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ABSTRACT

Influence of Social Media Use on the Mental Health of Overweight Individuals

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I. INTRODUCTION

The rising prevalence of mental health issues among overweight individuals has prompted concern, especially in relation to social media use [1]. This study explores various perceptions of social media, such as comparison, validation, and exposure, that affect mental health in overweight individuals. It seeks to identify key perception factors and examine their relationships with psychological outcomes, contributing to a deeper understanding of technology's role in mental well-being [2].

II. METHODS

Data were collected from 200 overweight individuals using standardized questionnaires: the Social Media Use Scale (SMUS) and the Depression Anxiety Stress Scales (DASS-21) [3]. Participants self-reported their perceptions of social media and mental health status. Descriptive statistics summarized the data, while correlation analysis examined relationships between social media perception factors and mental health outcomes, offering insights into the psychological effects of digital engagement on this demographic [4].

III. RESULTS AND DISCUSSION

A. Scoring Summary of SMUS score

Descriptive findings indicate that consumption was the most frequent social media behavior among overweight individuals ($M = 4.98$, $SD = 2.08$), suggesting high levels of passive engagement with digital content. Comparison followed closely ($M = 4.20$, $SD = 2.09$), while image ($M = 3.38$, $SD = 1.66$) and belief ($M = 1.49$, $SD = 1.19$) were less common.

B. Correlation Between SMUS and DASS-21

Correlation analysis revealed that comparison and belief factors had the strongest and most significant associations with anxiety, depression, and stress (Spearman's $\rho > 0.39$, $p < 0.001$). Image and consumption activities showed weaker but still significant relationships, especially with stress. Despite their lower frequency, comparison and belief-based activities were more strongly tied to anxiety symptoms than consumption [5]. These findings highlight that not all frequent activities equate to the most psychologically impactful [6].

TABLE I
SCORING SUMMARY OF SMUS SCORE

Assessment	Frequency (N)	Mean	Std. Dev.
Image	200	3.38	1.66
Comparison	200	4.20	2.09
Belief	200	1.49	1.19
Consumption	200	4.98	2.08

TABLE II
CORRELATION BETWEEN SMUS AND DASS-21

		IMAGE	COMPARISON	BELIEF	CONSUMPTION
	Spearman's R	0.203	0.463	0.471	0.140
	Sig. (2-tailed)	0.004	<0.001	<0.001	0.049
ANXIETY	N	200	200	200	200
	Spearman's R	0.164	0.494	0.415	0.117
DEPRESSION	Sig. (2-tailed)	0.020	<0.001	<0.001	0.098
	N	200	200	200	200
STRESS	Spearman's R	0.215	0.474	0.397	0.210
	Sig. (2-tailed)	0.002	<0.001	<0.001	0.003
	N	200	200	200	200

IV. CONCLUSIONS

Comparison and belief-based social media use are strongly linked to poorer mental health among overweight individuals, while high-frequency consumption has a limited psychological impact. These findings suggest that the type of engagement, not just frequency, matters in mental health outcomes, emphasizing the need for targeted digital literacy and mental health interventions [7].

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