Social Media Behaviors and Psychosocial Predictors of Social Media Addiction

Krista Howard, PhD, Sinjin Roming, BS, and Natalie Ceballos, PhD, Department of Psychology
Stephanie Dailey, PhD, Department of Communication Studies
Tom Grimes, PhD, Department of Mass Communication

INTRODUCTION

Social media addiction is an ongoing problem. Maladaptive social and personal factors associated with addiction can include:
- Preoccupation with social media
- Withdrawal symptoms
- Replacing important activities (sleep, eating) with social media use
- Escape from problems (poor coping)
- Loss of relationships

Prior research has identified several independent factors related to social media addiction:
- Desire for belongingness
- Lack of conscientiousness
- High levels of extroversion
- Low self-esteem
- Anxiety
- Depression
- Stress

PURPOSE

This study aims to simultaneously evaluate both the social media behaviors and psychosocial factors related to high levels of social media addiction.

For this study, we assessed:
- Age
- Gender
- Race/Ethnicity
- Number of Connections (Friends/Followers/Following)
- Social Media Usage
- Facebook, Twitter, Instagram, and Snapchat Intensity
- Need for Social Media
- Comparisons to Others Better/Worse off
- Online vs Offline Identity Overlap
- Stress
- Social Support
- Self-Esteem
- Empathic Concern
- Personal Distress
- Big-5 Personality Factors
- Axis I Psychopathology (Depression, Anxiety, Somatization, and Panic)
- Quality of Life

METHODS

Participants
This study included 504 undergraduate students at Texas State University who completed an online survey via Qualtrics.

Measures
Demographics: Age, Gender, Race/Ethnicity

Social Media Behaviors:
- Social Media Use: Number of friends/followers/following and amount of time per day
- Need for Participating on Social Media Scale
- Comparison of Others Better/Worse Off
- Social Media Online vs Offline Identity Overlap

Psychosocial Factors:
- Perceived Stress Scale (PSS)
- Interpersonal Support Evaluation (ISEL-12)
- Interpersonal Reactivity Index (IRI): contains 4 subscales: Perspective-Taking, Fantasy, Empathic Concern, and Personal Distress
- Rosenberg Self-Esteem Scale
- Big-5 Personality Inventory: measures Openness, Agreeableness, Conscientiousness, Extroversion, and Neuroticism
- Patient Health Questionnaire (PHQ): Validated self-report measure used to evaluate the presence of Axis I Psychopathology (Somatization Disorder, Major Depressive Disorders, Panic Disorder and Anxiety Disorder)

Outcome Variable: Bergen Social Media Addiction Scale (BSMAS)

Statistical Analysis
Univariate statistical analyses were used to assess the relationship between the BSMAS scores and the individual predictors. Pearson and Spearman correlations were used for continuous predictors and Independent t-tests and ANOVAs were used for categorical predictors. A Holm-Bonferroni correction was used to account for multiple comparisons. A Hierarchical Multivariate Linear Regression was used to identify the key social media behaviors and psychosocial factors most associated social media addiction. The alpha level was set a p=.05.

Table 1. Demographics

Table 1. Demographics	Descriptives Means (St. Deviations) or Pearson r	Statistical Significance
Gender		
Males	14.0 (5.0)	t = -3.403
Females	16.2 (5.6)	p = .001
Age		
	r = -.214	p < .001
Race/Ethnicity		
Caucasian	16.1 (5.3)	NS
African American	14.7 (5.1)	
Latino/Hispanic	15.4 (5.8)	
Sleep (Average hours/night)		
	r = -.004	NS
Physical Health Condition		NS
Yes	14.6 (5.5)	
No	15.9 (5.6)	
Mental Health Condition		NS
Yes	17.0 (5.8)	
No	15.6 (5.5)	

Table 2. Social Media Behaviors

Table 2. Social Media Behaviors	Descriptives Means (St. Deviations) or Pearson/ Spearman r	Statistical Significance
Social Media Intensity		
Facebook	r = .328	p < .001
Twitter	r = .379	p < .001
Instagram	r = .407	p < .001
Snapchat	r = .549	p < .001
Social Media Connections		
Facebook Friends	r = .122	p = .006
Twitter Followers	r = .166	p = .001
Twitter Following	r = .282	p < .001
Instagram Followers	r = .183	p < .001
Instagram Following	r = .324	p < .001
Snapchat Friends	r = .288	p < .001
Social Media Hours per Day		
Facebook	r = .149	p = .002
Twitter	r = .277	p < .001
Instagram	r = .275	p < .001
Snapchat	r = .276	p < .001
Need for Social Media Scale		
	r = .470	p < .001
Comparison to Others		
	r = .429	p < .001
Better Off than Me	r = .285	p < .001
Worse Off than Me		
Online/Offline Identity Overlap		
	r = -.178	p < .001

Table 3. Psychosocial Factors

Table 3. Psychosocial Factors	Descriptives Means (St. Deviations) or Pearson/Spearman r	Statistical Significance
Perceived Stress Scale		
	r = .391	p < .001
Social Support (ISEL)		
	r = -.147	p = .001
Empathy (IRI)		
Perspective-Taking Scale	r = -.137	p = .002
Fantasy Scale	r = .083	NS
Empathic Concern Scale	r = -.102	p = .024
Personal Distress Scale	r = .326	p < .001
Rosenberg Self-Esteem Scale		
	r = -.290	p < .001
Big 5 Personality Inventory		
Extraversion	r = -.050	NS
Agreeableness	r = -.172	p < .001
Conscientiousness	r = -.293	p < .001
Neuroticism	r = .287	p < .001
Openness	r = -.046	NS
Major Depressive Disorder		
Yes	18.5 (6.3)	t = -4.413
No	15.3 (5.2)	p < .001
Anxiety Disorder		
Yes	18.9 (6.0)	t = -5.554
No	15.2 (5.3)	p < .001
Somatization Disorder		
Yes	17.0 (5.7)	t = -2.858
No	15.4 (5.5)	p = .004
Panic Disorder		
Yes	18.9 (5.6)	t = -3.825
No	15.5 (5.4)	p < .001
Quality of Life (SLSS)		
	r = -.220	p < .001

Table 4. Multivariate Linear Regression

Table 4. Multivariate Linear Regression	Standardized Beta	Standard Error	β	t	p-value
Age	.002	.082	.003	.034	.973
Gender (Male Reference)	.027	.701	.408	.582	.561
Facebook Intensity	.176	.043	.152	3.566	.000
Snapchat Intensity	.204	.055	.189	3.412	.001
Instagram Intensity	.043	.046	.035	.757	.450
Twitter Intensity	.091	.034	.062	1.815	.071
Need for Social Media	.208	.024	.111	4.571	.000
Comparisons of Better Off	.108	.238	.470	1.972	.050
Comparisons of Worse Off	.097	.236	.482	2.047	.042
Perceived Stress Scale	.142	.064	.159	2.486	.014
IRI – Perspective-Taking	-.035	.057	-.039	-.674	.501
IRI – Empathic Concern	-.110	.056	-.122	-2.177	.030
IRI – Personal Distress	.086	.067	.114	1.704	.090
Self-Esteem	.070	.052	.064	1.247	.214
Conscientiousness	-.133	.050	-.138	-2.740	.007
Major Depressive Disorder	.118	.725	1.699	2.343	.020
Constant		3.683	.337	.091	.927

RESULTS

Univariate Comparisons identified the following as significant predictors of Social Media Addiction:
- Females
- Younger age
- Higher levels of Intensity on Facebook, Twitter, Instagram, and Snapchat
- More friends/followers/following connections
- More hours per day use of social media
- Higher Need for Participating on Social Media
- More likely to compare themselves to others they perceive to be better or worse off than themselves
- Less concordance with Online-Offline Identity
- Higher perceived stress
- Lower perceived social support
- Lower levels of Perspective-Taking and Empathic Concern on Empathy Scale; Higher levels of Personal Distress on Empathy Scale
- Lower Self-Esteem
- Lower Agreeableness and Conscientiousness; Higher Neuroticism on Big-5 Personality Scale
- Presence of Axis I Pathology: Major Depression, Anxiety Disorder, Somatization Disorder, and/ Panic Disorder
- Lower Quality of life

Hierarchical Multivariate Linear Regression identified these factors as most significantly related to Social Media Addiction, when all factors are considered simultaneously:
- Greater Facebook and Snapchat Intensity
- High Need for Participating in Social Media
- More likely to compare themselves to others better and/or worse off than themselves.
- Higher perceived stress
- Lower Empathic Concern
- Lower Conscientiousness
- Presence of Major Depressive Disorder

IMPLICATIONS

The results from this study highlight social media behaviors and psychosocial factors associated with high levels of social media addiction. Using this information will help us to develop prevention and intervention strategies that can target these predictors, which, in turn, may help reduce social media addiction and its harmful effects on both the individual and society.

ACKNOWLEDGEMENTS