on psychosocial issues due to social media addiction.

Population and Sample

The target population of this study was young adults aged 18–30 years old.

Sampling Technique

In this study, participants were divided into two groups: the experimental group (n=30), who received the CBT intervention, and the control group (n=30), who did not receive any therapy intervention. The groups were formed by randomly using a random sampling method.

Research Measures and Covariates

Social Media Addiction Scale (SMAS-41)

Tutgun et al. (2015) developed the Social Media Addiction Scale (SMAS-41 with a Cronbach's alpha value of 0.94, which was used to assess the severity of social media addiction among young adults.

Depression, Anxiety, Stress Scale (DASS-21)

Lovibond et al. (1995) developed the Depression Anxiety Stress Scale (DASS-21). To measure the stress, anxiety, and depression. Cronbach's alpha coefficients were 0.91 for depression, 0.84 for anxiety, and 0.90 for stress. In this research, it is a highly reliable tool to measure the psychological symptoms due to social media addiction among young adults.

Social Comparison Scale (SCS)

Allan et al. (1995) used the SCS scale to assess people's perceptions of their social standing and self-worth relative to others. The value of Cronbach's alpha is 0.88; the scale has eleven items that represent a ten-point semantic differential scale rating.

UCLA Loneliness Scale

Russell et al. (1978, revised in 1996) used the UCLA Loneliness Scale in this study. This was a four-point Likert scale (Often to Never) with a Cronbach's alpha coefficient ranging from 0.89 to 0.94.

Cyberbullying Victimization and Cyberbully Offending Scales

Hinduja et al. (2010) used the Cyberbullying Victimization and Cyberbully Offending Scales. This was a Likert-type response scale. Cronbach's alpha values range from 0.80 to 0.90. This study sought to assess people's experiences with cyberbullying as victims as well as offenders by using this scale.

Inclusion Criteria:

- Age between 18-30 years old
- High scores on the social media addiction scale
- Willingness to participate in an 8-week CBT intervention program

Exclusion Criteria:

- Diagnosed psychiatric disorders
- Required immediate clinical intervention
- Currently getting any form of psychotherapy
- Inability to attend weekly CBT sessions

Intervention Procedure

A manualized CBT session plan was used to reduce the psychosocial issues associated with social media addiction. Eight weekly sessions, each lasting 45 minutes, were conducted by experienced clinical psychologists with essential CBT training.

Data Analysis Plan

In this research study, the pre-post responses were analyzed using SPSS-27 Statistics, a standard statistical software in quantitative research studies. A variety of statistical methods were used to evaluate the research objectives. The frequency distributions, standard deviation, and mean, paired sample t-test are other descriptive statistics, which were calculated in order to describe the general distribution of the study variables. To determine differences between experimental and control groups, an independent sample t-test was utilized, and to investigate how scores of the participants changed within the groups between pre-test and post-test, a paired sample t-test was undertaken. All the statistical analyses had results that were statistically significant with a significance level of $p < .05$.

Ethical Considerations

The ethical principles were strictly adhered to throughout the research process to ensure that the rights and welfare of the participants were not compromised. Ethical approval of the study was sought before data collection. The therapy trials were registered from the Iranian Trial Registry (Registration no. IRCT20241030063547N1).

Results

Table 4.1: Experimental Group, Paired Samples t-test (n = 30)

Variable	Pre-Test M (SD)	Post-Test M (SD)	Mean Diff.	t	df	p	Cohen's d	Effect Size	Sig.
Social Media Addiction	160.00 (20.08)	91.93 (18.20)	68.07*	18.75	29	<.001	3.39	Very Large	***
Depression	25.07 (2.56)	14.97 (3.59)	10.10*	15.77	29	<.001	3.95	Very Large	***
Anxiety	19.47	11.17	8.30*	13.08	29	<.001	2.75	Very	***

	(3.01)	(2.63)						Large	
Stress	32.00	19.40	12.60*	13.84	29	<.001	3.84	Very	***
	(3.28)	(4.96)						Large	
Loneliness	61.57	36.33	25.24*	12.63	29	<.001	3.43	Very	***
	(7.36)	(8.16)						Large	
Social	34.77	61.27	26.50*	14.28	29	<.001	3.33	Very	***
Comparison	(7.95)	(9.82)						Large	
Cyberbullying	9.37	3.83	5.54*	7.09	29	<.001	1.48	Very	***
Victimization	(3.74)	(2.63)						Large	
Cyberbullying	7.97	3.67	4.30*	6.66	29	<.001	1.47	Very	***
Offending	(2.92)	(1.94)						Large	

*** p < .001.

Note: The above table (4.1) shows the pre-post results of CBT effectiveness on psychosocial issues due to social media addiction among young adults in the experimental group.

Table 4.2: Control Group, Paired Samples t-test (n = 30)

Variable	**Pre-Test M (SD)**	**Post-Test M (SD)**	**Mean Diff.**	**T**	**df**	**p**	**Cohen's d**	**Sig.**
Social Media Addiction	155.27 (19.31)	152.83 (20.07)	2.44	0.89	29	.379	0.13	Ns
Depression	25.60 (3.69)	24.87 (2.96)	0.73	0.85	29	.401	0.20	Ns
Anxiety	23.27 (7.10)	23.00 (6.38)	0.27	0.30	29	.763	0.04	Ns
Stress	31.67 (3.45)	32.40 (3.50)	-0.73	-0.92	29	.363	0.21	Ns
Loneliness	56.47 (10.20)	61.57 (6.85)	-5.10	-2.38	29	.24	0.30	Ns
Social Comparison	34.67 (9.47)	35.57 (10.91)	-0.90	-0.34	29	.737	0.10	Ns
Cyberbullying Victimization	7.97 (2.57)	11.50 (5.65)	-3.53	-3.05	29	.51	0.38	Ns
Cyberbullying Offending	7.03 (2.54)	9.60 (3.22)	-2.57	-3.20	29	.336	0.12	Ns

(p > .05). * p < .05, ** p < .01.

Note: The above table (4.2) shows the pre-post results of psychosocial issues due to social media addiction among young adults in the control group, who receive no treatment.

Discussion

The hypothesis of this study was supposed to check the CBT effectiveness on psychosocial issues due to social media addiction among young adults in the experimental group as compared to the control group. Table 4.1 discloses statistically significant results across all eight outcome variables in the experimental group from pre-test to post-test (all p < .001). These results strongly supported the hypothesis, suggesting that the experimental group showed a statistically significant reduction in all psychosocial issues due to social media addiction by using CBT.

Connecting these results with literature, previous experimental research studies largely supported the current findings, such as an experimental study by Melissa et al. (2018), which indicated that university students' levels of loneliness and depression significantly reduced when their daily use of social media was restricted to about 30 minutes. In a similar vein, Gross (2018) noted that excessive online activity raises the risk of becoming a victim of cyberbullying, which in turn increases anxiety and depressed symptoms. These previous results are parallel to the current findings.

Table 4.2 shows pre-to-post results in the control group, which did not receive psychological intervention. No significant variations were observed for SMAS, depression, anxiety, stress, loneliness, social comparison, cyberbullying victimization, and offending (all $p > .05$), confirming constancy or some worsening on these measures without intervention. The variations between the EG progresses and the CG deterioration provide evidence for the specific effectiveness of the CBT intervention.

These current findings are also justified by the literature in a parallel way. According to Sameer et al. (2010), the control group marked an increase in psychosocial issues, such as anxiety, sadness, loneliness, victimization, and offenses, which shows that psychosocial cyberbullying issues worsened in the absence of support or intervention. Moreover, Kumari et al. (2024) support the current findings by showing that psychosocial issues worsen in the absence of structured therapies like cognitive-behavioral therapy, especially in social media addiction.

Conclusion

The experimental and control groups' results demonstrated that the intervention was highly effective in reducing the psychosocial issues due to social media addiction. The experimental group showed significant reductions in social media addiction, depression, anxiety, and stress. Social comparison, loneliness, and cyberbullying were reduced as compared with the control group receiving no intervention. These significant differences between the two groups indicated that the improvement was due to the intervention itself, not by chance or time effects. The overall results of the study showed that structured, targeted programs of CBT intervention might dramatically enhance psychosocial outcomes by reducing social media use.

References

1. Ahmed, S., Khan, R., Ali, M., & Raza, H. (2020). Impact of social media addiction on mental health among youth. Journal of Behavioral Studies, 15(2), 123–135.
2. Allan, S., & Gilbert, P. (1995). A social comparison scale: Psychometric properties and relationship to psychopathology. Personality and Individual Differences, 19(3), 293–299.
3. Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2023). The relationship between addictive use of social media and mental health: A systematic review. Current Opinion in Psychology, 50, 101514.
4. Anwar, P., Murtaza, U., Ejaz, S. F., & Tanveer, S. (2025). Social media addiction and avoidance of depressive thoughts among young adults in Pakistan. Sociology & Cultural Research Review, 4(2), 668–675.
5. Baqir, S. A. (2022). Social media addiction: An overview of research and implications. Current Belief in Psychology, 36, 1–6.
6. Beck, J. S. (2020). Cognitive behavior therapy: Basics and beyond (3rd ed.). New York: Guilford Press.

7. Dawra, M. S. R. K., & Rahman, A. U. (2025). Depression, anxiety, and self-esteem among social media addicted young adults of the city of Bhakkar. Dialogue Social Science Review, 3(1), 764–778.
8. Ding, H., Cao, B., & Sun, Q. (2023). The association between problematic internet use and social anxiety within adolescents and young adults: A systematic review and meta-analysis. Frontiers in Public Health, 11, 1275723.
9. Fareed, S., Jabeen, S., Aurangzeb, S., & Aslam, R. (2024). Social media addiction, social media use, and aggression in young adults. Pakistan Journal of Humanities and Social Sciences, 12(3).
10. Gross, D. G., Aillen, R., & Young, J. (2018). No more FOMO: Limiting social media decreases loneliness and depression. Journal of Social and Clinical Psychology, 37(10), 751–768.
11. Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. Archives of Suicide Research, 14(3), 206–221.
12. Hofmann, S. G., Curtiss, J., & McNally, R. J. (2023). A meta-analysis of cognitive-behavioral therapy for adult anxiety and related disorders. Cognitive Therapy and Research, 47(1), 1–18.
13. Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: The influence of social media on depression, anxiety, and psychological distress in adolescents. International Journal of Adolescence and Youth, 25(1), 79–93.
14. Kumari, S., & colleagues. (2024). Assessment of the impact of social media addiction on psychosocial behavior, like depression, stress, and anxiety, in working professionals. BMC Psychology.
15. Kuss, D. J., & Griffiths, M. D. (2023). Social networking sites and addiction: Ten lessons learned. International Journal of Environmental Research and Public Health, 20(2), 1103.
16. Lam, L. T., & Wong, E. M. Y. (2015). Stress moderates the relationship between problematic internet use by parents and problematic internet use by adolescents. Journal of Adolescent Health, 56(3), 300–306.
17. Lovibond, S. H., & Lovibond, P. F. (1995). Manual for the Depression Anxiety Stress Scales (2nd ed.). Sydney: Psychology Foundation.
18. Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2023). A comprehensive meta-analysis on problematic social media use and psychological well-being. Computers in Human Behavior, 138, 107550.
19. Melissa, S. T., Aun, M., & Thisted, R. A. (2018). Perceived social isolation makes me sad: A five-year cross-lagged panel study of loneliness and depressive symptomatology. Psychology and Aging, 24(2), 453–463.
20. Naveed, A., Amjad, S. R., & Kiani, S. (2023). The impact of social media problematic use on psychological well-being and frustration among adolescents and young adults: A comparative study. Regional Lens.
21. Potenza, M. N., Higuchi, S., & Brand, M. (2022). Behavioral addictions and the emerging role of cognitive behavioral therapy in treatment. Current Addiction Reports, 9(2), 150–162.
22. Russell, D. W. (1978, revised in 1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. Journal of Personality Assessment, 66(1), 20–40.
23. Sameer, M., & Flent, O. T. (2010). Extending the school grounds? Bullying experiences in cyberspace. Journal of School Health, 78(9), 496–505.
24. Sampasa-Kanyinga, H., & Lewis, R. F. (2022). Frequent social media use and psychological distress among adolescents: The moderating role of family cohesion. Journal of Adolescence, 93, 1–10.

25. Tutgun-Ünal, Y., & Deniz, L. (2015). Development of the Social Media Addiction Scale. Addicta: The Turkish Journal on Addictions, 2(2), 61–97.
26. Twenge, J. M., & Campbell, W. K. (2019). Media use is linked to lower psychological well-being: Evidence from three datasets. Preventive Medicine Reports, 12, 271–283.
27. Wang, Y., Li, D., & Li, X. (2022). Cognitive-behavioral therapy for internet and social media addiction among young adults: A randomized controlled trial. Journal of Behavioral Addictions, 11(4), 1017–1031.
28. Zemb, S., Chai, J., & Twang, D. (2023). Advancing social media addiction research: Longitudinal and neurobiological perspectives. Neuroscience & Biobehavioral Reviews, 138, 104719.