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RESEARCH ARTICLE

Effect of Cognitive Behavioral Therapy on Social Media Addiction Among College Students Using I-Pace Model

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Abstract: Social media addiction is a growing concern among college students, affecting their academic, emotional, and social well-being. This study aimed to develop and validate a questionnaire based on the I-PACE model to investigate the relationship between personality traits, affective states, cognition, and executive functions in social media addiction. Additionally, the study examined the effect of Cognitive Behavioural Therapy (CBT) on reducing social media addiction among college students. A quasi-experimental design was used with 50 participants selected through convenience sampling, divided into experimental and control groups. Pre- and post-intervention assessments were conducted using the Social Media Addiction Scale and the I-PACE-QSMA questionnaire. Results showed significant reductions in addiction levels for the experimental group compared to the control group. The I-PACE-QSMA scores also decreased, indicating increased awareness and understanding of addictive behaviours. The findings support the effectiveness of CBT in addressing social media addiction and underscore the utility of the I-PACE model in capturing the psychological dimensions of addiction. Future research should explore long-term effects and additional therapeutic strategies.

Keywords: Social Media Addiction, Cognitive behavioural therapy, I-PACE Model.

INTRODUCTION

Social media addiction is a type of behavioural addiction that is broadly defined as compulsive engagement in social media platforms that significantly disrupts the users' functioning in important life domains, such as interpersonal relations, work or study performance, and physical health. According to the components model of behavioural addiction, social media addiction is conceptualized as a set of symptoms pertaining to six types of problematic behaviour such as salience, tolerance, mood modification, relapse withdrawal and conflict. Prevalence of social media addiction was 36.9% among users, distributed equally among private and Government Pus. The most common health problem identified was strain on eyes (38.4%), anger (25.5%), and sleep disturbance (26.1%). 4.69% of global social media users are addicted to social media, which translates to 210 million people worldwide. India is in the list of top countries in terms of social media usage, with an average of 2 hours and 24 minutes spent per day on social media. Young Indians between the ages of 18 and 22 account for 40% of all social media addicts in India.

Cognitive behavioural therapy is based on the theory that behaviour is determined by the way in which persons think about themselves and their roles in the world. CBT aims to help individuals identify, challenge, and modify distorted or unhelpful thinking patterns, known as cognitive distortions, which contribute to various mental health issues, such as anxiety, depression, and trauma. By learning new coping skills and techniques, individuals can develop more balanced and constructive ways of thinking, leading to improved emotional regulation, behaviour, and overall well-being

The I-PACE model is a theoretical framework for the processes underlying the development and maintenance of an addictive use of certain Internet applications or sites promoting gaming, gambling, pornography viewing, shopping, or communication. The model is composed as a process model. Specific Internet-use disorders are considered to be the consequence of interactions between predisposing factors, such as neurobiological and psychological constitutions, moderators, such as coping styles and Internet-related cognitive biases, and mediators, such as affective and cognitive responses to situational triggers in combination with reduced executive functioning.

NEED FOR THE STUDY

- In today's era, Social media addiction among college students has emerged as a significant issue with profound implications for academic performance, mental health, and social well-being.
- Hence the study is to evaluate the effect of cognitive behavioral therapy on social media addiction among college students using I-PACE model.

INTERVENTION SCHEDULE AND STATISTICAL ANALYSIS

WEEK 1: Orientation on Social Media Addiction

Objectives: Provide an overview of social media addiction.

Warm-up: Ice-breaker activity to build rapport.

Performance: Introduction to social media addiction, its causes, and effects.

Wind Down: Group discussion to reflect on the session.
Homework: List free-time activities and track daily mobile usage hours.

WEEK2: Identifying Triggers and Consequences

- Objectives: Identify triggers and consequences of social media use.
- Warm-up: Scavenger hunt activity.
- Performance: Write about 10 triggers and consequences of social media use.
- Wind Down: Discuss the triggers and consequences participants have experienced.
- Homework: Engage in recreational activities like reading, gardening, etc.

WEEK 3: Introduction to Cognitive Behavioural Therapy

- Objectives: Introduce Cognitive Behavioural Therapy (CBT).
- Warm-up: Elevator pitch – talk about interests and hobbies.
- Performance: Presentation on psychoeducation.
- Wind Down: Discussion about the session.
- Homework: Practice a social media–free day.

WEEK4: Creating Awareness on Social Media Addiction

- Objectives: Create awareness about social media addiction.
- Warm-up: Debate on the pros and cons of social media addiction.
- Performance: Present awareness videos on social media addiction.
- Wind Down: Discuss participants' views on the videos.
- Homework: Create a schedule to manage scroll time.

WEEK5: Social Skills Training

- Objectives: Provide social skills training.
- Warm-up: Word association game.
- Performance: Role-play on social media obsession.
- Wind Down: Group discussion about the role play.
- Homework: Set time limits on all mobile applications.

WEEK6: Problem-Solving Skill Training

- Objectives: Provide problem-solving skill training.
- Warm-up: Building card towers.
- Performance: 3D puzzle activities.
- Wind Down: Final discussion and feedback on the sessions.

STATISTICAL ANALYSIS

Table 1: Demographic details of the study population with respect to Gender

GENDER	CONTROL GROUP	EXPERIMENTAL GROUP
MALE	8	11
FEMALE	17	14

Figure 1.1: Pie chart depicting the population size

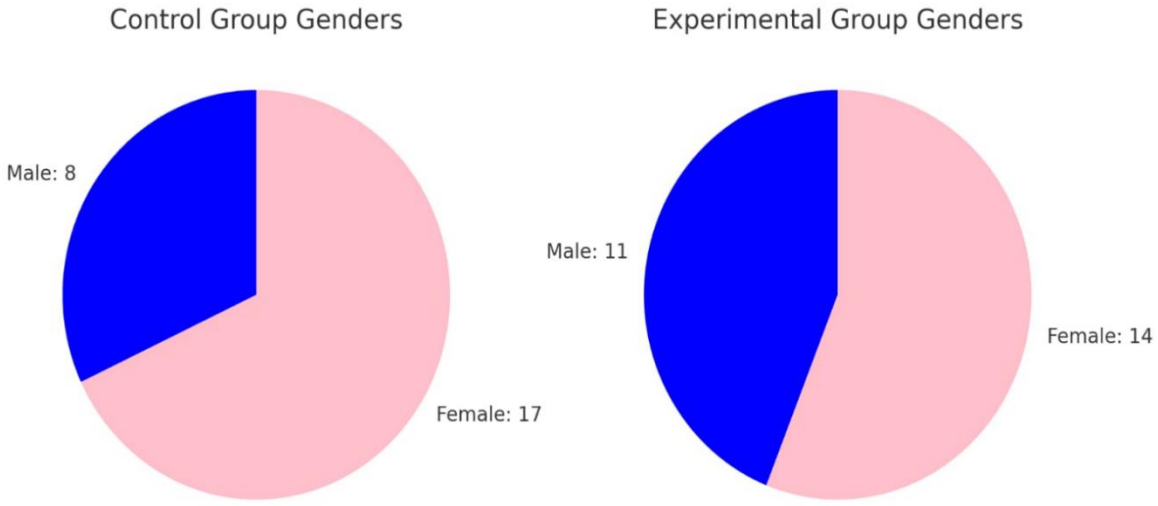


Table 2: Descriptive statistics for experimental group and control group

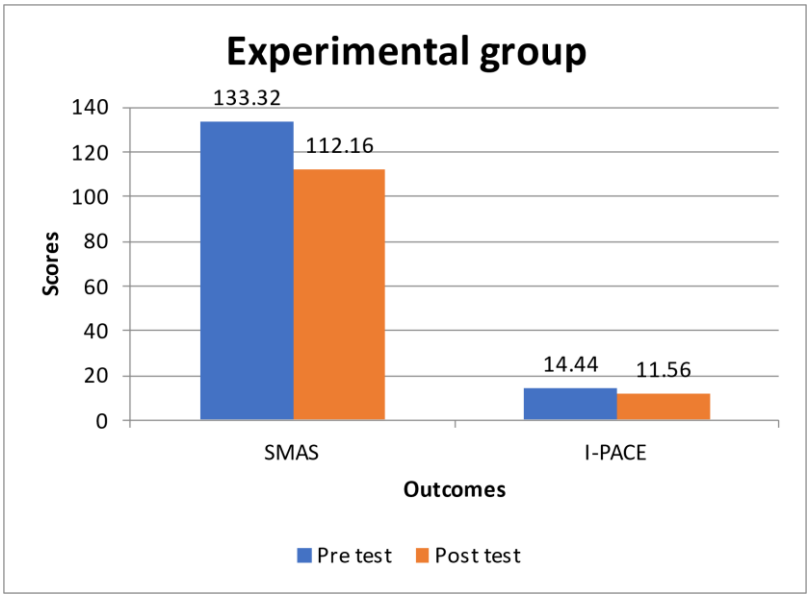
Groups		N	Minimum	Maximum	Mean	Std. Deviation
Experimental Group	Pretest SMAS Scores	25	123	163	133.32	12.092
	Post-test SMAS Scores	25	100	135	112.16	10.746
Control Group	Pretest SMAS Scores	25	74	122	108.64	14.215
	Post-test SMAS Score	25	66	110	97.76	11.931

Table 2.1: Descriptive statistics for experimental group (I-PACE-QSMA)

Group	N	Minimum	Maximum	Mean	Std. Deviation
I-PACE QSMA Pretest score	25	13	16	14.44	1.083
I-PACE QSMA Post-test score	25	10	14	11.56	1.083

Figure 2.2: Bar chart depicting the scores of pretests, post test for experimental group

	SMAS	I-PACE
Pre test	133.32	14.44
Post test	112.16	11.56



The graph depicts the pretest and post -test SMAS Score and I-PACE-QSMA for experimental group.

Figure 2.3: Bar chart depicting the scores of pretest , post test for control group

	SMAS	I-PACE
Pre test	108.64	0
Post test	97.76	0

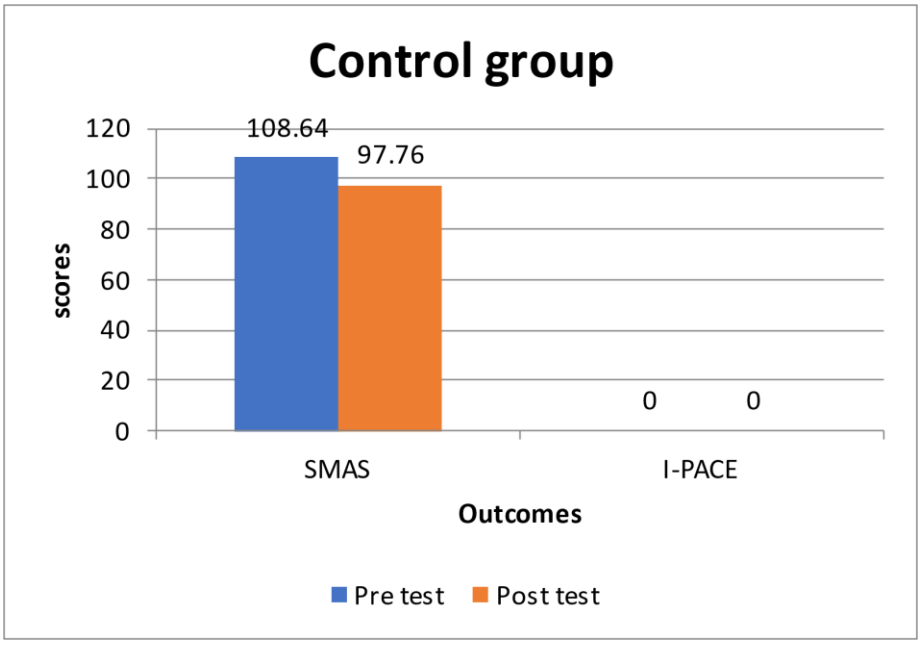


Table 3: comparison of pretest and post-test scores in control group

Control group (Intra group)

		Mean	N	Std. Deviation	Std. Error Mean	p-value
Pair 1	SMAS PRETEST	108.64	25	14.215	2.843	
	SMAS POST-TEST	97.76	25	11.931	2.386	**<0.001***
Pair 2	I-PACE-QSMA PRETEST	.00[b]	25	0.000	0.000	
	I-PACE-QSMA POSTTEST	.00[b]	25	0.000	0.000	Nil

*Paired t test

*p-value<0.05 - statistically significant

Table 4: comparison of pretest and post-test for experimental group

Experimental group (Intra group comparisons)

		Mean	N	Std. Deviation	Std. Error Mean	p-value
Pair 1	SMAS PRETEST	133.32	25	12.092	2.418	
	SMAS POST-TEST	112.16	25	10.746	2.149	**<0.001***
Pair 2	I-PACE-QSMA PRETEST	14.44	25	1.083	0.217	
	I-PACE-QSMA POSTTEST	11.56	25	1.083	0.217	**<0.001***

*Paired t test

*p-value<0.05 - statistically significant

Table 5: Intergroup comparison

Group Statistics

V11		N	Mean	Std. Deviation	Std. Error Mean	p-value
SMAS PRETEST	Control group	25	108.64	14.215	2.843	
	Experimental group	25	133.32	12.092	2.418	**<0.001***
SMAS POST-TEST	Control group	25	97.76	11.931	2.386	
	Experimental group	25	112.16	10.746	2.149	**<0.001***
I-PACE-QSMA PRETEST	Control group	25	0.00	0.000	0.000	
	Experimental group	25	14.44	1.083	0.217	**<0.001***
I-PACE-QSMA POSTTEST	Control group	25	0.00	0.000	0.000	
	Experimental group	25	11.56	1.083	0.217	**<0.001***

*p-value<0.05 - statistically significant

Independent sample t-test

CONCLUSION:

In conclusion, this study provides strong evidence supporting the efficacy of CBT in reducing social media addiction among college students. The integration of the I-PACE model allowed for a nuanced understanding of the mechanisms through which CBT operates. These findings underscore the importance of addressing cognitive, affective, and executive function components in the treatment of social media addiction. Future research should continue to explore the long-term benefits of CBT and investigate additional therapeutic approaches to further enhance treatment outcomes.

LIMITATIONS AND RECOMMENDATION:

LIMITATIONS:

- The present study was done with small sample size.
- Study was done on restricted age group 18 to 25.
- Study involved only college students in Chennai. Hence the results cannot be generalized.

RECOMMENDATIONS:

- A Large Sample size and longer duration on intervention could be considered.
- Study can be done on different age groups.
- The present study can be performed for college students from different areas of the city.
- Participants from other professions can be taken into consideration.

DECLARATION: The authors have no conflict of interest

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