Original paper

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Give Me a Break: Do Mental Health Breaks from Social Networking Sites Correlate with Lower Psychopathology? - Preliminary Findings

Kelci Chezem Davis¹, Jennifer Katherine Boland¹, Larissa Aileen Fernandez¹, Jaime Lynn Anderson¹

¹Department of Psychology and Philosophy, Sam Houston State University, Huntsville, United States of America

Abstract - Social networking sites (SNS) have become a pervasive part of modern society. In 2019, 69 % of adults used Facebook, and 74 % of these users checked Facebook daily. Social networking use is even higher in younger generations; 92 % of adolescents check SNS daily, and 24 % report being online "almost constantly." Recently, a flood of research has exposed the harmful correlates of social networking site use, including increased depression, anxiety, suicidality, psychological distress, self-esteem, anxiety, and sleep problems. As the public has become aware of these adverse outcomes, a new trend of taking a break from SNS for their mental health has increased in popularity. However, no empirical research has examined how the mental health of those who have taken a SNS mental health break differs from those who have not. Therefore, this study examined the differences in personality psychopathology, self-esteem, and internalizing symptoms between these two groups in a sample of 565 adult social networking site users. It was found that individuals who took a SNS mental health break had higher self-esteem, but also higher levels of personality psychopathology and internalizing symptomology. Implications for this study are discussed.

Key words: social networking; mental health; personality; psychopathology; self concept

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Introduction

Over the last decade, the use of social networking sites (SNS) has become an integral aspect of many people's lives, with as many as 70 % of Americans using SNS in 2018 [1]. Adults and adolescents report high levels of SNS use; up to 74 % of adults and 92 % of adolescent Facebook users reported checking their accounts daily [1-2]. Indeed, 24 % of adolescents endorse being online "almost constantly." [2]. This trend of excessive SNS use has become so concerning to researchers and the public that a "Social Media Disorder" has been proposed due to excessive use and perceived addiction to these online communities [3]. Although not formally recognized by the Diagnostic and Statistical Manual of Mental Disorders (DSM - 5), there is evidence to suggest online users can be addicted to specific online activities such as social networking and online gaming [4-7]. Positive aspects of SNS use have also been found, such as decreased loneliness, enhanced bonding, and creating safe spaces for marginalized groups [8-11].

Correspondence to:

Jaime L. Anderson, Ph.D., Department of Psychology and Philosophy, Sam Houston State University, Campus Box 2447 Huntsville, TX 77341, Phone: + 1 936-294-4745 E-mail: jla068@shsu.edu

However, these have been largely overshadowed by negative findings.

Although using SNS has allowed people to connect and communicate more efficiently, it has also been linked to mental health concerns. Literature has linked SNS use to depression, anxiety psychological distress, attention deficit hyperactivity disorder symptoms, bipolar disorder symptoms, suicidality, lower self-esteem, and body dissatisfaction [12-18]. SNS use and mental health symptoms have also been linked in a dose-response style. Indeed, the longer an individual uses Facebook, the more likely they perceive others as happier than themselves and the less likely they are to believe life is fair [19]. For adults over 30, the higher the number of SNS used, the more likely a person is to report feeling they will have a nervous breakdown [20]. Moreover, multiple studies have found evidence of negative addictive aspects of SNS, often linked to self-esteem and narcissistic personality traits [21,22].

The relation between personality psychopathology and SNS behaviours has also been examined. In particular, a focus has been placed on the connection between narcissism and SNS use [23-26]. It is plausible that facets of narcissism, such as self-enhancing behaviours on social networking sites (e.g., selfies), are more a product of social norms in younger samples but become more strongly associated with personality psychopathology in older individuals. However, the connection between personality psychopathology and SNS use remains an emerging area in the field. As such, current research findings are limited.

As the public has become aware of adverse mental health correlates of SNS use, a new trend of taking a mental health break from SNS has increased in popularity. Websites such as Psychology Today have promoted this trend, suggesting that users limit their social networking site exposure through strategies such as tracking their SNS use time, turning off notifications, creating "phone-free zones" within one's home, or merely deleting social networking site phone applications [27]. Currently, anecdotal evidence has provided the foundation for advocates of SNS mental health breaks. In addition, celebrities, including Demi Lovato, Ed Sheeran, and Ariana Grande, have also helped fuel this popular trend. Many of these highly-followed social networkers have cited various reasons to take a SNS mental health break, including recovering from traumatic events, dealing with substance use, and merely needing space from their online platforms [28-29]. However, despite this trend becoming increasingly common, little empirical research has examined how the mental health of those who have taken a SNS mental health break differs from those who have not.

Within the past few years, research examining abstaining from SNS has shown mixed evidence for the anecdotal stories. Graham and colleagues found that limiting SNS use led to a slight improvement in well-being, which was attributed to changes in sleep quality [30]. However, in a longitudinal study on adolescents that examined both within- and between-participant effects, SNS was generally found unrelated to well-being, although the relation was complex [31]. Yet, in a randomized controlled trial, adults taking a one-week SNS mental health break were found to have significant improvement in well-being and a decrease in depression and anxiety symptoms, although the persistence of these effects remains unknown [32].

Although the trend of SNS mental health breaks has been increasing, and celebrities and blogs have touted the benefits, few studies have examined the evidence of these claims. The combination of exceptionally high use rates and widespread adverse effects creates a call for concern over SNS use. Therefore, this study provided a preliminary examination of possible amelioration strategies. More specifically, it was hypothesized that individuals who have taken a SNS mental health break would endorse lower levels of psychopathology and higher self-esteem levels than those who have not taken a SNS mental health break.

Internalizing symptomology has been highly studied in its connection to SNS use. Although depression is the most commonly cited correlate, anxiety, suicidality, bipolar disorder symptoms, and general distres have also been linked to social networking site use [12-17,32]. Because research has demonstrated a dose-response relationship between social networking use and internalizing symptoms, it is hypothesized that taking a SNS mental health break will relate to lower overall internalizing symptoms [19-20]. Personality psychopathology has been less studied than other forms of mental health symptomology related to social networking. However, there is evidence that SNS use is related to higher levels of antisocial personality disorder symptoms, narcissism, negative affectivity, and antagonism [23,25,33,34]. For this study, we examined pathological personality traits in addition to internalizing symptoms. However, due to the dearth of related research, hypotheses in this area are exploratory. Generally, it is hypothesized that those who have taken a SNS mental health break will have lower levels of maladaptive personality traits than social networking users who have not, particularly regarding negative affect and antagonism. Additionally, research has demonstrated the adverse effects social networking site use has on perceptions of oneself and one's body [16,19,25]. Therefore, it is hypothesized that individuals who have taken a SNS mental health break will have higher self-esteem levels than those who have not limited their social networking site use.

Subjects and Methods

Participants

The data for this study were collected through two separate online data collections. An initial sample of 489 adults was recruited through Amazon Mechanical Turk; however, 251 participants failed the validity screen (see below) and were suspected of random responding. Participants who passed these validity checks were financially compensated (1.50 USD) for their time. After excluding participants suspected of random responding, this data collection resulted in a final sample of 238 participants. An additional portion of the data was collected at a mid-sized southern university, producing 327 participants after removing invalidated submissions. The final sample for the current study consisted of 565 participants.

The mean age of the sample was 26.05 years old. Of the participants, 72.6 % identified as female, 24.2 % as male. Additionally, 63.9 % of the sample identified as White. The majority of participants reported having used SNS for 5 - 10 years (59.1 %), and Facebook was the most commonly reported SNS used (25.3 %). A total of 154 participants (27.3 % of the overall sample) reported taking a mental health break from SNS. Descriptive information for the sample can be found in Table 1. Due to the exploratory nature of this study, detailed information regarding the mental health break was not collected (e.g., length of break, proximity to current time). This study functions as a preliminary examination.

Measures

Personality Inventory for DSM-5 Short Form

The Personality Inventory for DSM - 5 Short Form (PID – 5 - SF) is a shortened, 100 - item version of the Personality Inventory for DSM - 5 (PID - 5) designed to assess the personality trait model found in the DSM - 5 Alternative Model for Personality Disorder (AMPD) [36,36]. The inventory measures 25 personality trait facets and can be categorized into five broader traits domains: Negative Affectivity, Detachment, Psychoticism, Disinhibition, and Antagonism. For this sample, internal consistencies ranged from α = 0.93 (Detachment) to α = 0.95 (Negative Affect).

The Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale (RSE) is a 10item self-report measure of overall self-esteem. The internal consistency of the current sample was acceptable ($\alpha = 0.92$) [37].

The Inventory of Depression and Anxiety Symptoms – 2nd Version (IDAS - II)

The Inventory of Depression and Anxiety Symptoms - 2nd Version (IDAS - II) is a 79-item self-report questionnaire [38]. It assesses internalizing symptomology over the past two weeks, including depression, anxiety, obsessive-compulsive disorder, bipolar disorder, and post-traumatic stress disorder. For this study, the Claustrophobia, Checking, Ordering, and Cleaning subscales were removed due to their lack of relevance.

	N	Percentage
Total n	565	100
Sex		
Male	137	24.6
Female	410	73.6
Other	10	1.8
Race		
White	361	63.9
Black/African American	99	17.5
Hispanic/Latin	96	17.0
Asian/Pacific Islander	37	6.5
Native American	8	1.4
Other	7	1.2
Years of Social Networking Use		
Less than one year	4	0.7
1 - 5 years	94	16.6
5 - 10 years	334	59.1
10 - 15 years	108	19.1
15 + years	25	4.4
Social Networking Sites Use		
Facebook	431	76.3
Twitter	386	68.3
Snapchat	373	66.0
Instagram	428	75.8
Tumblr	87	15.4
Reddit	159	28.1
Other	49	8.7
Mental Health Break Taken		
No	411	72.7
Yes	154	27.3

Table 1. Demographics of the study sample

Note: Participants could select more than one race/ ethnicity and indicate more than one used social networking site.

The current sample's internal consistencies ranged from 0.76 (Appetite Gain) to 0.92 (Depression).

Validity Indicator

Six validity items were dispersed throughout the survey. These indicators included questions with which most participants were expected to disagree, such as "I wrote three best-selling novels last year" and "I am close personal friends with the prime minister of Zanzibar." Individuals suspected of random responding (i.e., individuals who endorsed two or more validity items) were excluded.

Results

MANOVA analyses were used to compare group differences between individuals who have taken a SNS mental health break and those who have not concerning personality psychopathology and internalizing symptomology, as measured by the IDAS-II. Additionally, an independent samples t-test was run to examine differences between these two groups (i.e., those who have taken a SNS mental health break or not) in self-esteem, as measured by the RSE. Descriptive statistics for the PID-5-SF, IDAS-II, and RSE are presented in Table 2.

MANOVA Analyses

There was a statistically significant difference in personality psychopathology based on whether an individual had previously taken a social media mental health break, F (5, 559) = 9.63, p < 0.001; Wilk's $\Lambda = 0.921$, partial $\eta 2 =$ 0.08, such that those who had previously taken a mental health break endorsed higher levels of personality psychopathology. A Bonferonni correction (p < 0.025) was used when interpreting between-subjects effects. A history of taking a social media mental health break had a statistically significant relationship with all personality variables (p's < 0.017). These results are detailed in Table 3.

There was also a statistically significant difference in internalizing psychopathology based on whether an individual had previously taken a social media mental health break, F (14, 548) = 4.13, p < 0.001; Wilk's $\Lambda = 0.904$, partial $\eta 2 = 0.10$, such that those who had previously taken a mental health break en-

			Std.
	Mean	Ν	Deviation
PID-5-SF Negative	1.64	565	1.01
Affectivity			
PID-5-SF Anxiousness	1.96	565	1.18
PID-5-SF Emotional	1.40	565	1.06
Lability			
PID-5-SF Separation	1.58	565	1.09
Insecurity			
PID-5-SF Perseveration	1.35	565	0.90
PID-5-SF	1.18	565	0.82
Suspiciousness			
PID-5-SF	1.54	565	0.89
Submissiveness			
PID-5-SF Depressivity	1.03	565	0.87
PID-5-SF Hostility	1.29	565	0.96
PID-5-SF Detachment	1.26	565	0.74
PID-5-SF Withdrawal	1.48	565	0.85
PID-5-SF Anhedonia	1.19	565	0.91
PID-5-SF Intimacy	1.11	565	0.83
Avoidance			
PID-5-SF Restricted	1.70	564	0.78
Affectivity			
PID-5-SF Antagonism	0.99	565	0.64
PID-5-SF	1.12	565	0.77
Manipulativeness			
PID-5-SF Deceitfulness	0.97	565	0.70
PID-5-SF Grandiosity	0.88	565	0.64
PID-5-SF Attention	1.37	565	0.97
Seeking			
PID-5-SF Callousness	0.82	565	0.63
PID-5-SF Disinhibition	1.19	565	0.78
PID-5-SF	0.84	565	0.60
Irresponsibility			
PID-5-SF Impulsivity	1.13	564	0.88

Table 2. Descriptive statistics of the PID-5-SF,IDAS - II and RSE results

 Table 2.
 (Continued)

	Mean	N	Std. Deviation
PID-5-SF Distractibility	1.60	565	1.11
PID-5-SF Rigid	1.55	561	0.89
Perfectionism			
PID-5-SF Risk Taking	1.08	565	0.83
PID-5-SF Psychoticism	1.08	565	0.76
PID-5-SF Unusual	1.03	565	0.80
Beliefs & Experiences			
PID-5-SF Eccentricity	1.38	565	1.01
PID-5-SF Perceptual	0.82	565	0.68
Dysregulation			
IDAS-II Depression	2.22	565	0.78
IDAS-II Dysphoria	2.12	565	0.92
IDAS-II Lassitude	2.36	565	1.01
IDAS-II Insomnia	2.24	565	0.98
IDAS-II Suicidality	1.29	565	0.64
IDAS-II Appetite Gain	2.21	565	1.03
IDAS-II Well-Being	2.77	565	0.94
IDAS-II Mania	1.68	563	0.87
IDAS-II Euphoria	1.53	563	0.67
IDAS-II Social Anxiety	2.09	565	1.07
IDAS-II Trauma	1.72	565	0.94
Intrusions			
IDAS-II Trauma	2.13	563	1.12
Avoidance			
IDAS-II Appetite Loss	1.87	565	0.99
IDAS-II Panic	1.55	565	0.73
RSE Total Score	20.19	565	6.67

Note: PID-5-SF - The Personality Inventory for DSM-5 – Short Form, broad domain facets are underlined; IDAS-II - The Inventory of Depression and Anxiety Symptoms – 2nd Version; RSE - The Rosenberg Self – Esteem Scale.

dorsed higher levels of internalizing psychopathology. After a Bonferonni correction, a history of taking a social media mental health break had a statistically significant relationship with most of the examined internalizing variables (p's < 0.001), with the exceptions

				Par-	Mental		99 % Confidence Interval	
Dependent Variable	df	df error	F	tial Eta Squared	Health Break	Mean	Lower Bound	Upper Bound
Negative Affect	1	563	39.57**	0.07	No	1.49	1.39	1.58
					Yes	2.07	1.91	2.22
Detachment	1	563	26.66**	0.05	No	1.16	1.09	1.23
					Yes	1.52	1.40	1.63
Antagonism	1	563	5.78*	0.01	No	0.95	0.89	1.01
					Yes	1.09	0.99	1.19
Disinhibition	1	563	29.82**	0.05	No	1.08	1.01	1.16
					Yes	1.48	1.36	1.60
Psychoticism	1	563	24.33**	0.04	No	0.98	0.91	1.05
					Yes	1.33	1.21	1.45

Table 3. Tests of Between-Subjects Effects results for personality psychopathology (PID – 5 - SF)

Note: PID – 5 - SF - The Personality Inventory for DSM-5 – Short Form. * Significant at p = 0.025 level. ** Significant at p < 0.001 level

	<u>.</u>			Par-	Mental		99 % Confidence Interval	
Dependent Variable	df	df error	F	tial Eta Squared	Health Break	Mean	Lower Bound	Upper Bound
Depression	1	561	31.97**	0.05	No	2.11	2.04	2.18
					Yes	2.51	2.39	2.63
Dysphoria	1	561	30.91**	0.05	No	1.98	1.90	2.07
					Yes	2.45	2.31	2.59
Lassitude	1	561	33.32**	0.06	No	2.21	2.11	2.30
					Yes	2.74	2.59	2.90
Insomnia	1	561	22.00**	0.04	No	2.12	2.02	2.21
					Yes	2.54	2.39	2.69
Suicidality	1	561	3.37	0.01	No	1.26	1.20	1.32
					Yes	1.37	1.27	1.47
Appetite Gain	1	561	10.36*	0.02	No	2.13	2.03	2.23
					Yes	2.44	2.28	2.60
Well-being	1	561	0.34	0.00	No	2.79	2.70	2.88
					Yes	2.74	2.59	2.88
Mania	1	561	25.10**	0.04	No	1.57	1.49	1.65
					Yes	1.97	1.84	2.11

 Table 4.
 Tests of Between - Subjects Effects results for Internalizing Symptoms (IDAS - II)

				Par-	Mental		99 % Confidence Interval	
Dependent Variable	df	df error	F	tial Eta Squared	Health Break	Mean	Lower Bound	Upper Bound
Euphoria	1	561	0.31	0.00	No	1.52	1.45	1.58
					Yes	1.55	1.45	1.66
Social Anxiety	1	561	24.30**	0.04	No	1.96	1.85	2.06
					Yes	2.44	2.28	2.61
Trauma Intrusions	1	561	29.19**	0.05	No	1.59	1.50	1.68
					Yes	2.06	1.92	2.21
Trauma Avoidance	1	561	27.54**	0.05	No	1.98	1.88	2.09
					Yes	2.53	2.35	2.70
Appetite Loss	1	561	18.65**	0.03	No	1.75	1.66	1.85
					Yes	2.15	2.00	2.31
Panic	1	561	13.20**	0.02	No	1.47	1.40	1.54
					Yes	1.72	1.61	1.83

Table 4.(Continued)

Note: IDAS-II - The Inventory of Depression and Anxiety Symptoms – 2nd Version. * Significant at p = .025 level. ** Significant at p < 0.001 level.

of Suicidality and Euphoria. These results are detailed in Table 4.

t - Test Analyses

This study found that participants who had taken a SNS mental health break had significantly higher rates of self-esteem (M = 21.81, SD = 7.08) than participants who had never taken a mental health break (M = 19.59, SD = 6.41), t (563) = -3.56, p < 0.001, d = 0.33.

Discussion

This study aimed to improve understanding of how temporarily abstaining from social networking site use impacts the generally adverse outcomes of SNS exposure. Although the trend of SNS mental health breaks has been increasing, and celebrities and blogs have touted their benefits, empirical evidence of these claims is currently mixed and limited in outcomes examined [30-32]. The combination

of exceptionally high use rates and widespread adverse correlates creates a call for concern over social networking use. Therefore, this study provided an exploratory examination of possible amelioration strategies. We expected individuals who had previously taken a SNS mental health break to endorse lower levels of personality psychopathology and internalizing and higher self-esteem than those who had never taken a mental health break. This expectation was supported by previous research, which indicated social networking site use is correlated with adverse mental health indications, including pathological personality traits, internalizing symptoms, and lowered self-esteem [12,14,16,20,23,26,30,34].

Overall, the findings from this study primarily contradicted our hypotheses. The results show that those who had previously taken a mental health break endorsed higher personality psychopathology and internalizing symptoms. Although these effect sizes were relatively small, they provide evidence of significant differences. Nevertheless, in line with our hypothesis, those who had previously taken a social media mental health break had higher self-esteem with a moderate effect. Because temporal precedence was not established in this study, one possible interpretation of our results is that those with higher personality psychopathology rates and internalizing symptoms were more likely to need a SNS mental health break.

Considering the findings, it seems the potential amelioration of these symptoms is not lasting. However, it may provide a sense of pride or esteem, which would explain the protective nature of self-esteem rates in those who took a break. Findings across studies examining social networking site use and self-esteem have led to mixed conclusions. However, a recent meta-analysis found a small, but significant negative correlation between social networking site use and self-esteem [39]. This relationship was stronger when SNS use associated with adverse outcomes (e.g., addictive use, social comparisons on SNS) was examined [39]. Further, individuals with clinically significant psychological symptoms display more problematic SNS use and lower self-esteem scores than social SNS users from the general population [40]

Although this study provides a preliminary evaluation of SNS mental health breaks and their associations with psychopathology and self-esteem, there are limitations to the current findings. This study was conducted online and utilized only self-report measures. As previously mentioned, the cross-sectional nature of this study limits the causal implications. Although a notable portion of our sample had taken a SNS mental health break, information about the details and timing of this break was not gathered. Nonetheless, this study provides a reason to examine mental health breaks and include them in the growing dialogue around SNS use.

Previously, few studies examined the relation between social networking site use and personality psychopathology beyond narcissism. Considering the current results regarding personality psychopathology, the field's limited focus on narcissism appears unwarranted. Additionally, this study provides evidence that SNS mental health breaks may impact users, and the findings serve as an exploratory foundation for future examinations. Additional research should utilize experimental methods to assess how abstaining from social networking impacts mental health. A longitudinal study would be necessary as the alleviating effects of SNS mental health breaks – if they exist – may only be temporary.

The growing trend of consciously limiting social networking use through mental health breaks has led to a plethora of anecdotal claims of increased well-being and better mental health. However, these claims have yet to be substantiated by empirical evidence. Therefore, this study sought to determine whether taking a SNS mental health break led to decreased levels of personality psychopathology and internalizing symptomology, or increased selfesteem. Contrary to expectations, our results show that those who had taken a mental health break endorsed higher levels of personality and internalizing psychopathology. Due to the cross-sectional nature of the current study, it remains unclear whether higher psychopathology made someone more likely to take a SNS mental health break or if taking a mental health break increased psychopathology. Nonetheless, it appears evident that benefits from this trend may be more limited than the claims currently being touted. However, one area in which these claims do hold weight is self-esteem, as individuals who had taken a SNS mental health break exhibited higher self-esteem levels than those who had not. Considering the adverse effects associated with problematic social networking use, understanding potential amelioration strategies is of the utmost importance.

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Conflict of interest

None to declare.

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