

## **The construction of the socially networked public: rethinking digital inequality in the social Web era.**

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### *Abstract*

The flourishing of Social Network Sites (SNSs) is based on the development of the Web and its mobile extension. The online social network that SNSs represent is a mechanism that enhances users' interaction, information exchange and social networking. SNSs are now one of the major activities on which Internet users spend their time online. This study addresses SNS usage by focusing on who SNS users are, the extent to which users participate and how they differ in terms of usage. Using the data composed of 1,000 samples, gathered from an online survey carried out during September 2011, we find the evidence of the influence of age (negative), the number of offline social acquaintances (positive) and the number of subscribed online communities (positive). However, after controlling for the five major 'leisure activities' variables, the age effect disappeared. Among five different categories of offline leisure activities, the social and cultural activities were to shape SNS use. The more cultural and social activities a respondent engages in during his or her free time, the higher the probability that he or she uses SNS. This tendency would be reinforced when the involved SNS most likely enhances social interactions between closely associated people to a greater extent than between strangers. From this analysis, we find that the online social network is closely related to the offline cultural and social capital and that the online social network strongly compensates rather than substitutes for cultural and social capital.

*Keywords:* Social Network Site, cultural capital, social capital, digital inequality

### **1. Introduction**

The flourishing of Social Network Sites (SNS) is based on the development of the Web and its mobile extension. Boyd and Ellison (2007) defined SNSs as Web-based services that allow individuals (i) to construct a public or semi-public profile within a bounded system, (ii) to articulate a list of other users with whom they share a connection, and (iii) to view and traverse their list of connections and those made by others within the system. Sites such as Twitter, Facebook, and Flickr make it possible for individuals to generate open or semi-open profiles and show visitors a list of connected persons. In fact, the online social network that SNSs represent par excellence is a mechanism that enhances users' interaction, information exchange and social networking (Papacharissi, 2010). SNSs are now one of the major activities on which Internet users spend their time online. This study addresses SNS usage by focusing on who SNS users are, the extent to which users participate and how they differ in terms of usage.

In Korean society, during the last ten years, SNSs that were once integrated on Portal sites such as Naver,

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Daum and Nate have changed with the widespread use of smartphones and the mobile Internet. The massive penetration of global SNSs such as Twitter and Facebook in the “Korean Web” is an astonishing phenomenon. According to the “Social Trend 2011 in Korea” report that was published by the National Statistics Agency in February 2011, the number of Korean Twitter accounts reached 5.44 millions and the number of Facebook accounts was 5.36 millions. Twitter users grew from 0.63 million by a factor of 8.6 over one and a half years. Older generations who have not actively used the Internet as a tool of self-expression have finally logged in to SNSs.

Twitter is of primary importance in attracting mass media attention because its users are considerable not in terms of volume but influence. Celebrities, including writers, scholars, journalists and entertainers, generate innumerable tweets and retweets and are involved in socio-political debates, such as those during the serial election campaign period in 2011. Supporters for the opposing party participated in social voting to mobilize the voters because the younger generation’s vote was seen as favorable for the victory of the opposing party in the election. They tried to canvass for “votes” by uploading self-portrait photography called “vote-certifying photos” that shows one’s picture taken near the polling station. The National Election Commission’s endorsement that this type of activity is not illegal makes this collective action vital.

This study addresses the digital inequality question related to online social participation mediated by SNSs. In this paper, we will discuss how the digital inequality phenomenon changed after the SNS revolution. This exploratory study, which notes a new socio-cultural dimension of social networks that have expanded through SNSs, tries to clarify which factors influence SNS use and their implication for digital inequality.

To accomplish these goals, we will first briefly describe the evolution of the Web, the theoretical background of SNSs studies and their implications for digital inequality. Second, we will attempt to find some variables determining the SNS use, including the socio-demographic ones and the variables representing the different features of leisure activities. This analysis is based on an online survey administered to a sample of 1,000 Internet users in September 2011. Third, we will discuss how it is possible to identify a new type of social integration and how to build solidarity in the Network Society (Van Dijk, 2006a).

## 2. Theoretical background

### 2.1 The rule of the social Web

The metamorphosis of the Web is witnessed in many aspects as the principle of Web 2.0 becomes dominant. The World Wide Web is defined as an Internet client-server communication system for retrieving and displaying multi-media hypertext documents (Berners-LEE et al. 1994). However, the Web is mostly regarded as a social phenomenon where a variety of communication is exchanged (Crowston & Williams, 1997). To cite Bruno Latour’s term, the social Web is a type of “*agencement sociotechnique*” (Latour, 1994).

The Web has evolved as a channel of communication through which an increasing number of people exchange real-time information and content without physical constraint. In the past, the Web was characterized by hyperlinks and hierarchical networks structured as directories. The Web became dynamized after the advent of the Web 2.0, which is described as a second-generation, more personalized and communicative form of the World Wide Web that emphasizes active participation, connectivity, collaboration and sharing of knowledge and ideas among users.

The social Web is the third trend in the evolution of the Web in which users are definitively key players and participants’ activeness is a barometer of the success of a site. This revolutionary change directly impacts the

traditional media field, as we have witnessed for the past ten years. Old media such as TV broadcasting corporations, radio, and newspapers have lost their devoted subscribers, listeners and viewers and have faced the decline of both advertising revenue and the popular attention that was once reserved for them.

At first glance, social media appears to be an extension of personal media such as blogs. However, one of the salient characteristics of social media is the fact that the social networks are observable by others and that a friend of a friend is more likely to be a new friend than other individuals.

With Web 2.0, platforms and applications that enhance online social networking were developed. As a consequence, SNS ceased to be a simple tool of social intercourse or collective communication and evolved into a platform on which alternative press, social commerce, social voting and socio-cultural activities could fully manifest (Millerand, Proux, and Rueff, 2010). This transformation of the Web shows its future orientation based on users' participation, cooperation and collective intelligence. The social Web is based on minimal architecture that does not hinder users' voluntary involvement and the synchronized participation of the masses. Scalability now rules the SNS business because the reach of social media is, by definition, infinite from the perspective of the Web.

## 2.2 Digital inequality in the age of Social Media

In the first stage of the Information Society, a number of studies were dedicated to the feasibility of "information democracy" because it was broadly accepted that the purpose of the Information and Communication Technology (ICT) was the relatively "even distribution of information". However, shortly after widespread broadband penetration, the problem of the "digital divide" emerged, and its multi-dimensional aspects drew researchers' attention. There is a large volume of literature on the reproduction of inequality that exists offline in an online version: "digital inequality". The popular topic of research on the digital divide was based on the dichotomy between access-haves and have-nots (DiMaggio & Hargittai, 2001). Researchers have attempted to clarify how Internet use might be related to socio-economic status (DiMaggio et al., 2003). However, 'digital inequality' turns out to be a more sophisticated and perplex concept explaining multiple dimension of digital divide (Van Dijk, 2006b). It is theoretically premised that the use gap has become more important, while the digital divide has turned into more complex phenomena. As the level of Internet use could vary depending on the benefit expectancy of Internet use due to the use and gratification theory, we witness the 'digital differentiation' rather than the digital divide between users and non-users (Seo & Lee, 2006).

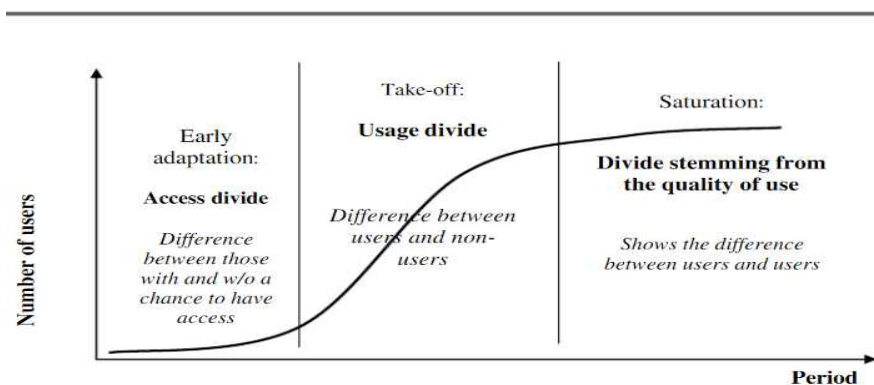
As the information society progresses, researchers have begun to identify other determinants of digital inequality. For example, Hargittai and Shafer (2006) studied the role of gender in differences in online skills. After analyzing a data set, they concluded that women's self-assessed skill is significantly lower than that of men's, whereas men and women do not actually differ greatly in their active abilities.

As we see in the figure 1, the theoretical advance in the Molinár's study (2003) notes that the digital divide is a constantly transforming issue that does not exemplify the picture of a static divide at all. Therefore, it requires multifaceted analysis and cannot be reduced to a bipolar accessibility/inaccessibility or a user/non-user issue. As we see in Figure 1, Molinár notes that the problem of the digital divide will not even be eliminated in the social saturation stage of the ICT tools.

In the social media-dominated Internet environment, the problem of digital inequality is transformed as people's attention becomes the source of value. Researchers of SNSs have focused on the characteristics of their users. The characteristics of users, motivations and degree of satisfaction were the main focus of early researchers. For example, Lamp, Ellison and Steinfield analyzed popular SNS use and social capital building. Che Alhadi et al. (2011) conducted online surveys to determine why people use Twitter. Participants were asked

about their purposes in using Twitter, including both reading and writing tweets. They provided five purposes as an example. Participants were allowed to select more than one purpose and to provide their own purposes under “others”. As a result, the data were manually analyzed and classified to identify the categories of users’ purposes and organized to build the taxonomy. Finally, their analysis revealed 8 major categories for microblogging as follows: i) Social interaction with people, ii) Promotion or marketing, iii) Sharing resources, iv) Giving or requiring feedback, v) Broadcasting alerts/urgent information, vi) Requiring/raising funding, vii) Recruiting workers, and viii) Expressing emotions. This study shows us that SNS users’ motivations are largely social and cultural at the same time.

Figure 1. The explanation frame of the digital divide (Molnár, 2003)



[http://www.academia.edu/1308255/The\\_explanation\\_frame\\_of\\_the\\_digital\\_divide](http://www.academia.edu/1308255/The_explanation_frame_of_the_digital_divide), retrieved 2012-11-02.

Still, Huberman, Romero and Wu (2009) argue that the perspectives of scholars, advertisers and political activists that view online social networks as an opportunity to study the propagation of ideas, the formation of social bonds and viral marketing are nuanced. They note the existence of two different networks in Twitter: a very dense one comprised of followers and followees and a sparser and simpler network of actual friends. The latter proves to be a more influential network in driving Twitter usage because users with many actual friends tend to post more updates than users with few actual friends. We are aware that the digital inequality problem can be extensible, if not reinforced, in the socially networked cyberspace given that friends offline could change the quality of the social network online.

Ahn’s study (2011) enticed us to conduct a survey on the relationship between the digital inequality and the cultural and social factor. His study of students’ participation in SNSs utilizes a nationally representative survey from the Pew Internet & American Life Project. He uses binary logistic regression to examine the relationship between social, demographic and technology variables with youth participation in social network sites. The results suggest that traditional divide indicators such as Internet access or parents’ education are not significant predictors of SNS use. Youth appear to find a way to connect. He concluded that a deeper understanding of the social and cultural factors that are related to participation in social technologies is needed for larger populations.

### 2.3 Cultural capital online

Previous research on cultural capital has been mostly focused on offline cultural practices. Bourdieu(1979)

emphasizes that the social position a person occupies during his or her childhood has a major if not determining impact on cultural preference. The digitization of cultural products and the rapid diffusion of broadband networks and personal digital devices make it possible for individuals to enjoy their cultural life online. Of course, we do not intend to promote technological determinism by proclaiming that ICT produces changes in the cultural field by itself. However, as a cultural technology, ICT should be seriously considered as one of the most important factors affecting the patterns of cultural practices that are familiar to older generations. In a society where cultural socialization is a matter of institutionalization, the cultural capital is transferred vertically from generation to generation. Observing user behavior in P2P networks, we witness that ICT makes possible a type of horizontal transfer of cultural capital among Internet users by minimizing the costs of cultural products.

The fact that the Internet has become a significant mediator and accelerator for cultural socialization suggests that to understand the reproduction of cultural capital, we should take into consideration the effect of this technological change on cultural practices in general. Unfortunately, however, despite a large number of studies on the diffusion of the Internet and its effects on society, only a few are dedicated to the cultural use of the Internet. Therefore, much work remains to be done in this field (Emmison & Frow, 1998).

It has been said that the Internet has an affinity for mass culture rather than high culture. For example, online communities and SNSs have become of interest for public relations agents in the entertainment industry, whereas classical music and arts galleries seem to be less interested in this type of promotion. Along the same lines, Internet users who are highbrow in terms of cultural capital and use the SNSs to communicate with their peer group tend to remain within their own niches.

The sociology of culture focuses on the role that culture plays in the consolidation of the hierarchical structure of social strata in a given society (Bourdieu and Passeron, 1970). To understand why social stratification is maintained through cultural distinction, Bourdieu and his colleagues tried to elucidate the mechanism through which the cultural preference that distinguishes one social group from others is reproduced.

With regard to cultural capital in the digital age, we can ask whether the use of the Internet attenuates the uneven distribution of cultural capital. This question is related to the debate about the “democratization of culture” and/or “cultural democracy”. On one hand, democratization indicates the gratuitous offering of culture, that is, the culture-friendly environment in which budget constraints converge to zero and neither social nor physical barriers exist for all people to fully enjoy culture. On the other hand, democratization means that minority cultures challenge the hegemony of the legitimized culture.

With the advent of the digital age, most digital optimists have foreseen the democratization of culture based on the conversion of cultural products into digitized content. This paper tries to determine whether the Internet contributes to the development of the democratization of culture as the optimists suggest or, on the contrary, whether it leads to the fractioning of social groups according to preference. Data analysis using the 2007 Korean General Social Survey (KGSS) shows that the embodied cultural capital online broadly influences cultural activities online, and it seems to be premature to conclude that the Internet may solve the problem of cultural inequality (Seo & Lee, 2010).

We assume that users bring their own tastes, preferences, lifestyle, habits, and political disposition when they go online. It is important to consider users as communicators and audiences as well as intermediaries. Not satisfied to remain passive receivers, they become active speakers expressing themselves. Particularly on SNSs, it is easier to create a message and share emotions by clicking “retweet” or “like”. The purpose of this study is to provide the statistical explanation about the influence of cultural preferences defined as main leisure activities on SNS use as well as to test hypotheses as follow.

### 3. Hypothesis

Considering the theoretical background and recent research on social media, we attempt to test the following hypotheses:

H1. age is the dominant variable that largely explains SNS usage.

H2. the number of offline social acquaintances influences SNS activities.

H3. the number of online communities that the respondent frequents has a positive effect on SNS use.

H4. the “level of education” variable is divided into “College and over” and “high school and under”. Individuals in the “College and over” category are expected to use SNSs to a greater extent than individuals in the “high school and under” category.

H5. what people are engaged in during their leisure time influences their SNS use. If the proportion of cultural or social activities that someone is engaged in is relatively large, he or she would spend more time on SNSs.

### 4. Data and variables

#### 4.1 Data

We carried out an online survey during a 12-day period (September 19 ~ 30, 2011). During the first stage, we defined the Internet user as a person who resides in Korea, uses the Internet more than once a month and is between the ages of 15 and 59. A multi-stage stratified sampling method was applied to select the respondents. We intentionally limited age groups to focus on relatively active users of SNSs. The sample size was 1,000, and the socio-demographic characteristics are summarized in Table 1.

Table 1. Socio-demographic characteristics of respondents

		(%)
		Internet users (N=1,000)
Gender	Male	53.4
	Female	46.6
Age	15 ~ 19	11.6
	20 ~ 29	23.3
	30 ~ 39	27.4
	40 ~ 49	25.0
	50 ~ 59	12.7
Occupation	Self-employed	7.0
	Office worker, technical worker	36.7
	Management	2.7
	Professional	5.3

		Internet users (N=1,000)
Occupation	Technical service/skilled worker/manual worker	3.9
	Salesman, service	5.0
	Housewife	12.9
	Student	26.0
	Agriculture, forestry/fishery/etc.	0.5
Level of education	Under middle school	2.0
	High school	23.4
	Bachelor	66.1
	Graduate or higher	8.5
Monthly income per household	les than 2 Million KRW	17.9
	2 ~ 3 Million KRW	23.6
	3 ~ 4 Million KRW	20.8
	4 ~ 5 Million KRW	16.6
	5 ~ 6 Million KRW	8.6
	more than 6 Million KRW	12.5
Subjective economic status	Upper	3.5
	Middle	75.2
	Under	21.3

## 4.2. Variables

This research considers basic socio-demographic and leisure activity variables as independent variables and SNS use as a dependent variable. Socio-demographic variables are composed of gender, age, level of education and occupation.

We re-coded the gender variable as a dummy variable and assigned values of “0” for female and “1” for male. Age was regarded as a scalable variable reflecting true age. We classified level of education in two broad categories because the size of the middle school category was not large enough. “Level of education” was categorized as a dummy variable with the following variables: 1 (“high school diploma or under”) and 0 (“bachelor's degree or higher”).

The inquiry was concerned with assessing participation in different leisure activities in everyday life. This “leisure activity scale” is composed of various questions, such as during free time, “How often do you go to concerts, live music theatres, galleries?”, “How often do you attend sports events as a spectator?”, “How often do you attend private academies?”, “How often do you communicate or chat online as well as offline?”, “How often do you hang out with friends or relatives?”, “How often do you listen to the music?”, “How often do you drink?”, “How often do you sing in Karaoke?”, “How often do you read books?”, “How often do you exercise sports training?”, “How often do you watch TV or Video?”, and “How often do you go shopping at department stores or malls?”. Variables were measured on a 7-point scale: ① never, ② less than once a month, ③ once every two weeks, ④ once every 5 ~ 6 days, ⑤ once every 3 ~ 4 days, ⑥ once every 1 ~ 2 days, and ⑦ everyday.

The variable “the number of subscribed online communities” is measured as follows: ① none, ② 1 ~ 5, ③ 6 ~ 10, ④ 11 ~ 20, ⑤ 21 ~ 50, and ⑥ 51 and more. Each variable is recorded at the middle value of the range. Next, we created an “offline social acquaintance” variable by asking “how many acquaintances do you have that you contact more than once every three months?”

To determine whether 10 different leisure activities can be reduced to lesser variables, we conducted a factor analysis and used factor scores as variables. We set 1.0 as a criterion for the eigenvalue. After varimax rotation, we obtained 5 leisure activities and named them as follows: “cultural activities”, “social activities”, “entertainment activities”, “self-developing activities”, and “basic activities”.

Table 2. Factor analysis

	Factors				
	Cultural activities 1	Social activities 2	Entertainment activities 3	Self-developing activities 4	Basic activities 5
Concert Theater, Exposition going	.749	.004	.040	.291	.112
Sports event attending	.664	-.143	.279	.127	-.002
Movie theater going	.636	.242	.053	-.056	.210
Private academy going	.476	.424	-.226	-.080	-.250
On/Offline Conversation, Chatting	-.024	.743	-.072	.066	.125
Hanging out with Friends, Meeting with relatives	.226	.678	.222	.021	-.095
Music listening	-.039	.615	-.010	.324	.058
Drinking	.038	-.070	.828	.040	.105
Singing in Karaoke	.418	.268	.618	-.099	-.160
Reading	.192	.060	-.196	.737	-.035
Sports training	.017	.257	.286	.661	-.004
TV/Video Watching	-.013	.053	.050	-.196	.802
Shopping in Department Store or Mall	.297	.014	-.032	.301	.604

The dependent variable is defined as dichotomous: ① use or ② non-use for each SNS (Twitter, Facebook, Mini-Homepage). For the final analysis, we decided to create another dependent dummy variable: ① more than one SNS use and ② none.

## 5. Analysis and discussion

As seen in Table 3, one of the most important variables affecting Twitter use is gender. Among Internet users, male users tend to be twice as numerous as female users. Younger individuals are more frequent users. After controlling other variables, education level and subjective class-consciousness does not have a significant effect on SNS usage. Social acquaintance and the number of subscribed online communities account for differences in SNS usage.

Table 3. Binary logistic regression on Twitter use

	Twitter use (1=yes)		
	B	S.E,	Exp (B)
Gender (male=1)	.673***	.179	1.960
Age	-.031**	.011	.969
Education level (1=bachelor's degree or higher)	.153	.198	1.165
Subjective class consciousness	-.031	.060	.969
Self-employed	.677	.403	1.968
Office	.187	.318	1.206
Manager-professional	1.005**	.383	2.731
Student	.189	.360	1.208
Housewife	-.103	.432	.902
Acquaintance	.009**	.003	1.009
Number of online communities that he or she frequents	.036***	.008	1.037
Constant	-1.185	.640	.306
Model statistics	-2 Log likelihood 987.570a	Cox & Snell's R <sup>2</sup> .091	Nagelkerke's R <sup>2</sup> .136

Note: 1) \* p< 0.05, \*\* p< 0.01, \*\*\* p< 0.001

Facebook users are more likely to be male and younger. In comparison with Twitter, it is noteworthy that education level is a dominant variable on Facebook. Someone in the category of “bachelor’s degree or higher” might use Facebook 2.17-times more frequently than one who is in the “high school diploma or under” category. Unlike Twitter, Facebook is a profile-based SNS and weaved by friendship. If Twitter is a system in which the centripetal force of celebrity is based on the way that “following” works, Facebook is characterized by mutual selection and inter-relation. More individuals with bachelors’ degree are on Facebook because the social relations that are made in the university are more sustainable than those in high school.

Table 4. Binary logistic regression on facebook use

	Facebook use (1=yes)		
	B	S.E,	Exp (B)
Gender (male=1)	.616***	.160	1.851
Age	-.025*	.010	.975
Education level (1=bachelor's degree or higher)	.775***	.185	2.170
Subjective class consciousness	-.084	.055	.919
Self-employed	1.141**	.385	3.130

	Facebook use (1=yes)		
	B	S.E,	Exp (B)
Office	.910**	.301	2.484
Manager-professional	1.672***	.374	5.325
Student	.736*	.342	2.089
Housewife	.514	.380	1.673
Acquaintance	.013***	.003	1.013
Number of online communities that he or she frequents	.030***	.008	1.030
Constant	-1.364*	.591	.256
Model statistics	-2 Log likelihood 1164.268a	Cox & Snell's R <sup>2</sup> .133	Nagelkerke's R <sup>2</sup> .180

Note: 1) \* p< 0.05, \*\* p< 0.01, \*\*\* p< 0.001

It is noteworthy that after running another logistic concerning the Mini-homepage of the CyWorld site, gender and age variables were dominant in the model as seen in Table 5. This reflects the fact that the population frequenting the CyWorld site is mainly female young generation as known.

Table 5. Binary logistic regression on mini homepage use

	Mini homepage use (CyWorld) (1=yes)		
	B	S.E,	Exp (B)
Gender (male=1)	-.956***	.183	.385
Age	-.086***	.010	.917
Education level (1=bachelor's degree or higher)	-.067	.190	.935
Subjective class consciousness	-.052	.059	.949
Self-employed	.553	.358	1.738
Office job, technician	-.155	.268	.856
Manager-professional	.088	.356	1.092
Student	-.574	.345	.563
Housewife	-1.069**	.324	.343
Social acquaintance	.006	.004	1.006
Number of online communities that he or she frequents	.010	.009	1.010
Constant	4.772***	.645	118.097
Model statistics	-2 Log likelihood 1061.459a	Cox & Snell's R <sup>2</sup> .175	Nagelkerke's R <sup>2</sup> .242

Note: 1) \* p< 0.05, \*\* p< 0.01, \*\*\* p< 0.001

Finally, we decided to run a binary logistic regression on SNS use. Model 1 includes basic socio-demographic categories. Table 6 presents the result of the analysis. H1 suggested that age would be the dominant variable that largely explains SNS usage. In model 1, the data confirmed this hypothesis: the age effect appeared to be negative. Older individuals used the SNSs to a lesser degree than the younger individuals ( $\beta = -.068$ ,  $p < .001$ ). To analyze the data in depth, we added “leisure activity” variables composed of five categories. However, when we added the leisure activities variable, after controlling for those five variables, the age variable became statistically insignificant.

The H2 was that the number of offline social acquaintances has an influence on SNS use. Overall, this hypothesis has been proved true as the “social acquaintance” variable is significant in the two different models after controlling for the other variables.

The H3 was that the number of online communities that a respondent frequents has a positive effect on SNS use. In both models, this hypothesis was statistically supported so that we concluded that social capital offline is as important as social capital online to determine SNS usage. As the education level variable has proved to be statistically insignificant, H4 was rejected.

Table 6. Binary Logistic Regression on SNS use

	Model 1			Model 2		
	B	S.E.	Exp (B)	B	S.E.	Exp (B)
Constant	4.000***	.827	54.601	3.597***	36.4+91	.917
Gender (male=1)	-.347	.241	.707	-.061	.014	.941
Age	-.068***	.013	.934	.128	.244	1.136
Education level (1=bachelor's degree or higher)	.156	.232	1.169	.091	.080	1.095
Subjective class consciousness	-.002	.076	.998	.702	.494	2.018
Self-employed	.868	.478	2.382	.036	.341	1.036
Office job, technician	.003	.326	1.003	.582	.500	1.789
Manager-professional	.776	.486	2.172	-.644	.484	.525
Student	-.334	.458	.716	-.758	.401	.469
Housewife	-.747*	.380	.474	.009	.007	1.009
Social acquaintance	.019*	.008	1.019	.030*	.015	1.031
Number of online communities that he or she frequents	.032*	.015	1.033	.603***	.138	1.828
Cultural activities				.603***	.138	1.828
Social activities				.614***	.120	1.847
Entertainment activities				.139	.116	1.149
Self-developing activities				.186	.106	1.204
Basic activities				.129	.113	1.138
Model statistics	-2 Log likelihood	Cox & Snell's R2	Nagelkerke's R2	-2 Log likelihood	Cox & Snell's R2	Nagelkerke's R2
				715.551a		

Note: 1) \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

In the H5, among five different categories of offline leisure activities, the social and cultural activities were hypothesized to shape SNS use. The more cultural and social activities a respondent engages in during his or her free time, the higher the probability that he or she uses SNS. The more social acquaintances that one has, the more frequently he is predicted to use SNSs. This tendency would be reinforced when the involved SNS most likely enhances social interactions between closely associated people to a greater extent than between strangers. From this analysis, we find that the online social network is closely related to the offline cultural and social capital and that the online social network strongly compensates rather than substitutes for the cultural and social capital offline.

## 6. Conclusion

In this paper, we investigated the extent to which the advent of SNSs has impacted the structure of online communication in Korean Society and which factors influence SNS use. In particular, we discussed the relationship between SNS use and digital inequality. By analyzing a data set composed of Internet users in Korea, we noticed that digital opportunities are not evenly distributed among all people. Rather, the cultural capital offline, measured here by one's main leisure activity, and social capital accumulated in the past still persist and are amplified in SNS-dominant cyberspace. Granted, we do not intend to insist that SNSs are another type of inequality generator. If so, it would be another version of technological determinism. However, it seems to be inevitable that one's offline socio-economic status and fame largely determine his or her online influence.

It has been said that the rise of SNSs makes online influential individuals, who partly assume the role of the gatekeepers and agenda-setters – a role that has previously been held by journalists of major press outlets or producers of broadcast corporations. The social influencers gain the power and provide scalability by posting or mediating a message about issues that the established journalists do not cover. The SNS users whose ripple effect is not necessarily strong have adopted the strategy of standing on the shoulders of giants. The more collaborative an anonymous SNS user is, the bigger the influence on his or her peers. He or she may place him or herself in the advantageous position in the fame- or attention-seeking of others.

Thus, to avoid deepening digital inequality, it seems beneficial to consider the fact that the social network effect online is closely related to cultural and social capital offline and that effective policy measures should be introduced to listen to the voices of marginalized people and attend to their social presence online.

## References

- Ahn, J. (2011). Digital divides and social network sites: which students participate in social media. *Journal of Educational Computing Research*, 45(2), 147-163.
- Berners-Lee, R., Luotonen, C. A., Nielsen, H. F. & Secret, A (1994) The World-Wide Web. *Communications of the ACM*, 37, 76-82.
- Bourdieu, P. & Passeron, J.-C. (1970). *La Reproduction: Eléments pour une théorie du système d'enseignement*. Paris: Les éditions de Minuit.
- \_\_\_\_\_ (1979). *La Distinction: Critiques Sociale du Jugement*. Paris: Les éditions de Minuit.
- Boyd, D. M. & Ellison, N. B. (2007). Social network sites: definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), article 11.
- Che Alhadi, A., Staab, S. & Gottron, T. (2011). Exploring user purpose writing single tweets. *Proceedings of Web Science Conference posters, June 14-17: Koblenz, Germany*.
- Crowston, K. & Williams, M. (1997). Reproduced and emergent genres of communication on the World-Wide Web.

- Proceedings of The Thirtieth Annual Hawaii International Conference on System Sciences*. Retrieved from [crowston.syr.edu/system/files/7734060030-1.pdf](http://crowston.syr.edu/system/files/7734060030-1.pdf)
- DiMaggio, P. & Hargittai, E. (2001). From the digital divide to digital inequality. Presented at the annual meetings of the American Sociological Association. Chicago, IL.
- \_\_\_\_\_, Celeste, C & Shafer, S. (2003). From unequal access to differentiated use: a literature review and agenda for research on digital inequality. Department of Sociology, Princeton University. Working Paper #29, Fall.
- Emmison, M. & Frow, J. (1998). Information technology as cultural capital. *Australian Universities Review*, Issue 1998, 41-45.
- Hargittai, E. & Shafer, S. (2006). Differences in actual and perceived online skills: the role of gender. *Social Science Quarterly*, 87(2), 432-448.
- Huberman, B. A., Romero, D. M. & Wu, F. (2009). Social networks that matter: Twitter under the microscope. *First Monday*, 14(1).
- Latour, B. (1994) *Nous n'avons jamais été modernes. Essai d'anthropologie symétrique*. Paris: La Découverte.
- Millerand, F., Proulx, S. & Rueff, J. (2010). *Web social, mutation de la communication*. Québec: Presses de l'université du Québec, coll.
- Molnár, Szilárd (2003). The explanation frame of the digital divide. *Proceedings of the Summer School, Risks and Challenges fo the Network Society*. Karlstad University, Sweden.
- Papacharissi, Z. (2010) *A Networked Self: Identity, Community, and Culture on Social Network Sites*. London: Routledge.
- Seo, U.-S. & Lee, H.-Y. (2006), A study of the influence of cultural taste on the information inequalities. *Informatization Policy*, 13(3), 212-233. (In Korean)
- \_\_\_\_\_. (2010). Networked cultural consumers and cultural capital. *Journal of Cybercommunication Academic Society*, 27(1), 93-137. (In Korean)
- van Dijk, J. (2006a). *The Network Society*. London: SAGE.
- \_\_\_\_\_. (2006b). Digital divide research, achievements, and shortcomings. *Poetics*, 34(4-5).