A Study of the Antecedents and the Consequences of Social Network Service Addiction: A Focus on Organizational Behaviors

Eunhee Leea and Youngkeun Choi b

aPh.D candidate of Division of Business Administration, College of Business, Sangmyung University, Seoul, South Korea
bAssistant Professor of Division of Business Administration, College of Business, Sangmyung University, Seoul, South Korea

ABSTRACT

The purpose of this study is to investigate the impact of job demand on employees’ social network service addiction and how it influences their job satisfaction and organizational citizenship behavior. And we explore if occupational self-efficacy can moderate the relationship between job demand and social network service addiction. In the results, first, job demand increases social network service addiction. Second, social network service addiction decreases job satisfaction and organizational citizen behavior. Finally, employees’ occupational self-efficacy decrease the effect of job demand social network service addiction.

Keywords: Social network service addiction; Job demands; Self-efficacy; Job satisfaction; Organizational citizenship behavior

I. Introduction

Social Network Services (SNS) such as Facebook, Tweeter, Instagram, LinkedIn have reached hundreds of millions of users (Wilson, et al., 2010). SNSs are predominantly used for social purposes, mostly related to the maintenance of established offline networks, relative to individual ones (Kuss & Griffiths, 2011). However, recent evidence suggests that individuals may feel compelled to maintain their online social networks in a way that may, in some circumstances, lead to using SNSs excessively.

Existing body of researches have various three perspectives of SNS addiction. First, some researchers argue that SNS addiction is a disorder requiring clinical treatment, for those people addicted to using SNSs experience symptoms similar to those experienced by those who suffer from addictions to substances or other behaviors (Block, 2008; Brenner, 1997; Chao and Nestler, 2004; Leshner, 1997; Griffiths, 2005; Shaffer, et al., 2005; Echeburua & Corral, 2010). Second, Kang et al. (2013) argue that the phenomenon of excessive SNS usage is an addictive consumption trait of SNS, defined as an intensive consumer behavior with great loyalty arising from the benefits of social network services. Finally, because unlike other addictions, SNS is an integral element of today’s professional and leisure culture (Kuss & Griffiths, 2011), the ultimate therapy aim is controlled use of the SNS and its respective functions (Echeburua & Corral, 2010). The therapy of SNS addiction should be different from those of other addiction.

However, although the nature or the therapy of SNSs
addiction is different from other addiction, if employees use and commit SNSs excessively rather than work hard, it will make a matter of great concern in the workplaces from the perspective of most companies except SNSs providers.

In this study, to examine the organizational behaviors related to SNS addiction in further, the first step is to investigate the organizational factors which arouse SNS addiction. Second, we will investigate how SNS addiction influences the organizational attitudes of employee. Finally, this study will find out the factors which can manage SNS addiction in the workplace.

II. Theoretical Background & Hypothesis Development

A. Social Network Service Addiction

Social Networking Sites (SNSs) are virtual communities where users can create individual public profiles, interact with real-life friends, and meet other people based on shared interests (Kuss & Girraffiths, 2011). SNSs are predominantly used for social purposes, mostly related to the maintenance of established offline networks, relative to individual ones. However, recent evidence suggests that individuals may feel compelled to maintain their online social networks in a way that may, in some circumstances, lead to using SNSs excessively (Kang et al., 2013). Such obsession and excessive use of an object is often described as SNS addiction (Kuss and Griffiths, 2011).

Relevant researchers have three perspectives of SNS addiction. First, SNS addiction is a disorder requiring clinical treatment. In the clinical fields (i.e. medicine, psychology, pharmacology, neuroscience, etc.), where addiction is traditionally studied, addiction is caused by initial engagement with and consequent obsession about the benefits provided by psychotropic substances (Block, 2008; Brenner, 1997; Chao and Nestler, 2004; Leshner, 1997). Some of the symptoms of addiction are withdrawal, conflict, tolerance, and other problematic outcomes. In accordance with the biopsychosocial framework for the etiology of addictions (Griffiths, 2005) and the syndrome model of addiction (Shaffer, et al., 2005), it is claimed that those people addicted to using SNSs experience symptoms similar to those experienced by those who suffer from addictions to substances or other behaviors (Echeburua & Corral, 2010).

Second, Kang et al. (2013) argue that it is inappropriate to include excessive usage of SNSs under those of other highly impulsive internet services such as pornography, gaming, and internet shopping, for excessive usage of SNSs does not cause much harm to the individual or society since the utilities of SNSs retain diminishing marginal utility. Even they call the phenomenon of excessive SNS usage an addictive consumption trait (ACT) of SNS, defined as intensive consumer behavior with great loyalty arising from the benefits of social network services and suggest five underlying dimensions of ACT of SNS including salience, euphoria, immersion, compulsion and association.

Finally, the therapy of SNS addiction should be different from those of other addictions. Unlike other addictions, the goal of SNS addiction treatment cannot be total abstinence from using the internet, for it is an integral element of today’s professional and leisure culture (Kuss & Griffiths, 2011). Instead, the ultimate therapy aim is controlled use of the internet and its respective functions (Echeburua & de Corral (2010).

B. Antecedents

Turel and Serenko (2012) recently summarized three overarching theoretical perspectives to explain the formation of SNS addiction. First, cognitive-behavioral model emphasizes that ‘abnormal’ social networking arises from maladaptive cognitions and is amplified by various environmental factors, and eventually leads to compulsive and/or addictive social networking. Second, social skill model emphasizes that ‘abnormal’ social networking arises because people lack self-presentational skills and prefer virtual communication to face-to-face interactions, and it eventually leads to compulsive and/or addictive use of social networking. Second, socio-cognitive model emphasizes that ‘abnormal’ social networking arises due to the expectation of positive outcomes, combined with internet self-efficacy and deficient internet self-regulation eventually leads to compulsive and/or addictive social networking behavior.

Most of relevant studies have focused on the perspectives of social skill model or socio-cognitive model. They have
suggested that because SNS are designed as a tool for interpersonal communication, psychological profile of their addictive user can be even more specific. Therefore, similar set of personality traits appeared to be associated with the excessive SNS use, such as: low self-esteem and low life satisfaction (Amichai-Hamburger & Vinitzky, 2010; Kuss & Griffiths, 2011; Tazghini & Siedlecki, 2013; Wilson et al., 2010), those scored higher on the trait of neuroticism and conscientiousness Amichai-Hamburger & Vinitzky, 2010, lower levels of openness to experience (Ross et al., 2009; Skues, Williams & Wise, 2012).

However, a few studies show the perspective of cognitive-behavioral model. Xu and Tan (2012) suggest that the transition from normal to problematic social networking use occurs when social networking is viewed by the individual as an important (or even exclusive) mechanism to relieve stress, loneliness, or depression. They contend that those who are poor at socializing in real life frequently engage in social networking. For these people, social media use provides such people continuous rewards (e.g. self-efficacy, satisfaction) and they end up engaging in the activity more and more, eventually leading to many problems (e.g., ignoring real life relationships, work/educational conflicts, etc.).

The purpose of this study is to examine the organizational behaviors related to SNS addiction. Therefore, in the perspective of cognitive-behavioral model, we pay our attention to work environmental factors arousing SNS addiction and suggest job demand as antecedents of SNS addiction.

At the heart of the Job Demands-Resources (JD-R) model (Bakker et al., 2003a; b; Demerouti et al., 2001a, b) lies the assumption that whereas every occupation may have its own specific risk factors associated with job stress, these factors can be classified in two general categories (i.e. job demands and job resources), thus constituting an overarching model that may be applied to various occupational settings, irrespective of the particular demands and resources involved.

Especially, job demands refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs. Examples are a high work pressure, an unfavorable physical environment, and emotionally demanding interactions with clients. Although job demands are not necessarily negative, they may turn into job stressors when meeting those demands requires high effort from which the employee has not adequately recovered (Meijman and Mulder, 1998).

According to transactional stress models, the nature and severity of emotional reactions following exposure to job demands are functions of dynamic interplay between event characteristics and individual appraisal and coping processes (Folkman and Lazarus, 1991; Lazarus, 1999; Zapf and Einarsen, 2003). Especially, the both of job demands are characterized as a prolonged exposure to interpersonal acts of a negative nature, with which the target is unable to cope. These characteristics are likely to make up a highly stressful situation characterized by lack of control.

The stress from job demands may then exacerbate individuals’ undesirable moods. This then leads such individuals to engage in the social networking behavior even more as a way of relieving dysphoric mood states. Consequently, when social network users repeat this cyclical pattern of relieving undesirable moods with social media use, the level of psychological dependency on social networking increases. Accordingly, the following hypothesis is established.

H1: Job demands are positively associated with SNS addiction.

C. Consequences

Some studies highlight that in some circumstances, SNS usage can lead to a variety of negative consequences that imply a potential decrease in involvement in real-life communities and worse academic performance, as well as relationship problems in the various context.

First, the results of an online survey of 184 internet users indicated that people who use SNS more in terms of time spent on usage were perceived to be less involved with their real life communities (Nyland et al., 2007).

Second, according to a more recent study assessing the relationships between Facebook usage and academic performance in a sample of 219 university students (Kirschner & Karpinski, 2010), Facebook users had lower Grade Point Averages and spent less time studying than students who did not use this SNS. Of the 26% of students reporting an impact of their usage on their lives,
three-quarters (74%) claimed that it had a negative impact, namely procrastination, distraction, and poor time-management. A potential explanation for this may be that students who used the Internet to study may have been distracted by simultaneous engagement in SNSs, implying that this form of multitasking is detrimental to academic achievement (Kirschner & Karpinski, 2010).

Third, it appears that the usage of Facebook may in some circumstances have negative consequences for romantic relationships. The disclosure of rich private information on one’s Facebook page including status updates, comments, pictures, and new friends, can result in jealous cyberstalking (Phillips, 2009), including interpersonal electronic surveillance (Tokunaga, 2011) by one’s partner. This was reported to lead to jealousy (Muise, 2009; Persch, 2007) and, in the most extreme cases, divorce and associated legal action (Luscombe, 2009).

However, few studies of SNS addiction have been interested in the context of workplace. Like other context, if employees spend a lot of time using and committing SNSs excessively rather than work hard, it will make a matter of negative consequences in the workplace. We suggest job satisfaction and organizational citizenship behavior as two kinds of consequences which are negatively influenced by SNS addiction.

First, job satisfaction conveys useful information about an individual’s economic, social, and personal life as it is a major determinant of labor market mobility (Freeman, 1978), job performance (Mount, Ilies & Johnson, 2006), and personal well-being (Rode, 2004). Second, organizational citizenship behavior can be considered to be an individual’s voluntary work beyond the role assigned to him/her in the organization (Bateman & Organ, 1983). Therefore, organizational citizenship behavior can be regarded as subset of pro-social organizational behavior (Cetin et al., 2003).

A large number of factors influencing job satisfaction have been recognized which consist of organizational aspects, job aspects and personal aspects (Sandra, 2012). And the predictors of organizational citizenship behavior mainly include dispositional (i.e., personal characteristics) and situational (i.e., leader-member exchange) factors (Podsakoff et al., 2000). However, there is no research work to investigate SNS addiction influencing job satisfaction and organizational citizenship behavior. Similar to other context, if employees use SNS more in terms of time spent on usage, they are less interested in their real life in workplace, which their job satisfaction decreases and don’t have time enough to play their voluntary work beyond the role assigned to them in the organization their roles in workplace, which their organizational citizenship behavior decreases. Accordingly, the following hypothesis is established.

H2: SNS addiction is negatively associated with job satisfaction.
H3: SNS addiction is negatively associated with organizational citizenship behavior.

D. Moderator

In their extensive summary of research on workplace stress, Kahn and Byosiere (1992) concluded that organizational theory and research have been too little concerned with organizational and interpersonal factors that might serve as moderators, buffers, or even as antidotes to stresses and their effects, and that empirical evidence in this area is essentially nonexistent. A few researchers addressed this oversight, primarily by focusing on the potential moderating role of personal factors (e.g., personality characteristics; Burke, Brief & George, 1993) and interpersonal (e.g., family and friends) sources of support (e.g., Fisher, 1985; Ganster, Fusilier & Mayes, 1986; Kaufman & Beehr, 1986). Therefore, this study suggests self-efficacy as a kind of personal factor to relieve stress from job demand arousing SNS addiction.

Self-efficacy may be considered as the way people respond to an external scenario, and relevant responses consist of personal behaviors and efforts that address problems regarding individual objectives (Schwarz, Boehler, Luszczynska, Mohamed & Knoll, 2005). People with high self-efficacy are capable of managing personal functions and are inclined to adopt positive problem-focused coping strategies. Therefore, they appear to be less affected by stressful events. By contrast, people with low self-efficacy are inclined to apply negative coping strategies and, therefore, tend to be more affected by stressful events (Bandura, 1997; Luszczynska, Scholz & Schwarzer, 2005; Schwarzer & Jerusalem, 1995). Previous studies have contended that self-efficacy plays a critical role in stress relief (Kreitler, Peleg & Ehrenfeld, 2007; Matsushima & Shiomi, 2003; McCammon, Durham, Allison & Williamson, 1988; Moeini et al., 2008). People
with high self-efficacy are less likely to be influenced by extremely stressful scenarios (Heinrichs et al., 2005; Prati, Pietrantoni & Cicognani, 2010; Regehr, Hill & Glancy, 2000; Regehr, Hill, Knott & Sault, 2003). However, neither of these studies examines the possibility that self-efficacy may help to buffer the effects of stress from job demand on SNS addiction. Theoretically, self-efficacy may act to attenuate the positive relationship between the stress from job demand and SNS addiction because people with high self-efficacy are less affected by stressful situations. In other words, self-efficacy may not only help eliminate a certain amount of stress experienced by job demand, but also may buffer the negative effects of stress that cannot be removed due to the nature of the job characteristics. Accordingly, the following hypothesis is established.

H4: Self-efficacy decreases the positive relationship between job demand and SNS addiction.

III. Methodology

A. Sample

The objective of the study was to identify the factors of the organizational behaviors related to SNS addiction based on empirical analysis. Therefore, because the factors of organizational behaviors can be identified by measuring the organization’s members' perceptions of workplace situation, we selected the regular workers in Korean companies and surveyed them for this research. The survey research method is very useful in collecting data from a large number of individuals in a relatively short period of time and at better cost. Hence, for the current study, the questionnaire survey was chosen for data collection.

This study is based on responses from workers in Korean companies. 305 responses were usable for analysis. Among the participants, 149 (49.1 percent) were men and 156 (50.9 percent) women. The age of them includes 20s (52.1%), 30s (24.2%), 40s (11.1%), and 50s (12.1%). The number of employee in their companies is less than 10 (38.4%), 11~50 (21.9%), 51~300 (12.7%), 301~1,000 (16.6%), and more than 1,001 (10.5%). The industry of their companies includes manufacturing (27.2%), construction (8.2%), service (36.4%), public agency (9.2%), wholesale-retail (7.9%), and etc. (11.1%). The position of them includes staff (38.7%), assistant manager (22.0%), manager (12.8%), senior manager (16.1%), director (10.5%). The tenure of them includes less than 5 years (56.1%), 5~10 (17.4%), 10~15 (11.8%), 15~20 (6.6%), more than 20 years (8.2%). The level of their education includes high school (16.4%), community college (18.4%), undergraduate (55.7%), and graduate school (9.5%). The marital status of them are married (54.8%) and single (44.3%).

B. Procedure

All participants received a paper-and-pencil questionnaire with an accompanying letter that explained the purpose of the survey, emphasized voluntary participation, and guaranteed confidentiality. Participants were asked to fill out the questionnaire and put it back into an envelope that was collected by the researcher.

C. Measure

Table 1 shows the measurements of variables in our study.

IV. Analysis Result

A. Verification of reliability and validity

The validity of variables is verified through the principal components method and factor analysis with the varimax method. The criteria for determining the number of factors is defined as a 1.0 eigen value. We applied factors for analysis only if the factor loading was greater than 0.5 (factor loading represents the correlation scale between a factor and other variables). In the factor analysis, we eliminated two items in the variables of shared vision and system thinking. The reliability of variables is judged by internal consistency as assessed by Cronbach’s alpha. We used surveys and regarded each as one measure only if their Cronbach’s alpha values were 0.7 or higher.
Table 1. The measurements of variables

| Variables         | Sub-factors          | Item numbers | Cronbach’s alpha | References                     |
|-------------------|----------------------|--------------|------------------|--------------------------------|
|                   | Role ambiguity       | 3            | .891             |                                 |
|                   | Role conflict        | 3            | .902             |                                 |
|                   | Role overload        | 2            | .886             |                                 |
| Job demand        | Emotional labor      | 8            | .911             | Karasek, R. A.(1979)            |
|                   | Department conflict  | 2            | .892             |                                 |
|                   | Task diversity       | 2            | .879             |                                 |
|                   | Task significance    | 3            | .909             |                                 |
|                   | Salience             | 5            | .887             |                                 |
|                   | Euphoria             | 4            | .892             |                                 |
| SNS addiction     | Immersion            | 3            | .906             | Kang et al.(2013)               |
|                   | Compulsion           | 4            | .902             |                                 |
|                   | Association          | 5            | .905             |                                 |
|                   | Work                 | 3            | .904             |                                 |
|                   | Pay                  | 3            | .907             |                                 |
| Job satisfaction  | Promotion            | 3            | .913             | Smith, et al.(1969)             |
|                   | Colleague            | 3            | .899             |                                 |
|                   | Supervision          | 3            | .893             |                                 |
|                   | Individual-oriented OCB | 6        | .926             | Williams & Anderson(1991)       |
| Organizational Citizenship | Organization-oriented OCB | 7        | .913             |                                 |
|                   | Occupational self-efficacy | -        | .924             | Schyns & Von Collani(2002)     |

Table 2. Correlations

| Role ambiguity     | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Role overload      | .00 | .00 | .1  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Emotional labor   | .00 | .00 | .00 | .1  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Department conflict| .00 | .00 | .00 | .00 | .1  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Task diversity    | .00 | .00 | .00 | .00 | .00 | .1  |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Task significance | .00 | .00 | .00 | .00 | .00 | .00 | .1  |     |     |     |     |     |     |     |     |     |     |     |     |
| Salience          | -.43| .00 | .90 | .00 | .26 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Euphoria          | .074| .281| .060| -.06| .229| -.00| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Immersion         | .032| -.03| .077| .072| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Compulsion        | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Association       | .294| .060| .277| .346| .217| .312| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Work              | -.221| .013| .032| .012| .102| .221| .078| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Pay               | -.001| .016| .077| .089| .198| .140| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Promotion         | .168| .014| .014| .109| .106| .026| .025| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Colleague         | -.168| .014| .014| .109| .106| .026| .025| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Supervision       | -.002| .240| .083| -.023| -.022| -.097| .088| .072| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Individual-OBC    | -.258| .073| .044| .089| .026| .025| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Organizational-OBC| -.150| .032| .165| .117| -.010| .014| .079| .021| .102| -.387| .009| .009| .009| .009| .009| .009| .009| .009| .009|
| Occupational Self-Efficacy | -.200| .036| .077| .025| -.287| .066| .068| .026| -.140| -.097| -.189| -.130| .143| -.040| .014| .050| .073| .340| .379|

*p < .05, **p < .01*
B. Relationship between variables

Table 2 summarizes the Pearson correlation test results between variables and reports the degree of multi-collinearity between independent variables. The minimum tolerance of .827, maximum variance inflation factor of 1.209 show that the statistical significance of the data analysis was not compromised by multi-collinearity.

C. Hypothesis test

To analyze the relationships between job demand and SNS addiction, the results in Table 3, consisting control and independent variables, show that sub-factors of job demand have statistical significances with sub-factors of SNS addiction. Moreover, role ambiguity has positive relationships with immersion ($\beta = .131, p < .01$) and association ($\beta = .297, p < .01$). Role conflict has a positive relationship with euphoria ($\beta = .222, p < .01$). Role overload has a positive relationship with compulsion ($\beta = .152, p < .01$). Emotional labor has a positive relationship with immersion ($\beta = .014, p < .01$), but has a negative relationship with association ($\beta = -.134, p < .01$). Department conflict has a positive relationship with salience ($\beta = .246, p < .01$) and compulsion ($\beta = .151, p < .01$). This implies that the more job demand people have in the workplace, the stronger their SNS addiction are, which is expected in our hypotheses. However, contrary to our expectation, emotional labor has a negative relationship with association ($\beta = -.134, p < .01$). It is shown that the more emotional labor people have, the weaker their association with SNS are.

The results in Table 4 show the effects of sub-factors of SNS addiction on the sub-factors of job satisfaction and organizational citizenship behavior. Salience has a negative effect on colleague satisfaction ($\beta = -.175, p < .01$). Compulsion has negative effects on colleague satisfaction ($\beta = -.128, p < .05$), supervision satisfaction

### Table 3. Analysis of the antecedents of SNS addiction

|                      | SNS addiction |
|----------------------|---------------|
|                      | Salience      | Euphoria | Immersion | Compulsion | Association |
| Sex                  | .062          | .148     | -.086     | .080       | -.019       |
| Age                  | .185 ***      | -.046    | -.068     | -.097 ***  | .211 ***    |
| Educational level    | .004          | .094     | -.089     | .042       | -.041       |
| Role ambiguity       | -.008         | .052     | .131 ***  | .079       | .297 ***    |
| Role conflict        | .010          | .222 ***  | -.011     | .027       | .058        |
| Role overload        | .049          | .009     | .019      | .152 ***   | .248        |
| Emotional labor      | -.051         | .091     | .014 ***  | .055       | -.134 ***   |
| Department conflict  | .246 ***      | -.030    | -.032     | .151 ***   | -.033       |
| Task diversity       | -.037         | -.052    | -.089     | -.059      | -.101       |
| Task significance    | .028          | .001     | -.026     | -.020      | -.021       |
| Adj. R²              | .065          | .062     | .019      | .046       | .196        |
| F                    | 3.129 ***     | 3.006 ***| 1.599 *** | 2.454 ***  | 8.408 ***   |

*p < .05, ** p < .01

### Table 4. Analysis of the consequences of SNS addiction

|                      | Job satisfaction | OCB               |
|----------------------|------------------|-------------------|
|                      | Work            | Pay              | Promotion | Colleague | Supervision | Individual | Organizational |
| Sex                  | -.104 ***       | -.054            | .045      | -.009     | .035        | -.069      | .066          |
| Age                  | .178 ***        | .059             | .043      | .051      | -.010       | .228 ***   | .167 ***      |
| Educational level    | .050            | .082             | -.032     | .074      | .022        | .029       | .026          |
| Salience             | -.054           | .059             | .068      | -.175 *** | .018        | .093       | .049          |
| Euphoria             | .012            | .068             | .059      | .024      | .048        | .001       | .021          |
| Immersion            | .013            | -.053            | -.057     | -.050     | .094        | -.066      | -.015         |
| Compulsion           | -.058           | .054             | -.027     | -.128 *** | -.179 ***   | -.049      | -.372 ***     |
| Association          | -.385 ***       | .012             | .026      | -.038     | -.017       | -.137       | .068          |
| Adj. R²              | .191            | .007             | -.007     | .031      | .018        | .068       | .173          |
| F                    | 9.945 ***       | 1.274            | .747      | 2.207 *** | 1.883 ***   | 3.786 ***  | 8.958 ***     |

*p < .05, ** p < .01
Table 5. Analysis of the moderating effect of occupational self-efficacy

|                                | Salience | Euphoria | Immersion | Compulsion | Association |
|--------------------------------|----------|----------|-----------|------------|-------------|
| Sex                            | .065     | .150     | -.073     | .077       | -.033       |
| Age                            | .169     | -.030    | -.077     | -.084      | .212        |
| Educational level              | .026     | .081     | -.084     | .056       | -.056       |
| Role Ambiguity(RA)             | -.085    | .064     | .099      | .044       | .290        |
| Role Conflict(RC)              | -.004    | .222     | -.001     | -.005      | .031        |
| Role Overload(RO)              | .041     | .007     | .036      | .115       | .233        |
| Emotional Labor(EL)            | -.005    | .093     | .046      | .051       | -.143       |
| Department Conflict(DC)        | .128     | -.036    | -.033     | .101       | -.005       |
| Task Diversity(TD)             | -.038    | -.035    | -.101     | -.029      | -.085       |
| Task Significance(TS)          | .050     | .037     | .003      | -.050      | -.017       |
| Occupational Self-Efficacy(OSE)| -.277    | -.120    | -.140     | -.135      | -.081       |
| RA * OSE                       | -.152    | -.003    | -.196     | .064       | .141        |
| RC * OSE                       | .044     | -.221    | .021      | .106       | -.011       |
| RO * OSE                       | -.031    | .083     | .088      | -.259      | .016        |
| EL * OSE                       | -.018    | -.068    | -.128     | -.008      | -.081       |
| DC * OSE                       | -.199    | .010     | -.001     | .041       | .057        |
| TD * OSE                       | .047     | -.039    | -.011     | .078       | -.054       |
| TS * OSE                       | .018     | -.075    | .049      | -.046      | -.078       |
| Adj. R²                        | .161     | .125     | .057      | .142       | .215        |
| F                              | 4.245    | 3.405    | 2.012     | 3.785      | 5.625       |

*p < .05, **p < .01

(β = -.179 p < .01) and organizational-oriented OCB (β = -.372, p < .01). Association has negative effects on work satisfaction (β = -.385, p < .01) and individual-oriented OCB (β = -.137, p < .05). This shows that the stronger SNS addiction people have, the weaker their job satisfaction and OCB are, which is expected in our hypotheses.

In Table 5, the results, consisting of moderators, shows the interactions between the sub-factors of job demand and occupational self-efficacy. Occupational self-efficacy has a negative effect on the relationship (β = -.196, p < .01) between role ambiguity and immersion, the relationship (β = -.221, p < .01) between role conflict and euphoria, the relationship (β = -.259, p < .01) between role overload and compulsion, the relationship (β = -.128, p < .05) between emotional labor and immersion and the relationship (β = -.199, p < .01) between department conflict and salience, expected in our hypotheses. However, contrary to our expectation, it is shown that occupational self-efficacy has a negative effect on the relationship (β = .141, p < .05) between role ambiguity and association.

Based on our results, when people have higher occupational self-efficacy in workplace, job demand has weaker impact on their SNS addiction. However, contrary to our expectation, it is shown that they have higher occupational self-efficacy, role ambiguity have stronger impact on the association with SNS addiction.

V. Conclusion

A. Summary and implications

This study investigated the impact of job demand level on employees’ SNS addiction and how their SNS addiction influences their job satisfaction and OCB. We conducted a data analysis to discover if occupational self-efficacy can moderate the relationship between job demand and SNS addiction. The findings can be summarized as follows. First, each characteristics of job demand such as role ambiguity, role conflict, role overload, emotional labor and department conflict increases each relevant phenomena of SNS addiction. Among the characteristics of job demand, job significance and job diversity are not significantly related to SNS addiction. This implies that although job is important in workplace or requires a variety of roles to employees, they don’t commit themselves to SNS world.
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to evade their stress. Because role ambiguity, role conflict, role overload, emotional labor and department conflict arise from interpersonal problem, they can evade these stresses by committing themselves to SNS world. However, the results show that emotional labor decreases their association with SNS are, which is contrary to or expectation. We infer that the reason of this result is due to the characteristics of emotional labor. Emotional labor showed strong, positive associations with emotional exhaustion and depersonalization (Hulsheger & Schewe, 2011). When employee’s jobs require great emotional labor, they are not only stressful but also exhausted emotionally and depersonalized seriously. These individual burnout can make them feel no association with SNS world as well as real life.

Second, each phenomena of SNS addiction such as salience, compulsion and association decrease each relevant factors of job satisfaction and OCB. Among the phenomena of SNS addiction, euphoria and immersion are not significantly related to job satisfaction and OCB. This implies that although employees feel euphoria from SNS use or immerse themselves in SNS world, they cannot get any satisfaction related to their job or don’t show OCB actively. Because this euphoria is aroused from SNS use, it is not actually relevant to their job and workplace. And their immersion focus only on SNS world, so they don’t pay their attention to their job and workplace. And, all phenomena of SNS addiction show no significance with both of pay and promotion satisfaction. Among job satisfactions, because the satisfactions related to work, colleague or supervision are related to intangible things such as situation, atmosphere or psychological state, they can be influenced by psychological states that are aroused from SNS addiction. Moreover, if employee commit themselves excessively to SNS world, they are likely to make any problem or trouble with their job, colleague or supervision. However, because the satisfactions related to pay or promotion are obtained only through tangible rewards, SNS addiction don’t influence these satisfactions.

Finally, employees’ occupational self-efficacy decrease the effect of each characteristics of job demand such as role ambiguity, role conflict, role overload, emotional labor and department conflict on each relevant phenomena of SNS addiction. However, the results show that employees’ occupational self-efficacy increase the effect of role ambiguity on their association with SNS. We infer that the reason of this result is due to the characteristics of occupational self-efficacy. Occupational self-efficacy refers to the competence that a person feels concerning his or her ability to successfully fulfill the tasks involved in his or her work (Rigotti, Schyns & Mohr, 2008). If employees have high occupational self-efficacy, they feel that they can fulfill their tasks successfully in the difficult situation such role conflict, role overload, emotional labor and department conflict. Therefore, they overcome the stress from these job demand. However, role ambiguity is not a job demand that they can overcome with high occupational self-efficacy. On the contrary, if employees are in the situation of role ambiguity, they don’t have their tasks that they should fulfil successfully. Therefore, because in the situation of role ambiguity, employees with higher occupational self-efficacy feel less associated in their workplace, they are more likely to find other alternatives of association such as an association with SNS world.

This study makes two kinds of research contributions. First, we introduce SNS addiction in the context of workplace and investigate organizational behaviors related to it. Our study is the first to empirically verify the antecedents and consequences of SNS addiction in the workplace. Second, we suggest and empirically verify that occupational self-efficacy is a personal factor moderating the relationship between job demand and SNS addiction.

Moreover, our study provides some of managerial implications to corporate executives who try to manage organizational attitude. Because SNS addiction occurs in reality, it is also not ignorable in the context of workplace. And as the competition between the companies become strong, some job requires a lot of job demand and it arouse SNS addiction, which in turn decreases employees’ job satisfaction and OCB. Given this situation, corporate executives need to assign jobs by considering the level of job demand and personal factors.

B. Limitations and future research directions

The analysis results based on our interpretation of the questionnaires provided several insights into the relationships between organizational behaviors and SNS addiction. However, we must also acknowledge the following limitations. First, we collected our responses from employees who are working at Korean companies. We can apply this study’s methods to data samples in
other countries in order to check the constancy of our variables’ relationships. Second, as the variables were all measured at the same time, we cannot be sure that their relationships are constant. Although the survey questions occurred in reverse order of the analysis model to prevent additional issues, the existence of causal relationships between variables is a possibility.

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