PROBLEMATIC FACEBOOK USE: A REVIEW OF LITERATURE¹

1. Introduction

With 2.13 billion monthly active users as of December 31, 2017, Facebook (FB) is the most used social networking site (SNS) [Facebook stats 2018]. Data from 2014 indicate that approximately two-thirds of active FB users are logged into it *every day*. With these numbers in mind, researchers have started inquiring about the potential of FB being addictive. Millions of hours are spent on FB daily, predominantly to foster interconnectedness and information exchange, but studies have also revealed that users do not always derive satisfactions from the use, and some negative outcomes have been reported, such as new modes of stalking and harassment, privacy breaches and data-harvesting², potentially damaging influences on the evaluation of job applications, and jealousy or suspicion in romantic relationships to name just a few [cf. Muise, Christofides & Desmarais 2009; Stieger et al. 2012].

Users of FB report mainly accessing this SNS to keep in touch with friends, share good news and gain information about their network, as well as to receive a tailored general news feed and chat/send messages. Predominantly used as pastime and for gaining all kinds of socially relevant information, including updates on other people's lives, facebooking might lead some to "heavy" habitual use that is sometimes seen as a "meaningless activity" [Thormholt 2016, pp. 664–665]. Meanwhile, unrealistic comparisons on FB tend to cause envy, which is why heavy FB use has been reported to decrease life satisfaction, and cause a decline in the sense of well-being (in normal circumstances connected to such aspects as health and longevity). While expecting positive information and pleasurable

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 $^{^2}$ At the time of writing this draft, a scandal broke out about Cambridge Analytica, a company permitted to harvest data from FB users, which was able to access FB users' networks through an app, and the possible influence the content they produced and disseminated could have on the outcomes of US election in 2016.

feelings when logging, FB users often feel disappointed and dissatisfied when the result of browsing various sections of accounts results in the opposite emotional stimulation. In an experiment on quitting FB, it was shown that people's life satisfaction increases significantly when they stop logging into FB for just one week. In addition, their emotional life also improves significantly, according to surveys [Thormholt 2016, p. 664].

The increasing amount of time people spend using FB, the variety of activities they can do while on it and the consequent psychological importance it assumes in their lives have led numerous researchers to analyze the effect FB may have on users' mental health and social behavior. Even though SNS addiction has not yet been recognized as a disorder by medical professionals³, recent research has indicated that FB use could become problematic and be characterized by addictive, compulsive or obsessive symptoms as well as some negative outcomes related to abuses of the services.

This paper is devoted to reviewing selected strands of research on problematic FB use, including its definition and modelling, its two theoretical conceptualizations (within the uses and gratifications paradigm and as addictive behavior), the attempts at its measurement (e.g., with the Bergen Facebook Addiction Scale) and the various correlations of risk factors for FB abuse. Then we describe the motivations of FB quitters and the implications that arise from recent research not only for users themselves but also for health professionals or educational practitioners, especially as regards raising awareness of FB addiction or containing other problematic uses.

2. What are the main problematic FB uses?

Scholars have noted that social features embedded in the Internet have created not only new opportunities, but also risks in causing various kinds of "problematic use" [Lee, Cheung & Thadani 2012], particularly when one's excessive use of social networking sites leads to destabilizing the social order, impinging on mental health and harming moral values of the community [Young 1998]. Various studies have attempted to map and model problematic FB uses to explain and predict the negative outcomes caused by some online social behaviors. Some of these studies conducted over a decade ago found empirical evidence for such outcomes

³ The Diagnostic and Statistical Manual of Mental Disorders (DSM) published by the American Psychiatric Association (APA), which offers common criteria for the classification of mental disorders relied on by clinicians, researchers, drug regulation agencies, health insurance companies, or pharmaceutical companies, is now in its fifth edition (DSM-5, published on May 18, 2013) and does not include Facebook addiction as an addictive disorder.

as negative mood alteration, compulsivity, excessive time waste, withdrawal and interpersonal control [Caplan 2003]. According to Caplan's (2010) social skills model, some individuals demonstrate *deficient self-regulation* of Internet use, as they engage in online social communication as a means of escaping from negative mood states (e.g., anxiety, loneliness, stress). Because online engagements tend to alleviate these negative moods, the mechanism behind mood alteration reinforces repeated online use (as is similar in the case of some types of substance abuse). Although this theory of addictive FB mechanism is convincing, there is currently not enough empirical results to validate it [Ryan et al. 2014].

An early definition of problematic FB use includes the statement that, while first being a functional substitute of social contacts or an alternative to face-to-face communication, FB can be abused, which results mainly from one's "loss of control over use that was originally motivated by active consideration of the gratifications of online behavior" [Song et al. 2004, p. 390]. Recent definitions of problematic FB use include "the use of FB that creates problems and impairments in users' lives such as psychological, emotional, social, school or work difficulties" [Marino et al. 2018, p. 275]. Problematic FB use can also be referred to in literature as a potential behavioral addiction, intrusion or dependency. The term *intrusion* stresses more strongly the aspect of broken relation with others, while the term *problem* signals the unwarranted preference of online interaction (rather than any other engagement) as a means of mood regulation. The six traditional criteria of addiction – salience, mood modification, tolerance, withdrawal, conflict, and relapse – have been applied to diagnose problematic FB use, to check whether FB abuse factors coincided with similar factors applied in the diagnosis of gambling addictions.

However, in 2014, Griffiths, Kuss and Demetrovitcs were still not able to find proof of addictive disorder in SNS use. While they did find some preliminary evidence for "some symptoms of SNS addiction" (e.g., preoccupation, withdrawal, negative outcomes), methodological issues precluded them from confirming that problematic FB use is an addiction. This was partly due to insufficient differentiation between the processes involved in facebooking, as some users evidenced what might be called "cyber-relationship" obsession, whereas others could be classified as "gaming addicts" (with regard to applications and games offered by FB, e.g., *Farmville*). Ryan, Chester, Reece and Xenos [2014] problematize this methodological aspect by asking whether all "heavy" uses of SNS are necessarily signs of addiction, or the label could only be applied to those uses that evidence users' lack of control over the activity.

According to Marino, Gianluca, Vieno and Spada [2018], who have conducted a meta-analysis of extant studies on the issue, the prevalence of problematic FB use worldwide appears to range between 2 proc. and 10 proc. among adolescents and young adults, showing the need to understand this global phenomenon in more depth. Some preliminary studies [cf. Cam & Isbulan 2012; Ryan et al. 2014] indicate that FB dependency is associated with being male (although a slight majority of FB users are actually female), with being a heavy user (logged multiple times a day), and being in a higher year level at university (because most studies were done on students). It is worth noting that the numbers of people marked for problematic FB use vary, as researchers try to nuance FB dependency as a specific case of SNS dependency (e.g., in contrast to Twitter dependency), which, in turn, may be a specific case of Internet dependency (with the most widespread types consisting of gaming addictions). These dependencies may well co-exist; in addition, they may correlate with certain psychological variables and social circumstances, such as relationship dissatisfaction, depression, or high levels of anxiety [Koc & Gulyagci 2013].

One strand of theorizing problematic FB use derives from the "uses and gratifications" paradigm of audience studies and aims to map the reasons and motivations of FB users in order to grasp the types and levels of gratifications that may, in turn, lead to heavy use or loss of control. Joinson [2008] found that heavy use of FB was related to *content gratifications* – games, applications, quizzes, news – and was often motivated by the need to simply "pass time". Meanwhile people who spend a lot of time on FB do so for different reasons than people who check FB regularly. Using FB for relationship maintenance and entertainment (status updates, chat after 2008, posting visual material) reinforces habits and multiplies time spent online [Hart 2011]. Returning to FB several times a day may be associated with *surveillance gratifications*, that is keeping up with status updates, news feed, and browsing applications, which implies predominantly passive uses of FB [Joinson 2008. This behavior might be seen as related to a condition anecdotally known as "fear of missing out" on important information and thus being marginalized in the offline social network [Ryan et al. 2014].

These nuances have led some scholars to call for more detailed studies of uses and gratifications, as there indeed seems to be a fundamental difference between women and men in their online motivations: while women use FB to maintain their social network, men tend to want to expand it [Ryan et al. 2014, p. 139]. It is also possible that men may be more likely to fail to regulate their Internet use and become addicted to FB, even though it is women who are heavier users of FB. Indeed, this means that pathways to addiction may be many and they can be triggered by different circumstances, including some gender-specific motivations. Overall, studies show that men and women, adolescents and young adults, students or otherwise, *when lonely* tend to engage with FB more excessively, especially if loneliness is mediated by social anxiety and FB is the easiest means that helps such people escape from unwanted moods [Valentine 2012]. One of the most pressing issues for the scholars to tackle now seems to be the ability to pin down the cause-effect sequence in FB dependency. Whereas some scholars have considered problematic FB use as a potential *risk factor* for psychological distress and lower levels of self-perceived well-being, other researchers have suggested that it might be a *consequence* of other aspects of psychological ill-being, such as depression, loneliness or poor psychosocial health [Marino et al. 2018, p. 281]. Another challenge would be to isolate the factors, if any, responsible for causing one's dependency on FB rather than any other SNS.

3. How to measure Facebook abuse/addiction?

The most advanced diagnostic tools to identify, monitor and diagnose problematic FB use have included both cognitive and behavioral variables and have recently been supplanted by such constructs as (1) negative outcomes (ranging from social withdrawal and diminished sense of self-worth to negative consequences at school/work), (2) deficient self-regulation (difficulties in face-to-face communication, obsessive cognitive and compulsive behavioral symptoms and failure to self-monitor usage patterns), and (3) using the Internet as sole tool for mood regulation to relieve acute anxiety, depression or stress [Lee, Cheung & Thadani 2012, pp. 1770–1771].

According to Andreassen, Torsheim, Brunborg and Pallesen [2012], it is not yet determined whether Internet addiction can be strictly understood as *platform* addiction or *content* addiction or any other aspect of use dependency, so it is necessary to construct and validate an applicable scale to measure how and why some individuals engage in excessive FB use that could be determined as problematic. The researchers established validity for a simple and neat FB addiction measurement tool, called the Bergen Facebook Addiction Scale (BFAS), which comprises 18 items, three for each of the core features of addiction (salience, tolerance, mood modification, relapse, withdrawal and conflict), scored on a 5-point scale (1:very rarely – 5:very often). The questionnaire features the following questions:

How often during the last year have you...

SALIENCE

spent a lot of time thinking about Facebook or planning how to use it, thought about how you could free more time to spend on Facebook, thought a lot about what has happened on Facebook recently, TOLERANCE

spent more time on Facebook than initially intended, felt an urge to use Facebook more and more,

felt that you had to use Facebook more and more to get the same pleasure from it,

MOOD MODIFICATION

used Facebook in order to forget about personal problems,

used Facebook to reduce feelings of guilt, anxiety, helplessness and depression,

used Facebook to reduce restlessness,

RELAPSE

experienced that the others have told you to reduce the use of Facebook but not listened to them,

tried to cut down on the use of Facebook without success,

decided to use Facebook less frequently, but not managed to do so, WITHDRAWAL

become restless or troubled if prohibited from using Facebook,

become irritable if prohibited from using Facebook,

felt bad if, for different reasons, could not log on to Facebook for some time, CONFLICT

used Facebook so much that it has had a negative impact on your job/studies, given less priority to hobbies, leisure and exercise because of Facebook,

ignored your partner, family or friends because of Facebook [Andreassen et al. 2012].

Even though the BFAS does not offer specific cutoff scores to distinguish addiction from non-addiction, it is suggested as a preliminary tool for epidemiologists and other practitioners to spot and monitor problematic FB use and possibly to apply more detailed diagnostic instruments, such as interviews.

4. Is quitting Facebook committing virtual suicide?

FB, just as any SNS, can have an addictive quality that manifests itself in an irresistible and overpowering urge to check the online status of one's 'friends' repeatedly throughout the day, or in experiencing peer-pressure to be online for fear of alienation [Stieger et al. 2012, pp. 4–5]. This has started to be problematized in studies that report on users, who in semi-structured interviews admitted to having a feeling of being forced to communicate, experiencing shallowness in conversation and fakeness of friendship online, or being pressured to add friends and wasting their time.

If FB use affects users' well-being negatively, then taking a break from it could have a positive effect in at least two dimensions, according to Thormholt

[2016], namely one's life satisfaction could increase and one's emotions could become more positive. Furthermore, it was demonstrated that these effects were significantly greater for heavy FB users, passive FB users and users who tend to envy others on FB. Just one week off FB has been shown as sufficient to significantly increase the sense of well-being and emotional satisfaction.

Some preliminary research has been done on people who quit their account [Stieger et al. 2012]. Most quitters (48 proc.) cited privacy concerns as their main motive, whereas others were driven by recognition of addictive behaviors, or followed motivations related to certain personality factors. According to Stieger, Burger, Bohn and Voracek [2012, p. 4], "there's not one prototypical kind of Facebook quitter", as some raise privacy and harassment issues, others complain of the waste of time (7 proc.), or of general dissatisfaction with the service or its provider (monopoly, unethical data-harvesting or experimenting with feed algorithms). Some quitters score high, some low on addition scales and openness to new experience or conscientiousness tests, so quitting is a decision reached on the basis of a broad range of motivations rather than a single factor.

It is worth remembering that quitting FB is not akin to "committing virtual identity suicide", which it is often called. In fact, people no longer on FB have not experienced high levels of psychological distress, but rather have been able to deal with the dissatisfaction the problematic use was causing for them [Stieger et al. 2012, p. 5].

5. What implications for practice have been suggested in literature?

Despite the fact that FB addiction is not officially registered as an addictive disorder [American Psychiatric Association 2013], there are some studies that advocate closer monitoring and attention to various aspects of problematic FB use. The following are some key recommendations arising from the literature review conducted above.

1) One needs to keep in mind the adaptive (non-problematic) Facebook uses that obtain for certain groups of individuals (even heavy users), for example, people with high levels of neuroticism who prefer the Internet for communication and avoidance of loneliness [Indian & Grieve 2014; Stieger et al. 2012];

2) To contain uncontrolled FB use and waste of time on meaningless activities, one could install a reminder on the Facebook using time, in a form of a box prompting the notice of time spent on the application [Lee, Cheung, & Thadani 2012];

3) To reduce envy or suspicion and increase well-being one might consider quitting FB for a time [Thormholt 2016];

4) Scholars, educators and practitioners should enhance public awareness of the possibility of and motivations behind quitting FB (Quit Facebook Day – 31 May; support groups or blogs such as ileftfacebook.com);

5) There still is a need to create fine-tuned diagnostic tools as well as evidence-based interventions following detailed motivational interviewing and followed by well-designed cognitive-behavioral therapy [Spada 2014];

6) There might arise a need to design prevention programs as well as support and clinical practices and procedures related to FB addiction in a parallel way to gambling addiction or substance abuse in the future.

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Problematic Facebook Use: A Review of Literature

Summary

With over two billion of registered users, Facebook is the most widely used internet social media platform in the world. Around two-thirds of the users log on to Facebook every day. Some scholars have started using the phrase "problematic Facebook use" to first model and then help monitor the lifestyle changes and habits developed by users who spend more and more of their time online. The literature suggests that "problematic" use begins with inordinate time "wasted" on "useless" social activities that eventually lead to a lowered sense of lifestyle satisfaction or self-esteem. Some studies link alleged Facebook "abuse" with such personality factors as lack of self-control and social isolation. None of this research, however, convincingly proves as of vet that Facebook causes depression, psychological disorders or addictive behavior. This chapter is devoted to reviewing selected strands of research on problematic Facebook use, including its definition and modelling (within the uses and gratifications paradigm, and as addictive behavior), the attempts at its measurement (e.g., with the Bergen Facebook Addiction Scale), and the various correlations of risk factors for possible future Facebook "abuse". Then we describe the motivations of Facebook quitters and the implications that arise from recent research not only for the users themselves, but also for health professionals or educational practitioners, especially as regards raising awareness of Internet addiction.

Keywords

social media, addictive behavior, uses and gratifications paradigm, lifestyle

Kiedy używanie Facebooka staje się problemem – przegląd literatury

Streszczenie

Z ponad dwoma miliardami zarejestrowanych użytkowników Facebook jest najbardziej rozpowszechniona platforma mediów społecznościowych na świecie, a prawie dwie trzecie użytkowników korzysta z niej codziennie. Niniejszy rozdział dokonuje przegladu literatury na temat szerokiego spektrum badań nad ewentualnymi uzależnieniami od Facebooka. Definicja "problematycznego" użytkowania Facebooka akcentuje "nadmierna" ilość czasu spedzanego na platformie na "bezproduktywnych" albo "bezcelowych" aktywnościach. Zjawisko to łaczone jest z takimi cechami charakteru, jak brak samokontroli czy izolacja społeczna i w niektórych zbadanych przypadkach prowadzi do pogorszenia się samooceny albo zadowolenia z życia. Nie ma jednak obecnie dowodów naukowych potwierdzajacych fakt wywoływania przez Facebooka depresji, zaburzeń psychicznych czy uzależnienia. Wiekszość badań medioznawczych nad użytkowaniem Facebooka przeprowadzonych jest w paradygmacie "korzystania i gratyfikacji". Ewentualne negatywne przyzwyczajenia można diagnozować za pomoca rozpowszechnionej już skali Bergen, która została tu opisana, a która wskazuje kilka obszarów korelacji między użytkowaniem mediów społecznościowych i stylem życia. Następnie przytoczone są najnowsze badania przypadków osób porzucających korzystanie z Facebooka i zanalizowany (głównie pozytywny) wpływ takiej decyzji na poziom ich satysfakcji z życia. Na zakończenie wyliczono główne rekomendacje w zakresie profilaktyki i ograniczania zagrożeń wynikających z nadmiernego korzystania z mediów społecznościowych.

Słowa kluczowe

media społecznościowe, uzależnienie, paradygmat korzystania i gratyfikacji, styl życia