A study on User's Personality Traits Affecting Facebook Use Behavior

(Focused on User's Impression Management)

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Abstract

This study intended to analyze experimentally about the difference in Facebook use behavior depending on degree of interest in impression management whose users have various personality traits. According to preceding research, independent variables (user's personality traits) include public self-consciousness, self-presentation, and definition of the situation. In case of dependent variables (Facebook use behavior), information projection behavior is included. Also, impression management was concerned as moderating variable. The survey was conducted targeting 235 Facebook users. Data was analyzed through Smart PLS 2.0 M3 program. In the results of the survey, self-presentation and definition of the situation positively affected information projection behavior, and impression management represented more than medium mediating effect to most of the accepted hypotheses. Therefore, this study founded that Facebook users considered timeline at Facebook as "personal space", and made an effort to be shown favorably to others. Furthermore, this study verified that users mainly do passive self-presenting to adjust themselves to socially admittable standards, and impression management explained significantly about all of the Facebook use behaviors. The result of this research shows that impression management is an important motive for the Facebook use, and users do various kinds of behaviors about information projection and suppression. This result could provide some insights to Facebook hands-on workers for developing optimal settings in where users could make impression management effectively, and to advertisers for developing marketing strategies in order to satisfy users' desires.

Keywords— **impression management, Facebook, information projection, user's personality traits**

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I. Introduction

With the growth of mobile devices, SNS (Social Network Service) is a representative online-service which people form relationships between one another online. (Li, Daugherty, & Biocca, 2001).

SNS allows users to announce their presence to the people who they want to form relationship with and also get feedbacks and impressions of themselves from the people. Nowadays, many universities and companies utilize SNS as a many source of applicant's evaluation. Therefore SNS users realize the need to manage their impression on SNS, resulting in passive information projection behavior.

In previous studies on SNS, several studies have found the factors affecting user's continuous usage and motive based on the personal trait (Hartijasti, 2013; Junco, 2012; Ross et al., 2009; Valenzuela, Park, & Kee, 2009). However, attempts to understand user behaviors in terms of impression management are not yet undergone on a satisfactory level.

In other words, this study assume that SNS users who like to attract attention from others and want to show their ideal figures to others more, the more positive each contents of themselves are shown on their SNS(Utz, Tanis, & Vermeulen, 2012); (Nathan DeWall, Buffardi, Bonser, & Keith Campbell, 2011).

Therefore, this study was design to the personal characteristic factors that have an effect on user behaviors and verify the moderating effect of impression management.

The results of this study could provide guidelines for SNS service providers who want to develop and implement new functions that grant users to manage their own personal impressions such as 'Comment', 'Like', 'Fan Page'.

II. Theoretical Background

A. *Impression Management and Online Impression Management*

Impression management is a process in which individuals attempt to influence the image others have of them of me in face to face interaction.

Impression management, generally performed on the stage, was first suggested as a social interaction in everyday life by Erving Goffman in 1959 which became a fundamental frame. Then, academically in social psychology field, some factors on impression management such as the goals in human interaction or other's valuation on oneself were studied. In late 1980's, studies on relationship between impression management performer and consumer from organizational perspective were conducts.

Scope of impression management has been expanded to various fields including stage performing and front decorating, information controlling or changing physical appearance or language expressions, using non-verbal gestures and more (Saetbyul Choi).

Impression management behaviors can be engaged unconsciously, automatically, and habitually but get stronger in relationship with others and behaves deliberately to create certain image by socially and conditionally. (Stevens & Kristof, 1995). Moreover, most of the people perform impression management behavior, its type, frequency and result differs between individuals. (Rosenfeld et al., 2002).

Online impression management is an online process in which individuals attempt to influence the image other have of them of me. Users can directly create, post and manage only information they want, and spend enough time thinking before information posting which could be more effective source for managing oneself then offline. Through this property of online, SNS users can imprint the image they want rather than simply having positive impression from others.

SNS, the social networking tool, is used for showing one's intended virtual image to other who do not know me and others think and evaluate me with the information provided. As one example, firms are recently utilizing SNS, as a channel to understand more of the applicants during hiring process. As the social recruiting becomes more active, SNS information providers try actively on their impression management to be the firm's ideal candidate. The firms, information consumer, can grasp the applicant's normal life style and how they are expressing themselves well on SNS (Maeil Business Newspaper). Therefore, online impression management through SNS is playing an important role between information provider and consumer.

B. *User's personality traits*

Phares(1984) defined personality from cognitive psychological perspective as the pattern of characteristic thoughts, feelings, and behaviors that distinguishes one person from another and that persists over time and situation. Caspi and Bem(1990) defined as behavioral inclination towards human or environment and overall impression onto the other people (personality of supervisor's impact on organizational citizen behavior: focused on ethical leadership and mediating effect of supervisor trust). Likewise, personality is individual's unique thoughts and behaviors distinguishing from others.

Studies on personality has been conducted actively and through the preliminary research focusing on personality and online behavior, it was verified that personality impacts on SNS using behavior. It was confirmed that main personality traits on SNS using behaviors are public self-consciousness, self-presentation, and definition of the situation.

Public self-consciousness is a personality trait which focuses on awareness of the self as it's viewed by others. This is one of the factors of SNS using behaviors that focus on what others think on me.

Self-presentation is one of communication methods to deliver one's ideal image to others verbally or non-verbally. It was confirmed from the preliminary research that by writing a message or uploading photos online, SNS users present oneself and use it to imprint self image to others. (Jacobson, 1999; Papacharissi, 2002a, 2002b; Sherman et al., 2001).
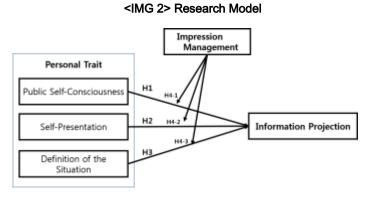
Definition of the situation refers to the user to define "how could I use my current circumstances or contexts". (Sam, 2012) Each SNS user has different meanings and thoughts on SNS space so different users decorate and manage their SNS space different.

Impression management plays an important role on personality based SNS using behavior. In most of the socio-psychological researches, impression management has been a factor that directly impacts on behavior. In organizational level research, however, premise that although most of the people show impression management its type, frequency, and result has individual differences. Impression management behavior was set as a variable of moderating effect as considered impression management behavior would control relationship between work performance and its evaluation []. Therefore, relationship between personality that shows individual difference and SNS using behavior would be controlled by impression management behavior.

C. *Research Model*

For the study of whether there's any differences of Facebook using behaviors on user's personality trait and how impression management could impact, research model (IMG2) was designed.

<IMG 2> Research Model

D. *Public Self-Consciousness*

Public self-consciousness is defined as "awareness of the self as it is viewed by others". People with strong public self-consciousness have higher motivation on self-presentation (EunHae Kim, 2009; SeungAh Jung, KyungJa Oh, 2005) and tend to express their thoughts and feelings actively to the others (Schouten, Valkenburg, & Peter, 2007;). Moreover, it's proved that bloggers' frequency of postings of messages or photos on their blog has close relationship with public self-consciousness (Shim, Lee, & Park, 2008).

H1: Public self-consciousness will have positive (+) impact on information projection behavior.

E. *Self-Presentation*

Self-presentation is a way a person communicates with others and it's a realistic communication to present oneself. (Johnson, 1980). Especially on online environment, users tend to present more information compared to other communication environments (Christofides et al., 2009). From a research on SNS, it was proved that self-presentation desire showed significant impact on user's self-disclosure intention.(SeBom Lee, 2011)

Therefore, user with high self-presentation desire will disclose more information on online based SNS to satisfy one's self-presentation desire.

H2: Self-presentation will have positive (+) impact on information projection behavior.

F. *Definition of the Situation*

Definition of the situation means to define what would be the purpose of SNS of SNS users and what would be the rule on presenting oneself onto others. Users disclose information on their own definition of the situation and the user with clear definition of the situation will disclose information actively based on their rule.

H3: Definition of the situation will have positive (+) impact on information projection behavior.

G. *Impression Management*

Impression Management is a process to determine which information to disclose and control attempting influence the image others have of them of the person. It was assumed people conscious their image on others when impacted on information projection behavior based on personality, impression management was used as moderating variable between personality and information projection behavior.

H4-1: Impression management will have significant impact between public self-consciousness and information projection behavior relationship.

H4-2: Impression management will have significant impact between self-presentation and information projection behavior relationship.

H4-3: Impression management will have significant impact between definition of the situation and information projection behavior relationship.

III. **Result & Discussions**

A. *Reliability & Feasibility test*

This study verified reliability and feasibility of measurement items and tools using PLS analysis tool.

For reliability analysis method, Cronbach's α value was analyzed. As Cron-bach's α value was above 0.6 for all 5 variables, its appropriate degree of reliability on measurement items of variables was confirmed (Nunnally, 1978).

[Table7] Confirmatory Factor Analysis

Variables	Measurement Item	Std. loading	t-value	AVE	CR	Cron-bach's α
Public Self-Consciousness	PSC1	0.700	2.946	0.6411	0.8766	0.8766
	PSC2	0.809	3.794			
	PSC3	0.862	4.149			
	PSC5	0.823	3.329			
Self-Presentation	SEL2	0.812	6.750	0.7447	0.8969	0.8550
	SEL3	0.821	7.150			
	SEL4	0.949	6.510			
Definition of the Situation	DOS2	0.935	33.816	0.7180	0.8342	0.6354
	DOS3	0.750	8.604			
Information Projection Behavior	IFP1	0.935	82.147	0.7737	0.9106	0.8541
	IFP2	0.922	56.186			
	IFP3	0.777	16.531			
Impression Management	IMP1	0.636	9.646	0.6020	0.8569	0.7839
	IMP2	0.831	31.844			
	IMP4	0.810	24.424			
	IMP5	0.810	21.759			

Moreover, factory analysis result with AVE value above 0.5 and CR(Construct Reliability) value above 0.7 could support convergent validity (Fornell&Lacker, 1981).
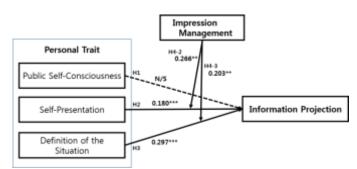
[Table8] Correlation between Latent Constructs

	Mean	DOS	IFP	PSC	SEL
DOS	4.46	0.76			
IFP	2.27	0.3447	0.88		
PSC	5.28	0.2530	0.1273	0.77	
SEL	4.61	0.1607	0.2039	0.1243	0.82

*Diagonal values (shaded) are squared root value of AVE on each concept.

[Table 8] shows correlation analysis result on different variables used in this study.

As squared root values of AVE on each variable are higher than correlation coefficient of each factor from above convergent validity analysis [Table 7], discriminant validity between the component concepts were confirmed. (Fornell&Lacker, 1981).

B. *Hypotheses Test*

[Table 9] Hypotheses Verification Result

No.	Hypotheses	Path Coefficient	t-value	SIG.	Result
H2	SEL→IFP	0.180	2.550	p<0.05	Support
H3	DOS→IFP	0.297	5.289	p<0.01	Support

Moderating Effect(Impression Management)

For this study, Cohen used interaction effect value from PLS equation to measure moderating effect of impression management. Based on the equation, moderating effect was calculated. Result of moderating effect is as below [Table 10].

It showed that both self-presentation and definition of situation were impacted by moderating effect, the impression management, and had moderating effect of medium. This proved that impression management impacted information projection on Facebook environment.

[Table 10] Test Result(Moderating Effect)

No.	Path	R square		P	Effect
		Main Effect Model	Interaction Model		
H4-2	SEL→IFP	0.053	0.252	0.266	Medium
H4-3	DOS →IFP	0.170	0.310	0.203	Medium

* Interaction Effect Value (Cohen, 1992)

1) $P=\{R^2\{(\text{interaction effect model})-R^2(\text{main effect model})\}/\{1-R^2(\text{interaction model})\}$

2) $0.02=<P$ (Small*), $0.15=<P$ (Medium**), $0.35=<P$ (Large***)

IV. **Conclusion**

The results of the study verified that personal traits such as self-presentation and definition of the situation have significant effect on information projection behavior. Also the study show that impression management has medium moderating effect among most of the accepted hypotheses.

Academic implications of this study are as below. First, previous literatures mostly focused on purpose of SNS usage as relationship management or entertainment whereas, this study extended the research scope by conducting and verifying based on the fact that SNS users utilize it as a purpose of impression management. Second, concept of "impression management" was developed in 1950s and applied mostly through offline but in this study, it was integrated on SNS environment and confirmed image management is also applicable on online along with offline.

Practical implications of this study are as below. First, it was proved self-presentation plays a significant impact on information projection on SNS. Therefore, SNS developer should consider user's self-presentation when designing and restructuring various functions and services. For example, Facebook is providing service to update user profile with simple personal information and photo upload from predefined template. Now, Facebook should lead user's information projection through customized services and design that the users could update their profile directly with free format which could ease self-presentation. Second, it also proved the significant level between definition of the situation and information projection. Therefore, SNS service providers should provide services that could correspond to various needs and purposes of individuals satisfying definition of the situation on what would be the purpose for SNS usage. Facebook, as an example, it's following the standardized formation but could be designed to customize it with the purpose of definition of the situation. If SNS definition of the situation is defined to maintain relationship with college friends, customized service such as prioritizing messages of

college friends on page would increase user satisfaction and vitalize SNS usage.

v. Limitation & Future work

This study had limitations on two major points.

First, variables impacting Facebook using behavior were considered only with user's psychological properties (intrinsic factor) while exempting other environmental properties (extrinsic factor) which decreases in explanatory power of the research. Also impression management is a variable related to personal feelings which varies on individuals and circumstances and that could show low explanatory power. To improve and have higher explanatory power of the study, extrinsic factor related to Facebook's function and environments would be analyzed together.

Second, although age range of Facebook users is widening, participants of questionnaires of this study were mostly 20's (88.09%) which would limit to generalize the result of this study. This seems to be result of online based survey and in future research, survey should be conduct with wider age range.

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