Does school-related burnout influence problematic Facebook use?

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ABSTRACT

The internet and social networks, Facebook in particular, are often used by adolescents. According to recent studies this use might sometimes become problematic or addictive. At the same time, high school students are exposed to stress due to the pressures of school work, and this stress might result in burnout syndrome. The aim of this study is to explore whether there is an association between the intensity of burnout and problematic use of Facebook. Two hundred eighty-six high school students completed questionnaires assessing problematic use of Facebook and three dimensions of school-related burnout. The results show that there is an association between burnout and problematic use of Facebook. The "exhausting at schoolwork" dimension for girls and the "feelings of inadequacy at school" dimension among boys are particularly related to problematic Facebook use.

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1. Introduction

Recent studies have shown the emergence of a phenomenon described as 'internet addiction behaviors' or 'excessive internet use'. This might be considered as a behavioral addiction accompanied by typical addiction symptoms such as mood changes, tolerance to use, or withdrawal and relapse (Widyanto & Griffiths, 2006). Nevertheless, there is no consensus on the best terminology to describe the phenomenon, nor regarding pathological criteria (Aboujaoude, 2010). The publication of the DSM-5 (APA, 2013) has not clarified whether internet addiction could be considered as an independent psychiatric disorder (Suissa, 2014). In the present study the concept of problematic internet use adapted to *problematic Facebook use* was retained. Problematic internet use was defined by Caplan (2003) as maladaptive cognitions and behaviors involving internet use that result in negative academic, professional and social consequences.

Numerous studies have shown that problematic internet use, especially among adolescents and young adults, is frequently associated with additional disorders such as social anxiety (Yen, Ko, Yen, Chang, & Cheng, 2009), depression, loneliness and low self-esteem (Ayas & Horzun, 2013), introversion and emotional instability (Van der Aa et al., 2009) eating disorders and body avoidance (Rodgers, Melioli, Laconi, Bui, & Chabrol, 2013). In addition, stress was found to be a risk factor for problematic internet use (Lam, Peng, Mai, & Jing, 2009; Van der Aa et al., 2009; Xiuqin et al., 2010). The self-escape theory proposed

by Baumeister (1989) offers a particularly interesting perspective to explain the association between stress and problematic internet use. According to this theory, for some people, perceiving a discrepancy between what one is and what one wants to be inspires an aspiration to escape from oneself. People confronted with the desire to escape from themselves will have difficulties projecting into the future and focusing their attention on their immediate environment. Several studies have shown that the implications of this concept can include self-destructive behaviors such as suicide (Baumeister, 1990) and eating disorders (Heatherton & Baumeister, 1991). This theory has also been tested by Kwon, Chung, and Lee (2011) among adolescents engaged in pathological use of online gaming; a tendency for self-escape was found to be the strongest predictor of pathological use of online games. Moreover, an explanatory model was conceptualized in which the perception of discrepancies between oneself and the ideal-self led to negative mood. This negative mood engendered the desire to escape from oneself, which led to pathological online gaming.

Adolescence is a particularly risky age as regards problematic internet use (Ha et al., 2007). Several studies indicate this: Chou and Hsiao (2000) found that 5.9% of adolescents reported problematic internet use, while Kaltiala-Heino, Lintonen, and Rimpelä (2004) found that 4.7% reported important prevalence variations depending on age. Finally, Lam et al. (2009) found both moderate problematic internet use (10%) and severe (0.6%). Accessing social networks such as Facebook has been reported to be among the most frequent uses of the internet during adolescence (Subrahmanyam & Greenfield, 2008). According to recent studies, most adolescents have a Facebook account. Indeed, the study conducted in the United States by Lenhart, Purcell, Smith, and Zickuhr (2010), found that 73% of adolescents had such profiles. In France, 92% of the adolescents (aged 15–17) had a Facebook account

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(Calysto, 2012). For most adolescents these social networks do not present any particular problems and are used to stay in touch with their friends, who they also meet offline (Gross, 2004; Reich, Subrahamanya, & Espinoza, 2012). According to the study conducted by Valkenburg and Peter (2007) it seems that in most cases the use of internet communication by adolescents has a stimulating effect on existing friendship relations. Nevertheless, in some cases the use of Facebook evolves into an addictive behavior. In his doctoral thesis Couderc (2012) considered that persons with addictive behaviors related to Facebook used this social network 191 min per day, which was three times higher than for average users. The study conducted by Wilson, Fornasier, and White (2010) showed that personality traits such as extroversion and unconscientiousness are predictors of social network use with a tendency to addiction among young adults. In the same vein, the study carried out by Andreassen, Torsheim, Brunborg, and Pallesen (2012) found that in addition to extroversion and unconscientiousness, neuroticism as well as sleep disorders are also associated with high scores for Facebook abuse. The study provided by Hofmann, Vohs, and Baumeister (2012) underlined the fact that Facebook has a high addictive potential as it offers a particularly convenient and affordable way to escape from reality. For those engaged in problematic Facebook use, the use and the connection to their Facebook page grow into a pressing need supplanting other activities or areas of interest (Suissa, 2014). There is a lack of empirical research about the benefits or disadvantages of the use of social network sites such as Facebook by adolescents, and the question of whether excessive or abusive use can be problematic is still unclear.

Among stressful situations which adolescents might have to cope with there is academic stress, which might evolve into burnout. Burnout has been widely described and documented previously among adults in professional situations (Maslach, Shaufeli, & Leiter, 2001). A second study conducted by Schaufeli, Martinez, Pinto, Salanova, and Backer (2002) found burnout among college students. More recently, burnout has been recognized among high school students. Salmela-Aro, Kiuru, Pietikïnen, and Jokela (2008) described burnout as a continuous phenomenon from academic stress to major burnout, and as for adults, burnout among high school students is a three-dimensional concept. It involves exhaustion due to schoolwork, referring to strain and chronic fatigue; a cynical attitude towards the meaning of school, which concerns indifference or a detached attitude towards schoolwork in general; and feelings of inadequacy at school, which means lack of school-related efficacy. Some risk factors and mental health consequences have been identified. Salmela-Aro, Kiuru, and Nurmi (2008) reported that a negative school environment and lower school marks were associated with higher levels of burnout. In the study conducted by Silvar (2001) poor family relationships and emotionally-oriented coping increased the risk of burnout, which in turn increased the risk of anxiety and school dropout. The study realized by Ang and Huan (2006) showed a mediation effect of depression between academic stress and suicidal ideas. Burnout as a predictor of depression was found in the study of Salmela-Aro, Savolainen, and Holpainen (2009). In addition, school burnout is often described as the result of discrepancies between, on the one hand, school result expectations and high self-standards from students or their relatives, and on the other hand, their real school results and learning abilities (Silvar, 2001; Kiuru, Aunola, Nurmi, Leskinen, & Salmela-Aro, 2008). Therefore, it is quite possible that students with high burnout scores would perceive a gap between what they ideally want to be and what they actually are, and consequently would tend to wish to escape from themselves, in which case Facebook could represent an escape.

Consequences in terms of mental health and maladaptive behaviors concerning burnout among adolescents have been poorly explored. Given that the use of Facebook is particularly prevalent among adolescents, focusing on misuse influenced by stressful situations such as school-related burnout seems relevant. Therefore, this study assumes that one or more of the dimensions of burnout, namely "*exhausting at schoolwork*", "*cynical attitude towards the meaning of school*" and "*feelings of inadequacy at school*" affect problematic Facebook use.

2. Method

2.1. Sample and procedure

The sample was composed of 286 high school students, whose mean age was 16.50 (SD = 1.11), including 115 boys, with a mean age of 16.61 (SD = 1.14), and 171 girls, with a mean age of 16.43 (SD = 1.08). At the time of data collection, the participants were attending a high school in Toulouse (south France). Initially, 300 students participated but 14 questionnaires were withdrawn from the study as they were incomplete.

After the researchers obtained the agreement of the school head, the students were invited to complete the questionnaire during their class hours on a voluntary basis. Anonymity was ensured. The school head informed the parents of the participants about the research project who returned their agreement. The study followed the ethical guidelines of the Helsinki Declaration and the study procedures were approved by the ethics committee of the research ward.

The study has been carried out with a cross-sectional design and data has been collected between February and March 2013.

2.2. Measure

2.2.1. Problematic Facebook use

Problematic use of Facebook was measured using a version of the Internet Addiction Test (AIT — Widyanto & McMurran, 2004) adapted to Facebook. It was a Likert scale of 20 items ranging from 1 'rarely' to 5 'always'. In the validation study of French language a one-factor solution was found (Khazaal et al., 2008) assuming a measure of problematic internet use. An example of one of the questions is, "*How often do your relatives complain of the time you spend on Facebook?*" Summed scores of the responses to the 20 items were classed following the usual IAT classification "average or normal Facebook use: 20–49," "occasional or frequent problems due to Facebook use: 50–79," "significant problems subsequent to Facebook use: 80–100." In the present study, the Cronbach's alpha-coefficient was 0.89. In the present study only two participants had a problematic Facebook use score above 80 hence only two groups have been retained, "average or normal Facebook use" and "problematic Facebook use" with a score equal or above of 50.

2.2.2. Burnout

The burnout was measured with the School Burnout Inventory (Salmela-Aro, Savolainen, et al. 2009), which is a nine-item scale ranging from 1 "completely disagree" to 6 "strongly agree", measuring the three dimensions of burnout among high school students: 'exhausting at schoolwork' four items, 'cynical attitudes towards the meaning of school' three items and 'inadequacy at school' two items. For instance, "*I feel overwhelmed by my schoolwork*" concerns exhausting at schoolwork, "*I feel a lack of motivation in my schoolwork and often think of giving up*" is related to cynical attitudes towards the meaning of school and "*I used to have higher expectations of my schoolwork than I do now*" is related to feelings of inadequacy. Salmela-Aro, Kiuru, Leskinen, and Nurmi et al. (2009); Salmela-Aro, Savolainen et al. (2009) showed that the scale presented rather good psychometric properties regarding validity and reliability. For the present study the scale was translated into French and back-translated by two bilingual persons, after which adjustments for the final version were made. Concerning internal consistency we found Cronbach's alphas of: $\alpha = 0.77$ for exhausting at schoolwork, $\alpha = 0.84$ for cynical attitudes towards the meaning of school, and $\alpha = 0.65$ for feelings of inadequacy at school.