# Satisfying needs through Social Networking Sites: A pathway towards problematic Internet use for socially anxious people?

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ABSTRACT

*Introduction:* Following the theoretical frameworks of the dual-factor model of Facebook use and the Self Determination Theory, the present study hypothesizes that the satisfaction of unmet needs through Social Networking Sites (SNSs) may represent a pathway towards problematic use of Internet communicative services (GPIU) for socially anxious people.
*Methods:* Four hundred undergraduate students (females = 51.8%; mean age = 22.45 + 2.09) completed three brief scales measuring the satisfaction via SNSs of the need to belong, the need for self-presentation and the need for assertiveness, the Generalized Problematic Internet Use Scale 2 and the Social Interaction Anxiety Scale. Structural equation modeling was performed separately for males and females.
*Results:* A direct effect of social anxiety on GPIU was found among both genders. Socially anxious males and females tend to use SNSs for self-presentation purposes, as well as for the opportunity to be more assertive. The association between social anxiety and GPIU was partially mediated by the need for self-presentation only among males.
*Conclusions:* The present results extend our understanding of the development of problematic use of Internet communicative services, based on the framework of the dual factor model of Facebook use and the Self Determination Theory. The fulfillment of an unmet need for self-presentation (i.e. the desire to create a positive impression of one's self in others) through SNSs could be one of the possible pathways to GPIU for socially anxious males.
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## 1. Introduction

### 1.1. Explaining online behavior: the contribution of the psychology of needs

The recent growth in the use of Social Networking Sites (SNSs) has stimulated some hypotheses regarding the psychological needs that underpin such widespread use. The dual-factor model of Facebook use (Nadkarni & Hofmann, 2012) proposes that such use is motivated by two basic social needs: (1) the need to belong, which refers to the intrinsic drive to feel close and accepted by others and gain social acceptance; and (2) the need for self-presentation, which is associated with the process of impression management. The central role that the need to belong has in determining behavior was already underlined by Baumeister and Leary (1995) and, more recently, through the self-determination theory (SDT) proposed by Deci and Ryan (1985, 2000).

Whereas these two perspectives focus on the need for belongingness, SDT also postulates two other basic psychological needs: a need for competence (i.e., to feel effective, skillful, and able to master the challenges of life) and a need for autonomy (i.e., to feel that one causes, identifies with, and endorses one's own behavior). Such needs are considered to be truly fundamental since they are believed to elicit goal-oriented behavior designed to satisfy them, beyond the fact that they apply to all people and are not derivative of other motives. As Sheldon and Gunz (2009) state, if the three needs proposed by the SDT are truly fundamental, then "a person who feels lonely should seek company, a person who feels incompetent should try to improve his or her skills, and a person who feels controlled should try to seek greater freedom" (p.1469). In other words, Sheldon and Gunz (2009) propose that if a particular need is currently satisfied, then people should turn their attention to less satisfied needs. It is expected that if a person currently feels very competent but not very connected to others, then she should be pressed to become more connected than to become more competent.

### 1.2. What unsatisfied needs can socially anxious people meet online?

In keeping with both the dual-factor model of Facebook use and the SDT, the need for belongingness (often called social connectedness in

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this field) has frequently been reported as one of the primary reasons in terms of motivating web use among socially anxious people (e.g., Roberts, Smith, & Clare, 2000). Individuals with high levels of social anxiety often resolve their desire to avoid painful feelings they anticipate from interpersonal interactions through avoidance and social isolation (e.g. Di Blasi et al., 2014). On the other hand, communicating online has been conceptualized as a safety behavior that allows those with social anxiety to communicate with others while minimizing any potential threats (Erwin, Turk, Heimberg, Fresco, & Hantula, 2004). For socially anxious individuals, communicating with others on the Internet in a text-based manner may allow them to avoid aspects of social situations they fear, while at the same time partially meeting their needs for interpersonal contact and relationships (Erwin et al., 2004). This hypothesis is consistent with empirical findings showing that the fear of being negatively evaluated is generally lower during online interaction than during face-to-face interaction among subjects with high social anxiety (Yen et al., 2012). This is also consistent with the social compensation hypothesis (Valkenburg & Peter, 2009), which states that those with poor friendships will benefit from online communication because threats that are present in face-to-face interactions are not present when interacting online. As Lee and Stapinsky pointed out (2012), "researcher have speculated that the text-based nature of the Internet, and the lack of visual cues when communicating online, allows those with social anxiety to conceal, and therefore control, the aspects of their appearance they perceive as leading to negative evaluation, such as sweating and stammering" (p.198).

Interestingly, whereas the search for acceptance and closeness through computer mediated communication (CMC) among socially anxious people has been theoretically supposed, there is dearth of empirical research on this topic. Moreover, the use of SNSs for self-presentation purposes (the other basic need postulated by the dual-model of Facebook use) that has recently been widely investigated among general population samples, has instead been scarcely explored among people with high socially anxiety levels. This is quite surprising since there is a great consensus about the fact that social anxiety arises from the desire to create a positive impression of one's self in others, along with a lack of self-presentational confidence (e.g., Caplan, 2007; Schlenker & Leary, 1982). As a consequence, CMC might represent an ideal tool for communicating among those people who are concerned with displays of imperfection due to fears of being judged and negatively evaluated.

Although the need for belongingness and self-presentation might be useful in explaining SNS use among the general population, the SDT appears to be more exhaustive as a theoretical framework that enables us to understand what socially anxious people are likely to find online. Indeed, among people with social anxiety the need for self-presentation might be better conceptualized as the need for presenting the self as more competent in terms of effectiveness, skillfulness, and ability to master the challenges of life. Moreover, besides the need for belongingness and self-presentation, the personal and social advantages found online by people with high levels of social anxiety might include the possibility for greater autonomy in terms of causes, identification, and endorsement of one's own behavior. They might, in other words, allow individual users to be more assertive. Wolpe (1958, 1973) has long argued that assertion training is beneficial for social phobics, since anxiety and assertion are incompatible. More recently, Azais and Granger (1995) place so much emphasis on the relationship between low levels of assertiveness and social anxiety that they define the social anxiety spectrum as an assertiveness disorder. Empirical research (e.g., Arrindell et al., 1990; Orenstein, Orenstein, & Carr, 1975) confirms that assertiveness relates inversely and significantly with measures of interpersonal anxiety among both men and women. Interestingly, low levels of assertiveness have also been found to be positive predictors of a problematic use of the web (Evren, Dalbudak, Evren, & Demirci, 2014).

### 1.3. Satisfying needs through SNSs: a pathway towards problematic Internet use for socially anxious people?

Caplan (2007, 2010) warns us that those who attempt to obtain social benefits or social control via the Internet are also likely to experience negative outcomes and may be at-risk for problematic Internet use. This hypothesis has recently stimulated a variety of research focused on the subjective importance attached to the unique characteristics of CMC by people with social anxiety. Young and Lo (2012) found that those with higher social anxiety trait attach higher self-relevance to CMC attributes (reduced cues, temporal flexibility and anonymity) which, in turn, predicted the willingness to spend time on interacting with people online. Similarly, Casale, Tella, and Fioravanti (2013) found that the lower the level of assertiveness, perceived autonomy, and self-directiveness in thought and action, the higher the subjective importance attached to the temporal flexibility offered by SNSs in message construction. Moreover, the perceived relevance of controllability significantly mediates the relationship between this intrapersonal intelligence ability and preference for online social interaction levels, one of the main cognitive precursors of problematic Internet use related to social networks (GPIU; Caplan, 2010).

The perception of computer mediated communication by people with social anxiety has been deeply explored, but the association between the social benefits found online and the development of GPIU has been scarcely investigated. The few studies available show that a preference for online social interaction arises from a perceived increase in self-presentational efficacy, and a reduction in perceived threat that socially anxious people experience when engaged in online social interaction (Caplan, 2005). However, Weidman et al. (2012) found that individuals who report higher levels of social anxiety and frequently engage in online communication report lower levels of self-esteem satisfaction and higher levels of depression, suggesting that their attempts to compensate for offline social inadequacies may fail to improve well-being. Based on the framework of the SDT, Wong, Yuen, and Li (2014) found that individuals who are psychologically disturbed because their basic needs are not being met are more vulnerable to becoming reliant on the Internet when they seek needs satisfaction from online activities.

The present study aims to extend these results, using the Facebook-use model (Nadkarni & Hofmann, 2012) and the STD as theoretical framework. We hypothesize that satisfying unmet needs through SNSs may represent a pathway towards GPIU for socially anxious people. Three specific needs were supposed to mediate the association between social anxiety and Social Network addiction: the need to belong, the need for self-presentation, and the need for autonomy in terms of major opportunities to be assertive. Specifically, the following direct and indirect hypotheses were proposed and tested:

**H1.** Social anxiety is a positive predictor of the need to belong.

**H2.** Social anxiety is a positive predictor of the need for self-presentation.

**H3.** Social anxiety is a positive predictor of the need for assertiveness.

**H4.** The need to belong is a positive predictor of GPIU levels.

**H5.** The need for self-presentation is a positive predictor of GPIU levels.

**H6.** The need for assertiveness is a positive predictor of GPIU levels.

**H7.** There is a positive indirect relationship between social anxiety and GPIU levels that is mediated by the need to belong.

**H8.** There is a positive indirect relationship between social anxiety and GPIU levels that is mediated by the need for self-presentation.

**H9.** There is a positive indirect relationship between social anxiety and GPIU levels that is mediated by the need for assertiveness.