Social Media Addiction Research and Status as a Mental Health Disorder

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Interest in the concept of social media addiction has increased in recent years, as evidenced by a search in the University of South Florida's online library database. A keyword search on the exact phrase "social media addiction" (limiting results to peer-reviewed content and including equivalent subjects) found 337 peer-reviewed items published in 2019, contrasted with just 2 in 2012. Kuss & Griffiths commented in 2011, "The contemporary scientific literature addressing the addictive qualities of social networks on the Internet is scarce." (Kuss & Griffiths, 2011, p. 3528) The literature now exists, but does it demonstrate that social media addiction is truly a mental health disorder in its own right? This paper provides a brief overview of the research ongoing in the field of internet-based addictions in general and social media addiction in particular, including terminology used; definitions for social media addiction; some characteristics and demographics of individuals being studied; sociological and psychological approaches in the research; work on refining a suitable scale to measure social media addiction; and the status of social media addiction as a mental health disorder. I have transformed some of the information and resources from this paper into graphic artifacts housed at https://www.annettefaithrobinson.com/social-media-addiction.

To ascertain the state of research into internet-based addictions and, specifically, social media addiction, searches on social media addiction and related topics were carried out on December 6, 2019 in the University of South Florida's online library database. These were Boolean, exact phrase, keyword searches that limited results to peer-reviewed content and included equivalent subjects. Keywords were identified during a prior review of literature related to social media addiction. The Boolean "OR" operator was used when needed and variant

spellings of "smartphone" and "smart phone" were included. Tables 1 and 2 show the exact numbers of peer-reviewed items found, and Charts 1 and 2 in the Appendix provide visual representations of the 2012-2019 data. There is likely overlap in the search terms used; for example, searching on "internet addiction" AND "smartphone addiction" AND "social media addiction" turned up 99 peer-reviewed items published between 2013 and 2019 that contain all three terms. Also, it is possible that not all 2019 items are indexed yet in the databases. Still, these searches give some indication of the volume of research being done.

Table 1

Research into Internet-Based Addictions, 2012-2019	2012	2013	2014	2015	2016	2017	2018	2019
Internet Addiction/Disorder	1199	1454	2235	2033	2387	2943	3226	2459
Internet Gaming Addiction/Disorder	35	81	353	459	603	1150	1104	832
Smartphone Addiction	6	39	102	214	374	535	753	792
Social Media Addiction	2	31	47	98	142	176	295	337
Facebook Addiction/Disorder	32	50	74	136	186	212	359	280
Social Network(ing) (Sites) Addiction	7	37	49	100	123	127	206	174

Overall results for 2000-2011 include minimal research into areas directly related to social media addiction and are shown separately in Table 2.

Table 2

Research into Internet-Based Addictions, 2000-2011	2000-2011
Internet Addiction/Disorder	4644
Internet Gaming Addiction/Disorder	33
Facebook Addiction	31
Social Network(ing) (Sites) Addiction	5
Smartphone Addiction	2
Social Media Addiction	0

These numbers demonstrate significant interest in and research into the broad field of Internet addiction dating back to at least the year 2000. Research into Internet gaming disorder, also known as Internet gaming addiction, showed a significant uptick in 2014 after the disorder was included in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* 2013 edition (DSM-5) as a condition for further study. (Petry & O'Brien, 2013) Research in the field of

smartphone addiction has been gaining strength, and mentions of Facebook/social media/social networking addictions, while on the lower end of the scale, have been increasing, especially since 2015.

The various labels for Internet-based addictions are closely related, if not interchangeable. All of them, of course, fall under the umbrella of Internet addiction disorder. Facebook addiction, social media addiction, and social networking sites (SNS) addiction are closely linked. Kuss & Griffiths suggest that "smartphone addiction may be part of SNS addiction" (2017, p. 1) while differentiating between social media and social networking sites, stating that these are often, incorrectly, used interchangeably in the literature. (2017, pp. 2-3) Some other current or emerging terms include cyberaddiction; nomophobia, "no mobile phone phobia" (Kuss & Griffiths, 2017, p. 9); FOMO, "fear of missing out" (Kuss & Griffiths, 2017, p. 8); and phubbing, "phone snubbing" or "engaging with a smartphone instead of paying attention to another person or persons during a social interaction" (Al-Saggaf & O'Donnell, 2019, p. 132).

According to the Salem Press Encyclopedia of Health, "Social media addiction represents a constellation of uncontrollable, impulsive, and damaging behaviors caused by persistent social media usage that continues despite repeated negative consequences." (Viola, 2019, p. 1) Grau et al. (2019) described social media addiction as "a phrase sometimes used to refer to someone spending too much time using Facebook, Twitter, Instagram or other social media platforms – so much so that it interferes with other aspects of daily life." (p. 205)

Studies show mixed results for gender differences in propensity toward social media addiction. Grau et al. cite a review of Nakaya's 2015 book *Internet and Social Media Addiction* showing men to be more prone to social media addiction. (Grau et al., 2019, p. 205) Kuss & Griffiths (2017), focusing in on SNS addiction, cite studies showing it may be more common in

females and, too, that there may be an underrepresentation of teenage girls in the research. (p. 9) Kuss & Griffiths also mention discrepancies in findings on gender as a risk factor for Facebook addiction. (2017, p. 10) Andreassen et al. (2017) found that being a woman was related to addictive use of social media (p. 291), as did Chung et al. (2019, p. 65)

Research is being done into social media addiction among teens (e.g., Boyd, 2014), high school and university students (e.g., Simsek et al., 2019 and Tayo et al., 2019), and millennials (e.g., Grau et al, 2019 and Masi, 2018), and also in workplace settings (e.g., Zivnuska et al., 2019). Socioeconomic status is being considered, with some suggesting lower income is related to social media addiction (e.g., Andreassen et al., 2017) while others, such as Dogan et al. (2019), studying Facebook addiction risk, found no significant influence for income levels. (p. 2)

Thinking about the sociological and psychological underpinnings for addiction to social media, Danah Boyd and Sherry Turkle are two respected scholars who have researched the ways in which people and society relate to technology. Turkle talks about the seductive nature of human-computer interaction, especially for those "afraid of intimacy but afraid of being alone" (Turkle, 2004, p. 21), and of the ability to play with one's identity through social media and networking. Learning theorist Seymour Papert described how "the computer simply, but very significantly, enlarges the range of opportunities to engage as a bricoleur or bricoleuse." (Papert, 1993, p. 145) This would apply not only when it comes to scientific activities like coding, but in identity work and in any number of creative or collaborative endeavors. All of the above can be powerful attractants for people with low self-esteem and locus of control issues, who may be more likely to become addicted to social media. (Andreassen et al., 2017, p. 291; Chak & Leung, 2004, p. 567) Boyd, however, is cautious about labeling teens' extensive use of social media as addiction, stating, "The rhetoric of addiction positions children as vulnerable to the seductiveness

of technology, which in turn provides a concrete justification for restricting access and isolating children." (Boyd, 2014, p. 98)

Chung et al. (2019) examined the relationship between the "Dark Tetrad" personality traits (psychopathy, narcissism, Machiavellianism, and sadism) and impulsivity and social media addiction. They showed positive findings for psychopathy in social media addiction, but not for the other Dark Tetrad traits, or for impulsivity. (p. 64) In contrast, Andreassen et al. did find a positive correlation between narcissism and addictive use of social media (2017, p. 291), and Casale & Fioravanti (2018) confirmed a relationship between grandiose narcissism and Facebook addiction. (p. 315)

Many researchers have attempted to create or adapt scales for measuring social media and related addictions. For social media addiction specifically, the most common practice seems to be to adapt the Bergen Facebook Addiction Scale (BFAS) and call it the Bergen Social Media Addiction Scale (BMSAS). The BFAS was created by Andreassen and colleagues in 2012 and was based on criteria similar to those used to measure other behavioral addictions. (Andreassen et al., 2012, p. 511) Mark Griffiths (2012), one of the authors cited by Andreassen et al., responded with a critique of the research field with its focus on Facebook alone and called for a more comprehensive measurement tool that would include other websites. Andreassen and Pallesen responded in 2013 defending the BFAS while acknowledging that more research was needed. (Andreassen & Pallesen, 2013) Andreassen and Pallesen, with Griffiths and other contributors, went on to describe in 2016 how the BMSAS is adapted from the BFAS, by means of replacing "Facebook" with "social media' and providing participants with a definition of social media as "Facebook, Twitter, Instagram, and the like." (Andreassen et al., 2016, p. 254)

Some of the other instruments that have been used or proposed to measure social media addiction include: The Social Media Addiction Questionnaire (SMAQ) that was adapted from Elphinston and Noller's 2011 Facebook Intrusion Questionnaire (FIQ) (Hawi & Samaha, 2017, p. 577); Van Den Eijnden et al.'s Social Media Disorder (SMD) Scale that made the distinction "between disordered (i.e. addicted) and high-engaging non-disordered social media users" (2016, p. 478); and Sahin's Social Media Addiction Scale – Student Form (SMAS-SF) developed to measure social media addiction levels in students aged 12 to 22 years old (Sahin, 2018).

Grau et al., in their 2019 research into social media addiction in student millennials, asked, "Can excessive social media use truly be defined as an addiction or is it merely a step on the consumption continuum?" (p. 201) Based on their study of 129 student millennials, they determined that "social media addiction may, in fact, exist in some respondents and may be in the near-addiction phase for others." (p. 212) However, not everybody agrees that social media addiction is a true mental health disorder. As already stated, Danah Boyd (2014) urges caution to those who seek to put the "social media addiction" label on excessive social media use. She cites psychiatrist Ivan Goldberg who voiced his disagreement in 1995 with the concept of Internet addiction as an actual disorder (pp. 81-82) and points us, rather, to psychologist Mihaly Csikszentmihalyi's concept of "flow" where a person can be "in the zone", fully absorbed in something to the extent that "time disappears, attention focuses, and people feel euphorically engaged." (p. 80)

Boyd seems to be in the minority, though, as the research literature increasingly focuses on social media addiction as a real disorder with neurobiological implications. Meshi et al. (2019) showed "a behavioral similarity between excessive SNS use and substance use and behavioral addictive disorders." (p. 172) Kuss & Griffiths (2011) suggested that activation of the

appetitive system in SNS users performing social searching activities is on a par with that of people who have behavioral addictions. (p. 3532) The already mentioned inclusion of Internet gaming disorder in the DSM-5 as a condition for further study was described as opening discussions for other behavioral addictions, with a call for strong empirical data to accompany any requests for including new mental disorders in future editions of the DSM. (Petry & O'Brien, 2013) Researchers are certainly heeding this call when it comes to social media addiction. As van den Eijnden et al. (2016) said, "there is a growing body of evidence" suggesting that social media addiction is "a legitimate mental disorder." (p. 478)

Alongside attempts to legitimize social media addiction as a mental health disorder, other efforts are ongoing to encourage the many of us who, though not addicts, struggle to put down our smartphones or otherwise refrain from constantly checking our social media feeds. Sherry Turkle is quoted in an interview with the Vox news website as saying, "Just because we invented a powerful technology doesn't mean we have to become its slaves." (Illing, 2018) She wants people to take more control in dictating how technology can serve humans, rather than humans serving technology. Barbara Newman in her 2013 essay "The Contemplative Classroom" reminds us that "we are still biological beings, not cyborgs" and thus it is important for us to seek to counteract the distractions of digital culture by slowing down, by cultivating contemplative habits and the integration of mind and body. (pp. 3-4) Tristan Harris, former Google design ethicist and founder of the "Time Well Spent" movement, has created the Center for Humane Technology with the goal of inspiring "market demand and momentum for products and services based on Humane Technology principles." ("Center for Humane Technology: Our Work," 2019) Let us endeavor not to be enslaved by technology, but to make it our servant.

References

Al-Saggaf, Y., & O'Donnell, S. B. (2019). Phubbing: Perceptions, reasons behind, predictors, and impacts. *Human Behavior and Emerging Technologies*, *1*(2), 132–140. https://doi.org/10.1002/hbe2.137

Andreassen, C. S., & Pallesen, S. (2013). Facebook Addiction: A Reply to Griffiths (2012). *Psychological Reports*, *113*(3), 899–902. https://doi.org/10.2466/02.09.PR0.113x32z6

Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, *30*(2), 252–262. https://doi.org/10.1037/adb0000160

Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, *64*, 287–293. https://doi.org/10.1016/j.addbeh.2016.03.006

Andreassen, C. S., TorbjØrn, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook Addiction Scale. *Psychological Reports*, *110*(2), 501–517. https://doi.org/10.2466/02.09.18.PR0.110.2.501-517

Boyd, Danah. (2014). *It's complicated: the social lives of networked teens.* Yale University Press. https://doi.org/10.1039/b916505n

Casale, S., & Fioravanti, G. (2018). Why narcissists are at risk for developing Facebook addiction: The need to be admired and the need to belong. *Addictive Behaviors*, *76*, 312–318. https://doi.org/10.1016/j.addbeh.2017.08.038

Center for Humane Technology: Our Work. (n.d.). Retrieved December 7, 2019, from https://humanetech.com/problem/#our-work.

Chak, K., & Leung, L. (2004). Shyness and locus of control as predictors of internet addiction

and internet use. *Cyberpsychology and Behavior*, *7*(5), 559–570.

https://doi.org/10.1089/cpb.2004.7.559

Chung, K. L., Morshidi, I., Yoong, L. C., & Thian, K. N. (2019). The role of the dark tetrad and

impulsivity in social media addiction: Findings from Malaysia. *Personality and Individual*

Differences, *143*, 62–67. https://doi.org/10.1016/j.paid.2019.02.016

Dogan, H., Norman, H., Alrobai, A., Jiang, N., Nordin, N., & Adnan, A. (2019). A web-based

intervention for social media addiction disorder management in higher education:

Quantitative survey study. *Journal of Medical Internet Research*, *21*(10), 1–12.

https://doi.org/10.2196/14834

Grau, S., Kleiser, S., & Bright, L. (2019). Exploring social media addiction among student

Millennials. *Qualitative Market Research*, *22*(2), 200–216. https://doi.org/10.1108/QMR-

02-2017-0058

Griffiths, M. D. (2012). 'Facebook Addiction': Concerns, Criticism and Recommendations –A

Response to Andreassen and Colleagues. *Psychological Reports*, *110*(2), 518–520.

Retrieved from http://irep.ntu.ac.uk/id/eprint/5408/1/Griffiths_3178.pdf

Hawi, N. S., & Samaha, M. (2017). The Relations Among Social Media Addiction, Self-Esteem,

and Life Satisfaction in University Students. *Social Science Computer Review*, *35*(5), 576–

586. https://doi.org/10.1177/0894439316660340

Illing, S. (2018, March 27). How we're becoming slaves to technology, explained by an MIT

sociologist. Retrieved from https://www.vox.com/science-and-

health/2018/3/27/17085282/technology-facebook-social-media-sherry-turkle.

Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction-A review of the psychological literature. *International Journal of Environmental Research and Public Health*, *8*(9), 3528–3552. https://doi.org/10.3390/ijerph8093528

Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, *14*(3), 1–17. https://doi.org/10.3390/ijerph14030311

Masi, L. (2018). Internet usage of millennials: What the literature reports? *Neuropsychiatrie de l'Enfance et de l'Adolescence*, *66*(3), 165–174. https://doi.org/10.1016/j.neurenf.2018.02.003

Meshi, D., Elizarova, A., Bender, A., & Verdejo-Garcia, A. (2019). Excessive social media users demonstrate impaired decision making in the Iowa Gambling Task. *Journal of Behavioral Addictions*, *8*(1), 169–173. https://doi.org/10.1556/2006.7.2018.138

Newman, B. (2013). The Contemplative Classroom, or Learning by Heart in the Age of Google. *Buddhist-Christian Studies, 33*, 3–11. https://doi.org/10.1353/bcs.2013.0017

Papert, S. (1993). *The Children's Machine: Rethinking School in the Age of the Computer*. New York: BasicBooks. Retrieved from https://learn.media.mit.edu/lcl/resources/readings/childrens-machine.pdf

Petry, N. M., & O'Brien, C. P. (2013). Internet gaming disorder and the DSM-5. *Addiction*, *108*(7), 1186–1187. https://doi.org/10.1111/add.12162

Sahin, C. (2018). Social Media Addiction Scale-Student Form: The Reliability and Validity Study. *Tojet - The Turkish Online Journal of Educational Technology*, *17*(1), 169–182.

Simsek, A., Elciyar, K., & Kizilhan, T. (2019). A comparative study on social media addiction of high school and university students. *Contemporary Educational Technology*, *10*(2), 106–119. https://doi.org/10.30935/cet.554452

Tayo, S. S., Adebola, S. T., & Yahya, D. O. (2019). Social media: Usage and influence on undergraduate studies in Nigerian universities. *International Journal of Education & Development Using Information & Communication Technology*, *15*(3), 53–62. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=138874280&site=ehost-live

Turkle, S. (2004). Whither psychoanalysis in computer culture? *Psychoanalytic Psychology*, *21*(1), 16–30. https://doi.org/10.1037/0736-9735.21.1.16

Van Den Eijnden, R. J. J. M., Lemmens, J. S., & Valkenburg, P. M. (2016). The Social Media Disorder Scale: Validity and psychometric properties. *Computers in Human Behavior*, *61*, 478–487. https://doi.org/10.1016/j.chb.2016.03.038

Viola, J. C. (2019). Social Media Addiction. In *Salem Press Encyclopedia of Health*. Retrieved from http://search.ebscohost.com.ezproxy.lib.usf.edu/login.aspx?direct=true&db=ers&AN=94415547&site=eds-live

Zivnuska, S., Carlson, J. R., Carlson, D. S., Harris, R. B., & Harris, K. J. (2019). Social media addiction and social media reactions: The implications for job performance. *Journal of Social Psychology*, *159*(6), 746–760. https://doi.org/10.1080/00224545.2019.1578725

Appendix

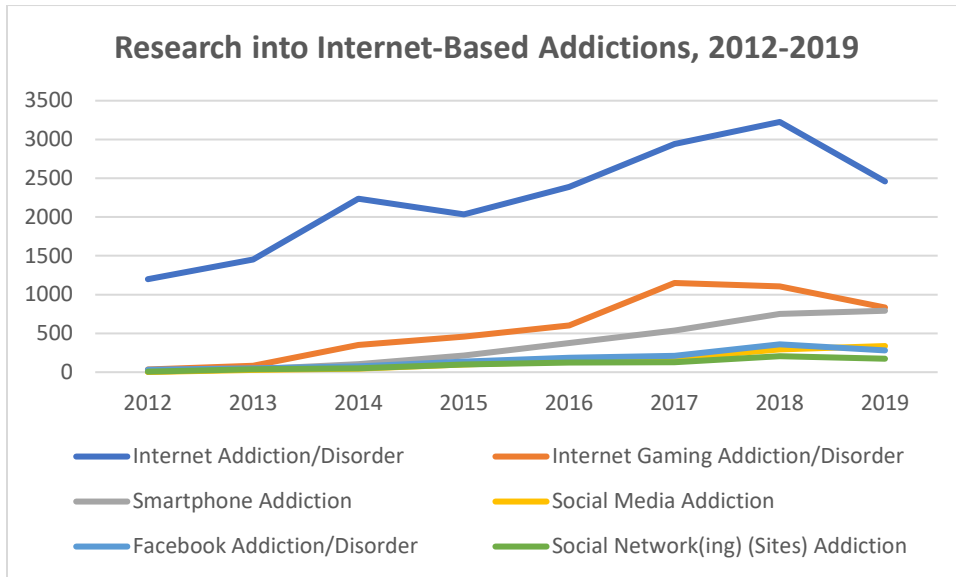Research into Internet-Based Addictions, 2012-2019

Chart 1

Chart 2 represents the data without the Internet Addiction/Disorder and Internet Gaming

Addiction/Disorder categories to provide a better view of the remaining categories.

Chart 2