

# 소셜네트워크서비스 피로감과 중단: 문화와 성별의 차이를 중심으로

## Social Networking Service Fatigue and Cessation: Focusing on Cultural and Gender Differences

최철환\*, 테라 마호니\*\*

경희대학교 체육학부\*, 뉴욕주립대학교 스포츠매니지먼트학과\*\*

Chulhwan Choi(chulhwan.choi@khu.ac.kr)\*, Tara Mahoney(tara.mahoney@cortland.edu)\*

### 요약

소셜네트워크 시스템(SNS)은 긍정적인 영향과 부정적인 영향을 동시에 주고 있으며, 사람들의 생활과 떼어 놓을 존재가 된 지 오래되었다. 본 연구에서는 서로 다른 문화권 남녀들의 SNS 피로감을 분석함과 동시에 그러한 피로감이 SNS를 중단하려는 의도와는 어떠한 관계가 있는지도 알아봤다. 연구결과, (a) 여성들이 SNS 활동으로 인한 상대적 박탈감과 평판 걱정, (b) 동양 문화권의 참여자들은 관계 부담, (c) 서양 문화권의 참여자들은 사생활 염려에 관한 피로감을 느끼고 있는 것으로 드러났다. 마지막으로 SNS 피로감과 중단 의도는 통계적인 유의한 관계가 없었으며, 이는 사람들이 피로감을 느낌에도 불구하고 SNS를 중단하고 싶은 마음은 없다는 것으로 해석된다. 이번 연구에서 문화와 성별이 SNS에 대한 사람들의 피로감에 영향을 준다는 것을 밝혔으며, 피로감에도 불구하고 일부의 사람들만이 SNS를 중단한다는 것이 드러났다.

■ 중심어 : | 중단 | 문화적 차이 | 성별차이 | 소셜네트워크 | 피로감 |

### Abstract

Social Networking Service (SNS) is a part of our daily lives, with their positive and negative impacts. This study investigates SNS fatigue in men and women of different cultural backgrounds as well as the relationship between SNS fatigue and the intentions to cease SNS activities. The study results show that during SNS activities, women are more concerned for their reputation; participants with East Asian cultural backgrounds experience burdens with respect to relationships, and participants with Western cultural backgrounds experience fatigue with respect to privacy concerns. No statistical significance was identified between SNS fatigue and the intentions to cease SNS activity; although people experienced fatigue, they did not desire to stop SNS use. This study reveals that culture and gender impacts SNS fatigue, and few people quit SNS despite the fatigue.

■ keyword : | Cessation | Cultural Differences | Gender Differences | SNS | Fatigue |

## I. Introduction

The integration of the Internet and advanced information technologies has led to the emergence of various online services such as

blogs, forums, messaging and chat platforms, and Social Networking Services(SNSs). SNSs offer many real-time communication channels, especially with the increase in smartphone and tablet PC users and the expansion of wireless

접수일자 : 2020년 05월 15일

수정일자 : 2020년 06월 09일

심사완료일 : 2020년 06월 09일

교신저자 : 최철환, e-mail : chulhwan.choi@khu.ac.kr

internet services[1]. In 2018, Hootsuite[2] reported that SNSs have more than three billion monthly users, with nearly one million new users joining each month. Within SNS space, Facebook continues to have the largest user base with over two billion active users[3], and there are almost 100 million Twitter accounts[4]. The prevalence and exponential growth of SNSs indicate the importance of these platforms in today's society.

### 1. Why do People Use SNS Sites?

In general, a SNS is a web-based service that helps people establish social relationships online and provides a space to share information and topics of interest[5]. According to Urista, Dong, and Day[6], the main motivation for SNS use is efficient communication with others through certain mediums. In other words, SNSs help share photos, texts, and videos in a virtual space, much like the physical space[7]. Other key motivations include passing time[8], taking part in a society, or building up a follower base[9]. Ultimately, SNS use is driven by the aforementioned benefits, as well as identity performance[10]. Another key benefit influencing SNS usage, is the diversity of platforms, many of which are segmented into national or cultural categories, providing differentiated service platforms to meet the diverse wants and needs of a global customer base[5].

### 2. SNS Fatigue

While there are many positive benefits that facilitate the increased usage of SNS globally, some have noted adverse effects. For instance, Lee[11] noted the public gaze and judgment from other people, information noise that may

occur during the process of sharing information or messages, spread of uncertain information, concern for leakage of personal information or invasion of privacy[12][13], and excessive interaction[14]. These negative aspects associated with SNS usage may lead some users toward SNS fatigue[12].

SNS fatigue refers to a SNS user's desire to discontinue consumption due to the amount of time required to keep up with participation (e.g., page views, information gathering, interaction with friends and acquaintances) on a variety of social platforms, which can also lead the users to feel overwhelmed[15]. In other words, SNS fatigue was defined as a state of mental agony, such as anxiety or stress, resulting from SNS use[16]. Ravindran et al.[13] reported that SNS fatigue increases as an individual gets further immersed in the SNS, and this type of stress may lead to temporary cessation of SNS activities or deletion of SNS accounts. Maier et al.[12] examined social support on SNS and found users giving too much social support to other users became exhausted, had low levels of user satisfaction, and began to decrease their consumption behaviors; all in line with previous studies regarding SNS fatigue.

Reports indicate that over 4 billion people are online for an average of 6 hours each day[2]. Since the emergence of SNSs, Facebook and Twitter have been the largest industry leaders, growing at an impressive rate[4]. Time spent on these SNSs is only second to time spent watching television[17]. This exponential growth rate in SNS warrants further exploration to better understand consumption behaviors as well as fatigue. The Limited Capacity Model (LCM)[18] was used as a framework to examine

SNS fatigue in the current study.

### 3. Limited Capacity Model(LCM)

The Limited Capacity Model(LCM) was developed as a way to interpret the information processing by mediated messages. The original focus of the model was to better understand the way consumers processed media consumption through televisions, however, this model has been adopted in various contexts to better understand new media consumption. The model posits three elements to information processing, (a) encoding, (b) storage, and (c) retrieval. Further research identifies the limited resources in terms of information processing, and also hypothesizes those factors(and others) influence a user's attitude, behavior and cognition[18].

The LCM developed by Lang[18] has been applied to analyze information overload from SNS, and refers to the mental saturation that may occur when a person's receptive capacity for information is exceeded[18]. SNS users have actually been found to experience fatigue as a result of mental overload[15]. Further, the persistent state of saturation leads to reduced performance[19]. Moreover, 24% of SNS users worldwide were found to have decreased their SNS use compared to when they first started, and the number of new SNS members decreased[20].

Industry insiders understand that, realistically, people lack the time to consume the endless stream of information produced on SNSs[17]. SNS fatigue stems from three reasons. First is a recently arising social issue; privacy concerns related to leakage of personal information that is registered in SNS accounts and can be easily exposed[21]. Second is the burden of having to maintain SNS accounts and information

overload; users' obligation to endlessly update or react to real-time information posted by friends becomes a disadvantage, rather than an advantage of social media[17]. Finally, SNSs can add to the mental stress of users that manifests in various forms such as comparative deprivation, burden from relationships, and preoccupation with reputation[22].

Previous research shows that these side-effects of SNS use lead to discontinuation of SNS activities[12]. Consequently, researchers found that fatigue and other psychological discord that occur through the use of a certain service or information technology had a significant impact on the intention to quit a SNS[12][23].

### 4. Gender/Cultural Differences in SNS Usage

SNS research has received much attention among social psychology researchers as a tool for understanding human behavior and emotions[15]. In particular, some researchers found gender differences in SNS use[24][25]. In general, there were more female SNS users than males[26], and females were also more avid SNS users[27]. In this respect, it was found that female users consistently update their photos, stories, or comments, demonstrating a higher need to express themselves than male users do[28]. More specifically, these authors argued that while females used SNSs to explore information or compare their lives with the lives of others, male users examined their acquaintances' profiles more to explore new friends and relationships. According to Muscanell and Guadagno's[29] research on Facebook users, males focused on establishing new relationships, while females utilized Facebook to maintain relationships with

existing friends. In contrast, Hargittai[30] found that while female users tended to use less SNSs than male users; they had a more diverse range of SNS accounts.

Moreover, Trepte and Masur[31] analyzed types of SNS use for five different countries(i.e., United States, England, Germany, Netherlands, China), and found that cultural differences greatly impacted user behavior and had a significant impact on the type of SNS use. Similarly, Lee et al.[15] found differences among usage intensity and behaviors of students SNS usage at Korean, Chinese and Malaysian universities. For instance, Malaysian students had the highest levels of SNS intensity of usage, whereas Koreans were more likely than the other two nations to use SNS to increase contact among friends and acquaintances. In addition, Barker and Ota[32] found that Japanese SNS users tended to share photos and talk with close friends, whereas American SNS users tended to express their feelings and emotions to a larger audience, beyond their close friends, on the networks. Lim[33] also published an interesting article stating that Japanese SNS users care a great deal about “what others think of me” while chatting with friends on SNS, whereas Americans SNS users do not concern themselves much with that. This can be seen as the manifestation of a nation’s cultural characteristics(e.g., individualism versus collectivism) in SNS use patterns. However, in a study covering Korea, China, and the United States, Ji, Hwangbo, Yi, Rau, Fang, and Ling[34] concluded that the national cultural differences do not significantly influence SNS use motivation.

## 5. Present Study

While many studies on SNSs confirmed that gender and cultural differences notably influenced psychological and behavioral factors, research results were not consistent in terms of gender and cultural differences. Therefore, the aim of this study is to further examine these concepts and potentially clarify inconsistencies found in prior research. Results of this study could assist sport managers to better understand their consumers and tailor social media management strategies to meet the needs of a diverse population of individuals based upon media consumption patterns, cultural backgrounds, and gender. Specifically, this study investigates the differences in social media fatigue and the intentions to quit SNS use among groups based on culture and gender; to explore the intentions that drive users to quit SNS use; and to examine the relationship between social media fatigue and the intentions to quit SNS use.

## II. Methodology

### 1. Procedure

A survey was conducted for approximately one month, starting in early October 2018 in areas populated by young adults in their 20s and 30s(main SNS user group). In Korea, the survey was conducted in two large shopping complexes in the southern region of the Gyeonggi Province. In the United States, the survey was conducted in one downtown area and two shopping complexes in a mid-sized city in the central eastern area. Before beginning the main part of the study, survey conductors with experience in administering surveys were hired and trained with respect to

the purpose, precautions, and procedures of the study. All participants voluntarily participated in a 15-minute survey after having had the purpose and the subject of the study explained to them; there were no monetary rewards for participation. Individuals who have never used SNS and minors were excluded from the study.

## 2. Participants

450 surveys were distributed, and 389 of them were returned (approximately 86.4% response rate). A total of 35 incomplete survey responses and 17 responses in which respondents had given ambiguous answers to questions about their cultural background, were excluded from the study. Finally, a total of 337 surveys were used as data for this study. Out of the 337 surveys collected for the study, 154 of the respondents were men (45.7%) and 183 were women (54.3%). Most respondents with East Asian cultural backgrounds ( $n = 175$ , 51.9%) were in their 20s ( $n = 82$ , 46.9%) or 30s ( $n = 56$ , 32.0%), followed by 40s ( $n = 27$ , 15.4%), and over 50s ( $n = 10$ , 5.7%). Majority of the respondents with Western cultural backgrounds ( $n = 162$ , 48.1%) were also in their 20s ( $n = 67$ , 41.4%) or 30s ( $n = 65$ , 40.1%), followed by 40s ( $n = 18$ , 11.1%), and over 50s ( $n = 12$ , 7.4%).

## 3. Measures

This study applied a revised version of the causes of SNS fatigue and cessation used in Lee[11]'s study. First, Lee's study used an in-depth group interview with 30 subjects aged between 20 and 50 in search of causes of SNS fatigue, eliciting 38 items. Further 177 subjects answered a survey created based on these questions; an exploratory factor analysis was used to eliminate 13 items with factor loadings

of less than 0.5. The resulting set of causes of SNS fatigue, comprising seven factors (25 items) also showed acceptable results of between .77 and .92 when measured in terms of Cronbach's alpha coefficient, an indicator of reliability [35].

In this study, the SNS fatigue causes identified by Lee[11] through the processes above were used, with the additional exclusion of two items with repetitions, giving a final set of six factors (23 items) as benchmarks for analyzing SNS fatigue. Detailed descriptions of each factor are as follows: (a) comparative deprivation (i.e., the sense of relative deprivation felt upon seeing posts in which other people look happy, 5 items), (b) burden of relationships (that of maintaining online relationships with people one does not want, 4 items), (c) burden of maintenance (that of managing SNS accounts with regular input such as uploading posts, 4 items), (d) privacy concerns (unwanted exposure of private life or leaking of personal information, 3 items), (e) information overload (that caused by excessive amounts of information or repeated exposure to similar posts, 3 items), and (f) reputation concerns (about how others will judge one's own posts, 4 items).

To analyze intention to quit SNS, we used the single factor (3 items) identified by Lee[11], in its original form without modification (e.g., I intend to quit SNS; Cronbach's alpha coefficient = .93). All questions in this survey were measured on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree).

## III. Results

### 1. Scale Validity and Reliability

In this study, confirmatory factor analysis was

performed in order to verify factor structure, based on criteria created in a previous study by Lee[11] to measure SNS fatigue and intention to quit. Confirmatory factor analysis verified seven factors: six related in SNS fatigue and one related to intention to quit. The value of all critical ratios from regression weights was greater than  $\pm 1.96$ . Further, standardized parameter estimates used to measure squared multiple correlations(SMCs), all yielded values of at least 0.4, showing the measurement variables to have good explanatory power. In the model fitness test, the comparative fit index(CFI), Tucker-Lewis index(TLI), root mean square residual(RMR), and root mean square error of approximation(RMSEA) were used. Results were  $CMIN = 405.479$ ,  $df = 278$ ,  $p = .000$ ,  $CMIN/df = 1.459$ ,  $CFI = .979$ ,  $TLI = .976$ ,  $RMR = .072$ , and  $RMSEA = .037$ . In this regard, it is a normal practice to refer to other indices of fitness when performing overall assessment of a model even if CMIN values, a reference to chi-square values, are rejected through chi-square verification[36]. In particular, if the CFI and TLI yield values of at least .90[37][38] and the RMSEA value is below .08, the model can be said to conform to these criteria[39]. The CFI and TLI in the current study exceeded the standard value of 0.90, and the RMR and RMSEA were 0.80 or less, which is an acceptable level.

Based on alphas for (a) comparative deprivation,  $\alpha = .833$ , (b) burden of relationships,  $\alpha = .932$ , (c) burden of maintenance,  $\alpha = .923$ , (d) privacy concerns,  $\alpha = .905$ , (e) information overload,  $\alpha = .905$ , (f) reputation concerns,  $\alpha = .937$ , and (g) intention to quit,  $\alpha = .914$ , all Cronbach's alphas showed acceptable internal consistency for reliability based on the .70 cutoff[35].

## 2. Factorial MANOVA for SNS Fatigue and Intentions to Discontinue SNS Usage

A 2 x 2 Factorial MANOVA was conducted to find the effects of the two independent variables, gender(i.e., male and female) and culture(i.e., eastern and western) on seven dependent variables (i.e., six factors of SNS fatigue and a factor of intention to quit) and the interaction between the two grouping variables(i.e., gender and culture) on SNS fatigue and the intentions to discontinue SNS use. To ensure that there are no significant differences in variability between groups, Box's Test of Equality of Covariance Matrices was performed. Given that the result(Box's  $M = 98.968$ ,  $F = 1.134$ ,  $p = .189$ ) was not statistically significant, meeting the homogeneity of variance-covariance assumption, this study proceeded with the analysis.

First, the Wilks' lambda multivariate F statistic for the main effect of gender on the dependent variables was statistically significant [Wilks' lambda = .724,  $F(7, 327) = 17.837$ ,  $p = .000$ ]. Based on the statistically significant results of the multivariate analysis, the univariate tests for comparative deprivation,  $F(1, 333) = 73.798$ ,  $p = .000$ , and reputation concerns,  $F(1, 333) = 52.235$ ,  $p = .000$ , based on gender(i.e., male and female) were found to be statistically significant. Applying mean scores on the results, female participants experienced SNS fatigue regarding comparative deprivation( $M = 4.204$  for female and  $M = 3.256$  for male) and reputation concerns( $M = 4.333$  for female and  $M = 3.313$  for male) more than males.

The second main effect of culture on dependent variables was also statistically significant [Wilks' lambda = .747,  $F(7, 327) = 15.817$ ,  $p = .000$ ]. Based on the statistically

significant results of the multivariate analysis, the univariate tests found there were statistically significant differences on the burden of relationships,  $F(1, 333) = 46.885, p = .000$  and privacy concerns,  $F(1, 333) = 55.809, p = .000$ , depending on culture(i.e., Western and Eastern cultures). Specifically, based on the mean scores of each variable, while participants with Eastern cultural backgrounds felt relatively more burden of relationships( $M = 4.181$  for eastern and  $M = 3.168$  for western), participants with Western cultural backgrounds experienced relatively more privacy concerns( $M = 3.189$  for eastern and  $M = 4.286$  for western). Lastly, the results indicated no statistically significant differences for the two-way interaction: gender and culture[Wilks' lambda = .975,  $F(7, 327) = 1.181, p = .313$ ]. Detailed psychometric information of the results from this Factorial MANOVA has been described in [Table 1]. Additionally, all mean scores of variables by the groups have been reported in [Table 2].

표 1. Results of MANOVA

Source	Dependent variables	df	F	p
Gender	comparative deprivation	1	73.798	.000*
	burden of relationships	1	.020	.887
	burden of maintenance	1	.148	.701
	privacy concerns	1	.045	.832
	reputation concerns	1	52.235	.000*
	information overload	1	.004	.951
	intention to quit	1	.044	.834
	Culture	comparative deprivation	1	.773
burden of relationships		1	46.885	.000*
burden of maintenance		1	1.344	.247
privacy concerns		1	55.809	.000*
reputation concerns		1	1.811	.179
information overload		1	3.678	.056
intention to quit		1	.717	.398
Gender * Culture		comparative deprivation	1	.979
	burden of relationships	1	1.005	.317
	burden of maintenance	1	.595	.441
	privacy concerns	1	3.597	.059
	reputation concerns	1	.053	.819
	information overload	1	2.642	.105
	intention to quit	1	.230	.632

\*p<.05

표 2. Mean scores of variables between groups

		CD	BR	BM	PC	RC	IO	IQ
Gender	M	<b>3.26</b>	3.68	2.99	3.69	<b>3.31</b>	3.48	3.18
	F	<b>4.20</b>	3.71	2.95	3.74	<b>4.33</b>	3.50	3.16
Culture	E	3.82	<b>4.18</b>	3.05	<b>3.19</b>	3.77	3.35	3.11
	W	3.72	<b>3.17</b>	2.88	<b>4.29</b>	3.97	3.63	3.23

Note. M = Male, F = Female; E = Eastern, W = Western; CD = Comparative Deprivation, BR = Burden of Relationships, BM = Burden of Maintenance, PC = Privacy Concerns, RC = Reputation Concerns, IO = Information Overload, IQ = intention to quit; Statistically significant higher mean scores among groups are in bold.

3. Multiple Regression

To predict intentions to quit from the six other sub-scales, a multiple regression was performed. The results of the multiple regression analysis showed that the results of the regression model were not statistically significant( $F = .512, p > .05$ ). Specifically, results for factors were: a) comparative deprivation,  $t = .879, p = .380$ , (b) burden of relationships,  $t = -.442, p = .659$ , (c) burden of maintenance,  $t = -.820, p = .413$ , (d) privacy concerns,  $t = .943, p = .346$ , (e) information overload,  $t = -.818, p = .414$ , and (f) reputation concerns,  $t = -.141, p = .888$ .

4. Correlations with each of SNS Fatigue sub-scales with intentions to discontinue SNS

To find correlations of each SNS fatigue with intentions to quit SNS use, A multiple correlation analysis was performed to determine the relationship between SNS fatigue and the intentions to discontinue SNS use. The result showed a statistically non-significant relationship between the variables[ $R = .103, R^2 = .011, F(6, 347) = .618, p = .716$ ].

#### IV. Discussion

This study is conducted in a situation where social networking service (SNS), which achieved rapid growth with the popularization of the internet and smartphones, has now become saturated and is evoking psychological fatigue in users. It is true that the advancement of the information and communications technologies has provided people with satisfaction while eliminating countless real-world constraints based on convenience, speed (or immediacy), and expandability. However, the factors that had once been considered the advantages of the internet turned into disadvantages owing to the expanded social relations and unlimited information caused by an excessive use of SNS. In addition, this study enables more concrete analysis by adopting Eastern and Western cultures[40] and males and females[41] with different perceptions on the key variable-private territory. The results of this study are expected to provide critical data on how the culture of SNS, which may face rapid changes in the future, will progress or decline.

Among factors that caused SNS fatigue in users of this study, there were significant differences in comparative deprivation and reputation concerns based on gender, with females indicating higher levels of fatigue than their male counterparts. These results are in line with the results of existing research. First, in the case of female SNS users, the findings by Haferkamp et al.[28] that females compare themselves with others on SNS are closely related to how female users experience fatigue resulting from comparative deprivation and reputational risk, as found in this research. These two factors can be interpreted as follows:

as one compares her image on SNS with others', one's emotions about the SNS activity of others manifest as fatigue resulting from comparative deprivation. Moreover, the evaluations of one's SNS activity by others manifests as fatigue resulting from reputational risk.

As young women in both Western and Asian countries have become more educated and economically active, women have been exercising great power across all markets, such as fashion, media, restaurant, performances, and travel, as major independent economic entities[42]. While such products offer functional benefits, this type of consumer mindset comes from the symbolic desire to be distinguished in terms of social position and class, and to find one's identity[43]. Snapchat is a SNS platform established in 2011, and based on the fact that 70% of its users are females[17], females are more active in posting photos of their travels, shopping, or dining experiences on SNSs than males and have a "competitive motivation" to show off to other people.

Based on the context, by comparing their lives to others' on SNS, it can be assumed that they experience comparative deprivation. Jin and Noh[44] reported that not only do women place more importance on their friends' reactions to their SNS posts than men, they also think more about how they should react to something that was posted by their friends and acquaintances. It follows that women experience more fatigue through other people's judgments regarding their SNS posts than men.

This study found significant differences in burden of relationships and privacy concerns based on cultural backgrounds, rather than the preferential differences between men and women. Hofstede[45] argued that Asian cultures,



including Korean culture that is influenced by Confucianism, have a collectivist mindset, while countries with a Western culture, such as the United States, have a more individualistic mindset. Those living in a collectivist culture tend to share more with members of the group[46], while those from an individualistic culture clearly differentiate personal and public domains and are averse to things that invade their personal lives[47].

Based on the above cultural difference, for someone with an East Asian cultural background, frequently sharing information on SNS with those with whom they are not very close may have served as a form of burden. Further, because people with an individualistic Western cultural background are strongly averse to the invasion of their personal space, they have been found to experience more SNS fatigue than their East Asian counterparts. This study holds significance in that it revealed how cultural differences, meaning the collectivist mindset of Asian culture and the individualistic tendencies of Western culture, have a significant impact on how people use SNS.

Finally, this study was unable to find a significant difference in the intentions to quit SNS use based on cultural or gender differences. Further, the more surprising fact is that no significant relationship was found between SNS fatigue and the intentions to quit. To elaborate, for the factors used in this study, the intentions to quit SNS use showed a very low relative average value, which means that people have no desire to quit using SNSs despite the various fatigue factors they may experience during usage. Up until just a few years ago, SNS was limited in that it could only be accessed in a specific area with a computer.

However, with the popularization of smartphones, tablet PCs, and wireless internet, it has become easily accessible[1]. Madden and Zickhur[1] argued that many people use SNSs due to the combination of their desire to establish relationships with others and to communicate with them in real-time. However, according to a survey from Sickfacebook[48], close to 50% of users of Facebook, Twitter, and other SNS platforms (350 million) show symptoms of addiction, where they experience serious psychological isolation, a sense of disconnection, and anxiety when they have not used SNSs. Although the results of these preceding studies demonstrate that many people experience SNS fatigue, the present study finds considerable implications that this fatigue does not immediately or easily lead to quitting SNS use entirely, because people are unable to overcome social trends and withdrawal symptoms.

In conclusion, SNSs are convenient and innovative networks for sharing, with many positive elements, but this study has revealed that many are experiencing mental fatigue as a result of SNS use. An important point is that there are significant differences in SNS fatigue in terms of the characteristics of SNS users(i.e., culture, gender). However, this study showed that SNS users are surprisingly unable to simply quit SNS activities in spite of their fatigue. This phenomenon is called "Facebook Twitter Addiction Disorder(FTAD)," where excessive SNS usage causes depression, exhaustion, anxiety, suppression, and other psychological confusion. The more problematic issue is that since individuals who are addicted to SNSs find it hard to quit SNS activities on their own, it is important to consider their own efforts to form

positive personal relationships in both the virtual and the real world.

## V. Conclusion and Limitations

This study on SNSs, a topic that has received much attention in recent times, sought to understand human psychological characteristics or behaviors that are difficult to explain. It is significant, because it avoided the variables used by many existing studies, such as SNS use motivation, satisfaction, engagement, emotional attachment, and synchronization; instead, it analyzed Eastern and Western nations comparatively, to understand the differences in gender and culture that could influence SNS fatigue and the intentions to discontinue SNS use.

Recommendations that surfaced in this study can be classified as follows. First, a cross-sectional design approach should study participants with different characteristics at a certain point in time. Studies applying this approach have difficulties in explaining changes to participant characteristics over time and in understanding the deep causal relationships between variables[49]. As such, it is necessary for future studies to conduct in-depth research using longitudinal studies.

Second, this study focused on the cultures that influenced the participants, rather than the region or country in which the participants resided. A limitation of this study was that the diverse range of races and cultures made it impossible to pinpoint the general characteristics of respondents. To minimize this limitation, prior to completing the survey, participants were provided with verbal

explanations of the purpose and the subject of the study, and asked to identify their own cultural area. For a more sophisticated approach, future studies should reflect other more specific variables, such as the ethnicity or place of birth of participants.

Lastly, while there are many factors that may have significant relationships with SNS fatigue and the intentions to discontinue SNS use, this study was not able to include all such factors. For example, factors such as time spent on SNSs, frequency, term, and number of SNS accounts may be necessary for a more sophisticated study design. More meaningful results could be derived from future studies that include more variables.

## 참고 문헌

- [1] <http://www.pewinternet.org/~media/Files/Reports/2011/PIP-sns-Update-2011.pdf>
- [2] <https://wearesocial.com/uk/blog/2018/01/global-digital-report-2018>
- [3] <https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>
- [4] <https://searchengineland.com/live-blog-twitter-ceo-dick-costolos-informal-business-address-92207>
- [5] D. M. Boyd and N. B. Ellison, "Social network sites: Definition, history, and scholarship," *J. of Computer-Mediated Communication*, Vol.13, No.1, pp.210-230, 2007.
- [6] M. Urista, Q. Dong, and K. Day, "Explaining why young adults use My Space and Facebook through uses and gratifications theory," *J. of Human Communication*, Vol.12, No.2, pp.215-230, 2009.
- [7] <https://ascilite.org/conferences/singapore07/p>

- rocs/mcloughlin.pdf
- [8] [http://fredstutzman.com.s3.amazonaws.com/papers/IDMA2006\\_Stutzman.pdf](http://fredstutzman.com.s3.amazonaws.com/papers/IDMA2006_Stutzman.pdf)
- [9] <https://dl.acm.org/doi/pdf/10.1145/1348549.1348556>
- [10] N. B. Ellison., C. Steinfield, and C. Lampe, "The benefits of Facebook "friends": Social capital and college students' use of online social network sites," *J. of Computer-Mediated Communication*, Vol.12, pp.1142-1168, 2007.
- [11] E. Lee, "The antecedents of SNS fatigue: Influences on intention to continuous usage and discontinuing intention," *J. of Korean HCI*, Vol.13, No.2, pp.21-29, 2018.
- [12] C. Maier, S. Laumer, A. Eckhardt, and T. Weitzel, "Giving too much social support: Social overload on social networking sites," *European J. of Information Systems*, Vol.24, No.5, pp.447-464, 2015.
- [13] T. Ravindran, A. C. Y. Kuan, and D. G. H. Lian, "Antecedents and effects of social network fatigue," *J. of the Association for Information Science and Technology*, Vol.65, No.11, pp.2306-2320, 2014.
- [14] H. J. Oh, E. Ozkaya, and R. LaRose, "How does online social networking enhance life satisfaction? The relationships among online supportive interaction, affect, perceived social support, sense of community, and life satisfaction," *Computers in Human Behavior*, Vol.30, pp.69-78, 2014.
- [15] A. R. Lee, S. M. Son, and K. K. Kim, "Information and communication technology overload and social networking service fatigue: A stress perspective," *Computers in Human Behavior*, Vol.55, pp.51-61, 2016.
- [16] T. Yamakami, "Towards understanding SNS fatigue: Exploration of social in the virtual world," *Computing and Convergence Technology (ICCCT) 2012 7th International Conference on*, pp.290-294, 2012.
- [17] L. F. Bright, S. B. Kleiser, and S. L. Grau, "Too much Facebook? An exploratory examination of social media fatigue," *Computers in Human Behavior*, Vol.44, pp.148-155, 2015.
- [18] A. Lang, "The limited capacity model of mediated message processing," *J. of Communication*, Vol.50, No.1, pp.46-70, 2000.
- [19] G. Hunter, "Information overload: Guidance for identifying when scales information becomes detrimental to sales force performance," *Management*, Vol.24, No.2, pp.91-100, 2004.
- [20] <http://www.gartner.com/newsroom/id/1766814>
- [21] A. Karahasanovic, P. B. Brandtzaeg, J. Vanattenhoven, B. Lievens, T. K. Nielsen, and J. Pierson, "Ensuring etiquette, trust, and privacy when developing web 2.0 applications," *IEEE Computer*, Vol.42, No.6, pp.42-49, 2009.
- [22] <http://dx.doi.org/10.2139/ssrn.2771042>
- [23] <https://www.pewresearch.org/internet/2013/02/05/coming-and-going-on-facebook/>
- [24] <http://webapps.roanoke.edu/businessweb/SEI/NFORMS%202012%20-%20Proceedings/proc/p120503002.pdf>
- [25] S. Okazaki, "Exploring gender effects in a mobile advertising context: On the evaluation of trust, Attitudes, and Recall," *Sex Roles*, Vol.57, No.11/12, pp.897-908, 2007.
- [26] A. Acquisti and R. Gross, "Imagined communities: Awareness, information sharing, and privacy on Facebook," *Privacy Enhancing Technologies*, pp.36-58, 2006.
- [27] <http://www.pewresearch.org/fact-tank/2015/08/28/men-catch-up-with-women-on-overall-social-media-use/>
- [28] N. Haferkamp, S. C. Eimler, A. M. Papadakis, and J. V. Kruck, "Men are from Mars, women are from Venus? Examining gender differences in self-presentation on social networking sites," *Cyberpsychology, Behavior, and Social Networking*, Vol.15, No.2, pp.91-98, 2012.

- [29] N. L. Muscanell and R. E. Guadagno, "Make new friends or keep the old: Gender and personality differences in social networking use," *Computers in Human Behavior*, Vol.28, No.1, pp.107-112, 2012.
- [30] E. Hargittai, "Whose space? Differences among users and non-users of social network sites," *J. of Computer-Mediated Communication*, Vol.13, No.1, pp.276-296, 2007.
- [31] S. Trepte and P. K. Masur, "Cultural differences in media use, privacy, and self-disclosure: Research report on a multicultural survey study," p.88, University of Hohenheim, 2016.
- [32] V. Barker and H. Ota, "Mixi diary versus Facebook photos: Social networking site use among Japanese and Caucasian American females," *J. of Intercultural Communication Research*, Vol.40, No.1, pp.39-63, 2011.
- [33] T. Lim, Face in the holistic and relativistic society, In M. Haugh and F. Bargiela-Chiappini, *Face, Communication and Social Interaction*, Equinox, pp.250-268, 2009.
- [34] Y. G. Ji, H. Hwangbo, J. S. Yi, P. L. Rau, X. Fabg, and C. Ling, "The influence of cultural differences on the use of social network services and the formation of social capital," *International J. of Human-Computer Interaction*, Vol.26, No.11-12, pp.1100-1121, 2010.
- [35] J. C. Nunnally and I. H. Bernstein, *Psychometric theory*, McGraw-Hill, 1994.
- [36] J. J. Song, *SPSS/AMOS statistical analysis method*, 21c Book, 2015.
- [37] S. H. Hong, "The criteria for selecting appropriate fit indices in structural equation modeling and their rationales," *Korean J. of Clinical Psychology*, Vol.19, No.1, pp.161-177, 2000.
- [38] P. M. Bentler, "Comparative fit indexes in structural models," *Psychological Bulletin*, Vol.107, pp.238-246, 1990.
- [39] M. W. Browne and R. Cudeck, "Alternative ways of assessing model fit," *Sociological Methods & Research*, Vol.21, No.2, pp.230-258, 1992.
- [40] S. E. Cho and H. W. Park, "A qualitative analysis of cross-cultural new media research: SNS use in Asia and the West," *Quality and Quantity*, Vol.47, pp.2319-2330, 2013.
- [41] H. Krasnova, N. F. Veltri, N. Eling, and P. Buxmann, "Why men and women continue to use social networking sites: The role of gender differences," *The J. of Strategic Information Systems*, Vol.26, pp.261-284, 2017.
- [42] H. J. Mo, "Fabulous single and doenjangnyo: The politics of consumption of single career women with advanced degrees in their 20s and 30s," *Social Research*, Vol.15, pp.41-67, 2008.
- [43] F. Kressmann, M. J. Sirgy, A. Herrmann, F. Huber, and D. J. Lee, "Direct and indirect effects of self-image congruence on brand loyalty," *J. of Business Research*, Vol.59, pp.955-964, 2006.
- [44] B. R. Jin and H. J. Noh, "Self-disclosure tendency, Facebook activities, and relational usefulness: Sex differences in young adults," *The Korea Contents Society*, Vol.15, No.7, pp.449-459, 2015.
- [45] G. Hofstede, *Culture's consequences: International differences in work-related values*, Sage, 1980.
- [46] J. A. Wagner and M. K. Moch, "Individualism-collectivism: Concept and measure," *Group and Organizational Studies*, Vol.11, pp.280-303, 1986.
- [47] J. Weintraub and K. Kumar, "Public and private in thought and practice: Perspectives on a grand dichotomy," *Contemporary Sociology*, Vol.27, No.4, pp.401-402, 1997.
- [48] <http://sickfacebook.com/350million-people->

suffering-facebook-addiction-disorder-fad/  
[49] J. R. Fraenkel, N. E. Wallen, and H. H. Hyun, *How to design and evaluate research in education*, McGraw-Hill, 2011.

저 자 소 개

최 철 환(Chulhwan Choi)

정회원



- 2010년 5월 : 뉴욕주립대학(체육학 석사)
- 2016년 5월 : 루이빌대학(체육학 박사)
- 2018년 3월 ~ 현재 : 경희대학교 강사

〈관심분야〉 : 소비자 심리, 스포츠 경영

테라 마호니(Tara Mahoney)

정회원



- 2007년 5월 : 웨스트버지니아 웨슬리안대학(경영학 석사)
- 2013년 5월 : 루이빌대학(체육학 박사)
- 2013년 8월 ~ 현재 : 뉴욕주립대학 교수

〈관심분야〉 : 소셜 미디어, 스포츠 참여