Passion and Self-Determination: Exploring Social Networking Site Addiction Using a Dualistic Framework

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Abstract

The purpose of the present study is to explore the role of behavioral/psychological constructs of passion and self-determination in the context of social networking site (SNS) addiction. The present study explored SNS addiction by employing a dualistic framework, which is an amalgam of the dualistic model of passion ([13]) and the self-determination theory (SDT; [14]). Data were collected through an online survey administered by a market research company based in the USA (N = 312). The survey consisted of items related to key constructs related to the research framework proposed (e.g., harmonious and obsessive passion). All the items included in the survey were 7-point Likert-type questions. Additionally, data related to demographics and Internet usage were collected. Structural equation modeling (SEM) was employed to explore the relationships between passion typologies, self-determination, and SNS addiction. Structural Equation Modeling showed that harmonious passion was positively related to autonomy and relatedness, but was negatively related to competence. Obsessive passion was negatively related to autonomy, competence, and relatedness. Competence and relatedness were negatively related to SNS addiction. Obsessive passion positively influenced SNS addiction, whereas, contrary to the expectation, harmonious passion also positively influenced SNS addiction. Obsessive passion towards SNS predicted SNS addiction via three basic psychological needs, namely, autonomy, competence, and relatedness. The present study draws upon concepts of positive psychology to understand SNS addiction. The proposed theoretical framework explained 86% of the variance in terminal construct, which is SNS addiction.

Keywords

Behavioral Addictions, SNS Addiction, Passion, Self-Determination, Basic Psychological Needs

1. Introduction

In recent years, behavioral addictions have gained attention from academic researchers (e.g., [1]) as well as popular mass media (e.g., [2]). Behavioral addictions refer to non-substance addiction that has behavioral focus other than ingestion of psychoactive substance ([1]). Furthermore, it has been noted that each behavioral addiction is characterized by recurrent pattern of behavior in a specific domain ([1]). Sample examples include sexual addiction (e.g., [3]), Internet addiction (e.g., [4]), and tanning addiction (e.g., [5]). One such behavioral addiction, which has received ample attention is social networking site (SNS) addiction (e.g., [6] [7]).

SNS is a virtual community, where users create public profiles, interact with real-life friends, and meet people of similar interest and so on ([7] see [8]). It has been suggested that SNS addiction has the potential to cause mental health issues to some users ([7]). For example, SNS addiction has negative consequences for the individual as well as the society in which they reside ([9]). For instance, research studies (e.g., [10] [11]) found that SNS addiction is related to higher level of narcissism and lower level of self-esteem. Several factors might contribute towards SNS addiction; dispositional factors (e.g., personality, self-esteem), socio-cultural factors (e.g., peers), and behavioral reinforcement factors (e.g., repetitive use of a medium) ([6] [12]). However, it has been noted that that the latter two factors (*i.e.*, socio-cultural factors and behavioral reinforcement factors) remain to empirically explored in the context of SNS addiction ([6]). Therefore, the purpose of the present study is to explore the role of behavioral/ psychological constructs of passion and self-determination in the context of SNS addiction. The present study explored SNS addiction by employing a dualistic framework, which is an amalgam of the dualistic model of passion ([13]) and the self-determination theory (SDT; [14]) that are explained below.

2. Literature Review

2.1. The Dualistic Model of Passion (DMP)

According to the *Oxford Dictionary* [15], passion refers to "strong and barely controllable emotion." Likewise, the American Psychological Association [16] defined passion as "a strong liking for an activity, object, or concept" (for an in-depth review, see [13], 675). Research had indicated that passion is dualistically valenced, which can result in positive psychological outcomes, such as improved physical health, as well as negative psychological consequences, such as gambling addiction ([13] [17]). This dualistic framework has been consistently supported by Vallerand and colleagues ([13] [17] [18] [19]), who more recently proposed the DMP. The DMP posits that there are two types of passions, namely *harmonious passion* and *obsessive passion* that can be internalized into one's identity.

Harmonious passion refers to "feeling the choice of engaging in the activity that one loves and is hypothesized to lead to more adaptive outcomes than ob-

sessive passion, which reflects an internal pressure to engage in the activity that one loves" ([13], p. 12). In other words, the two passions differ by locus of control or a function of intrinsic motivation (e.g., [20]). Many scholars have employed the DMP framework to understand various life contexts, which include leisure ([21]), gambling ([22]), and shopping addiction ([23]). Wang and Yang [23] noted that individuals with obsessive passion towards Internet dependency (*i.e.*, habitual usage) were more prone to engage in compulsive online shopping activities. Furthermore, research in personality psychology has found harmonious passion to be associated with autonomous personality, whereas obsessive passion is associated with controlled personality ([13]). However, the DMP framework has not yet been tested within the field of computer-mediated communication, such as Social Networking Site (SNS) use.

2.2. The Self-Determination Theory (SDT)

SDT is an organismic theory of motivation that explains psychological needs and motives ([14]). The fundamental psychological needs per the SDT include: *autonomy* (A; a sense of personal initiative), *competence* (C; to interact effectively in a given domain), and *relatedness* (R; to feel comfortable with others). Per the SDT, these three needs are paramount of individual's survival, growth, and integrity ([14] [23]). The SDT is a robust theory, which has been applied to various settings: educational ([24]), work psychology ([25]), and exercise ([26]).

2.3. The DMP and the SDT

The DMP was developed on the basis of the SDT ([13] [20]). Accordingly, harmonious passion and obsessive passion are related to the basic universal psychological needs—A, C, an R ([17]). Vallerand [17] contended that people do not have a choice related to certain activities (e.g., job), but certainly do have control over certain activities (e.g., sports, SNS use) that are enjoyable and paramount [to an individual]. Therefore, passion is not only related to basic universal psychological needs, but also includes self-defining activities that one likes or loves. These self-defining activities can be characterized as time consuming and central to one's identity ([13]). Occasionally, these self-defining activities can evolve into behavioral addictions such as SNS addiction. The aforementioned proposition perfectly aligns with Andreassen and Pallesen's ([6], 4054) comment—"being overly concerned about social media, driven by uncontrollable motivation to log on to or use social medium and devoting so much time and effort to social media that it impairs other important life areas." It is important to note that we are suggesting that SNS has both positive and negative consequences as noted elsewhere (e.g., [27] [28]), but it is the type of passion that determines the use of SNS (*i.e.*, normal usage vs. addictive usage) that is further a function of psychological need fulfillment. Based on extant literature review, the following research framework as shown in **Figure 1** with the mentioned relationships between the construct is proposed:

*H*1: Harmonious passion towards SNS is positively related to: Autonomy (*H*1*a*), Competence (*H*1*b*), and Relatedness (*H*1*c*).

*H*2: Obsessive passion towards SNS is negatively related to: Autonomy (*H*1*a*), Competence (*H*1*b*), and Relatedness (*H*2*c*).

*H*3: Autonomy (*H*3*a*), Competence (*H*3*b*), and Relatedness (*H*3*c*) are negatively related to SNS addiction.

*H*4: Harmonious passion towards SNS is negatively related to SNS addiction.

*H*5: Obsessive passion towards SNS is positively related to SNS addiction.

3. Methods

3.1. Participants and Procedure

Data were collected through an online survey administered by a market research company based in the US. The online survey link was created using the Qualtrics software. The convenience sample of US nationals consisted of male and female consumers ages 18 and over. Each participant was given a nominal financial incentive. A total of 312 useable completed responses were collected over a one-week period.

3.2. Measures

All the items included in the survey were 7-point Likert-type questions, with 1 = "Strongly Disagree," and 7 = "Strongly Agree." Additionally, data related to demographics and Internet usage were collected. In the following paragraphs, the scales employed in the present study are explained.

3.2.1. Harmonious and Obsessive Passions

The 14-item passion scale (8 and 6 items for harmonious and obsessive passion respectively) developed by Tosum and Lajunen ([29]) was adapted for the study

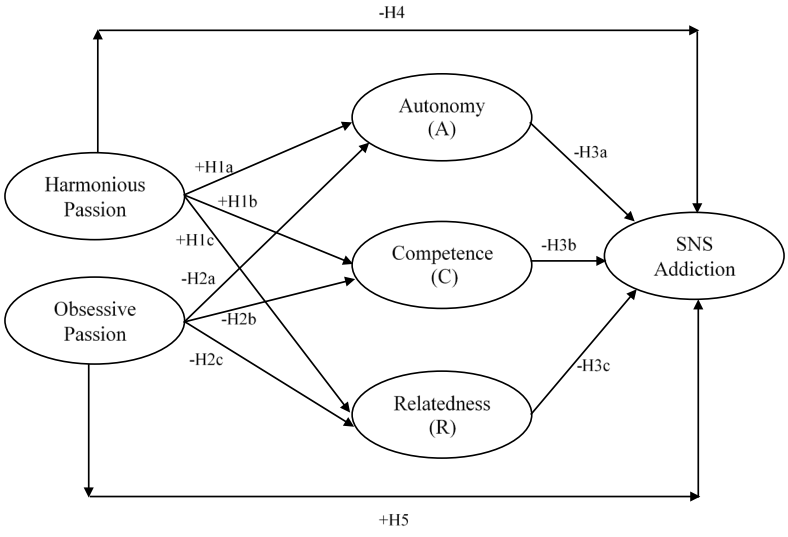

Figure 1. Hypothesized relationships among the research variables.

in the context of SNS. This scale captured both harmonious and obsessive passion towards online shopping. Sample items for harmonious passion were "Social networking sites (SNS) allowme to live memorable experience" and "My SNS activities are in harmony with other activities in my life." Likewise, sample items for obsessive passion were "My mood depends on being able to do my SNS activities" and "I have difficulty imagining my life without SNS." Tosum and Lajunen [29] reported adequate reliabilities for the passion scale (Cronbach's alpha: harmonious passion = 0.77 and obsessive passion = 0.92). In the present study, the Cronbach's alpha for harmonious passion and obsessive passion were 0.92 and 0.98 respectively.

3.2.2. Basic Psychological Needs

The basic psychological needs (*i.e.*, A, C, and R) were measured using multiple sources (partial; pertaining to life domain in general): autonomy (4 items, [30]), competence (4 items, [31]), and relatedness (9 items, [32]). Sample items included "In general, I feel free to do what I want" (A), "If I could, I would change a lot of things about myself" (C), and "In my relationships in life, I feel supported" (R). The Cronbach's alphas for A, C, and R in the present study were 0.91, 0.89, and 0.97 respectively.

3.2.3. SNS Addiction

The Internet addiction scale, which consists of 25-items developed by Caplan [33] was adapted for SNS context in the present study. Sample items included were "I experience guilt using my time being on SNS" and "I had unsuccessful attempts to control my SNS use." Caplan [33] reported adequate reliability of 0.85 in their study. In the present study, the Cronbach's alpha was 0.97.

3.3. Statistical Analysis

SPSS 22.0 was used to perform descriptive statistics and reliability analysis, whereas Mplus 7.0 was used to run the confirmatory factor analysis (CFA) and structural equation modeling (SEM) to test the proposed hypotheses. Because the constructs had numerous items, parceling technique was used ([34]).

3.4. Ethics

This study was carried out in accordance with the guidelines established by the Institutional Review Board at XXXXXXX. Institutional Review Board approval on human subjects was obtained prior to collecting the data. All participants were informed about the study and all provided informed consent.

4. Results

Majority of the respondents were female (71.2%), white (81.7%), with household income less than $50K (57.7%) and spent more than 3 hours on internet/day (51%). See **Table 1** for the detailed demographic profile of the sample.

All the constructs showed good internal consistency (Cronbach's alpha > .70).

Table 1. Demographic profile of the sample (n = 312).

Demographics	%
Gender	
Male	28.8
Female	71.2
Ethnicity	
White	81.7
Hispanic or Latino	3.8
Black or African American	10.6
Asian or Pacific Islander	1.3
Other	2.6
Age	
18 - 24	2.6
25 - 34	9.3
35 - 44	15.4
45 - 54	20.2
55 - 64	22.1
65 - 74	25.3
>75	5.1
Education	
High school degree	34.3
Associate degree	23.1
Bachelor's degree	24.4
Master's degree	6.7
Professional or doctorate degree	1.9
Other	9.6
Income	
<$50,000	57.7
$50,000 - $100,000	24.0
$100,001 - $150,000	12.2
$150,001 - $200,000	4.2
>200,000	1.9

Measurement model was tested through SEM. The measurement model with parceled items resulted in an acceptable model fit (χ^2 = 241.26, df = 75, p < 0.001; CFI = 0.97; RMSEA = 0.08; SRMR = 0.03). Subsequent structural model resulted in an acceptable fit as well (χ^2 = 249.50, df = 76, p < 0.001; CFI = 0.97; RMSEA = 0.09; SRMR = 0.04). SEM results showed that all the hypotheses were supported except $H1$b, $H3$a, and $H4$. Harmonious passion for SNS was positively related to autonomy (β = 0.265, p = 0.005) and relatedness (β = 0.255, p = 0.006), but negatively related to competence (β = −0.195, p = 0.032). $H1$ was mostly supported. Obsessive passion for SNS was negatively related to autonomy (β = −0.363, p = 0.000), competence (β = −0.304, p = 0.001), and relatedness (β = −0.233, p = 0.010). $H2$ was fully supported. Competence (β = −0.11, p = 0.002) and relatedness (β = −0.092, p = 0.008) were negatively related to SNS addiction.

Relationship between autonomy and SNS addiction was not significant (β = 0.047, p = 0.198). *H*3 was mostly supported. Obsessive passion for SNS (β = 0.64, p = 0.000) was positively related to SNS addiction. Therefore, *H*5 was supported. Contrary to our expectation, harmonious passion was positively related to SNS addiction (β = 0.286, p = 0.000), hence *H*4 was not supported. In total, the proposed research model explained 86% of the variance ($p < 0.001$) related to SNS addiction. These results are presented in Figure 2.

5. Discussion

Several studies have explored the positive (e.g., relationship formation and satisfaction, [35]) and negative consequences of SNS use (e.g., addiction, [36]). However, it has been noted that the psychology of SNS use and addiction needs greater empirical attention ([37] [38]). Consequently, the present study focused on psychology of SNS use and addiction, by employing a dual theory framework. The findings of the present study are important; especially, considering the polarized nature of SNS usage ([37]).

The present study compliments various studies that have discussed the positive and negative consequences of SNS use and addiction. For instance, consistent with the literature, harmonious passion towards SNS is positively related to autonomy and relatedness. This finding is consistent with several studies, which noted that SNS can provide individuals with support and increase one's feeling of self-control ([39]) as well as help battle loneliness by increasing one's social capital ([37]). On the other hand, obsessive passion for SNS is negatively related

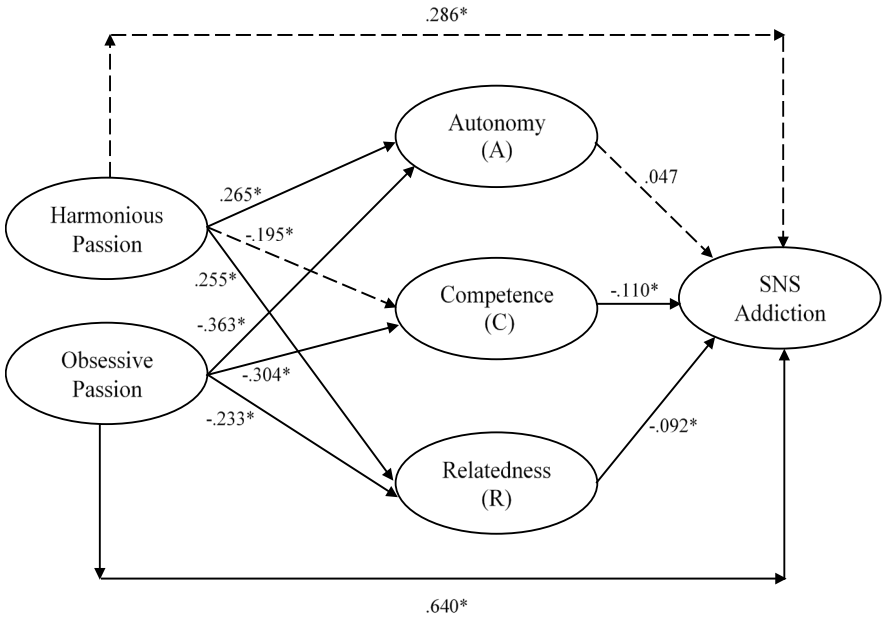

Figure 2. Relationships among the research variables. *Note:* Standardized path coefficients for relationships among research variables. Dotted lines represent the hypotheses which were not supported (either due to non-significance or opposite valence than expected). *$p < 0.05$.

to basic psychological needs. The aforementioned result is consistent with the literature (e.g., [40] [41]) that people with lower self-esteem and higher social anxiety seek refuge via SNS. Also, obsessive passion for SNS was positively and significantly related to SNS addiction. Basic psychological needs of C and R were negatively related to SNS addiction. This finding is consistent with the "rich-get-richer hypothesis," which states that people with lower self-esteem and higher social anxiety in real life may seek virtual relationships ([37] [41]). In other words, people who experience deficit in basic psychological needs might be addicted to virtual world (e.g., SNS).

Harmonious passion for SNS was negatively related to competence. Although contradictory to our expectation, this finding is consistent with Vosner, Bobek, Kokol, and Krecic ([42]) findings with regards to elderly SNS users in Slovenia. They found that SNS users experience several benefits despite lack of complete knowledge (e.g., SNS interface use). In other words, feeling of competence does not hinder SNS use, which might yield positive outcomes such as reduced level of loneliness and improved quality of life. Another contradictory result was that harmonious passion for SNS was positively related to SNS addiction. This finding is similar to Wang and Yang's ([23]) study. The scholars found that both passions were positively related to Internet addiction. Furthermore, autonomy was not related to SNS addiction, which is also contrary to our expectation.

The present study has both theoretical as well as practical implications. For example, from a theoretical perspective, this is among the first studies that investigated the phenomenon of SNS addiction using dual theory framework. The proposed research model explained 86% of the variance in the terminal construct, which demonstrates that the present study has solid foundation. Also, this study answered the call for additional study related to online psychology (e.g., [37]), by exploring both positive (e.g., social capital) and negative consequences (e.g., reduced physical activity) of SNS use and addiction. From a practical perspective, it is clear that experiencing deficit in basic psychological needs might lead one to engage in SNS addiction. Thus, from an application perspective, it is posited that the present study is useful to develop appropriate psychological intervention programs. For example, within organizational psychology, cyber-slacking (*i.e.*, non-work related Internet use such as SNS surfing, [43]) results in $178 billion loss of US productivity annually. Therefore, counselors should inquire about an individual's [or employee's] basic psychological needs when individuals are experiencing lack of control of SNS use or SNS addiction. SNS addiction is a type of Internet addiction; accordingly, intervention strategies (e.g., cognitive behavioral therapy, psychotherapy, see [44]) should be developed.

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