# How Does Facebook Browsing Affect Self-awareness and Social Well-being: the Role of Narcissism

Lin Qiu
Division of Psychology
Nanyang Technological University
Iinqiu@ntu.edu.sg

Han Lin
Division of Psychology
Nanyang Technological University
Iinh0022@ntu.edu.sg

Angela Ka-yee Leung School of Social Sciences Singapore Management University angelaleung@smu.edu.sg

#### **ABSTRACT**

Social networking sites such as Facebook have become extremely popular recently. In this research, we studied how Facebook browsing affects self-awareness and social well-being. Our results show that after Facebook browsing, individuals high in narcissism raised their public self-awareness while those low in narcissism reduced their public self-awareness. We also found that individuals low in narcissism perceived their friends' lives to be better than their own and consequently experienced negative social well-being and emotion. However, this effect did not occur for individuals high in narcissism.

# **Categories and Subject Descriptors**

J.4 [Social and behavioral sciences]: Psychology

#### **General Terms**

Experimentation

#### Keywords

Social networking, self-awareness, narcissism, well-being.

#### 1. INTRODUCTION

The use of social networking sites (SNSs) has been phenomenal in the past few years. Facebook, one of the most popular SNSs, has reached millions of users. Previous research showed that users tended to browse Facebook to obtain updates about their friends rather than searching for information about a particular person or looking for strangers to meet online [1]. In this study, we aim to understand how Facebook browsing affects individuals' self-awareness and social well-being.

## 2. RELATED WORK

# 2.1 Self-awareness

Facebook has created an online community where users frequently update their personal information such as feelings, pictures, and relationship status. Participating in this community makes individuals feel more connected with others and may also raise their public self-awareness -- the perception of self from others' perspectives [2]. Individuals may become more aware of how others view themselves and how to manage their image in

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

ACE '10, 17-NOV-2010, Taipei, Taiwan

Copyright 2010 ACM 978-1-60558-863-6/10/11 ...\$10.00.

the community. Therefore, we hypothesize that individuals would raise their public self-awareness after browsing Facebook.

# 2.2 Social Well-being

A large number of studies have shown that SNSs helped individuals strengthen their friendships and subsequently improve their well-being (e.g., [3]). However, Burke et al. [4] found that users who focused on content consumption (e.g., reading others' status updates or viewing others' pictures) feel lonelier than those who focused on direct communication with friends. We hypothesize that because users on Facebook tend to selectively display the attractive side of their lives, browsing Facebook would lead one to have the false impression that others' lives are better and consequently experience negative social well-being and emotion.

#### 2.3 Narcissism

Narcissism is a personality trait which refers to self-centered and inflated self-concept. Previous studies have found that narcissism could affect individuals' online experiences [5]. Therefore, we expect to examine how narcissism affects the relationship between Facebook browsing and its consequences (i.e., self-awareness and life comparison) in our study.

#### 3. CURRENT STUDY

# 3.1 Study 1: Facebook Browsing and Self-awareness

## 3.1.1 Study Design

Fifty-night college students participated in our study for course credits (35 female, average age = 21). We randomly assigned them into two groups. First, all participants completed the Narcissism Personality Inventory (NPI) [6]. Next, one group were asked to browse their Facebook account freely for five minutes (Facebook browsing condition), and the other group were asked to freely browse the Internet (except SNSs) for five minutes (control condition). Finally, all participants completed Mqatheson & Zanna's Public Self-Awareness Subscale [7].

#### 3.1.2 Results and Discussion

We found a significant Condition  $\times$  Narcissism interaction effect on public self-awareness, F(1, 55) = 7.78, p = .007. As shown in Figure 1, individuals high in narcissism raised their public self-awareness after Facebook browsing, while individuals low in narcissism reduced their public self-awareness. This suggests that although narcissistic individuals tend to ignore others' views, Facebook browsing makes they become more aware of others' perspectives. By contrast, individuals with low narcissism tend to care more about others' views in everyday

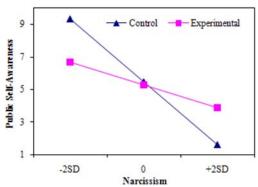


Figure 1: Public self-awareness as a function of narcissism (2SD above and below the mean) and condition.

life, but Facebook browsing leads them to be less concerned about how others might view them. We believe that the decreased public self-awareness may be caused by viewing the self-centered personal expression in the Facebook community.

# 3.2 Study 2: Facebook Browsing and Social Well-being

#### 3.2.1 Study Design

Eighty-nine college students participated in this study for course credit (36 males, average = 21.08). Besides the two conditions in Study 1, a third condition was added to ask participants to select the most active friends in their accounts and browse them for 5 minutes (active friends browsing condition).

Participants were asked to complete NPI first and then randomly assigned to one of the three conditions. After the browsing task, participants were asked to fill up a battery of questionnaires, including Satisfaction with Life Scale [8], State Loneliness Scale [9], and International Positive and Negative Affect Schedule Short Form [10]. In the end, participants were asked to rate their own life and their friends' lives separately on Cantril's Life Ladder [11]. We subtracted the rating that one gave to one's own life from the rating that one gave to one's friends' lives, and used it as the life comparison score to examine how one viewed others' lives in comparison to one's own.

## 3.2.2 Results and Discussion

As shown in Figure 2, we found that life comparison mediated the relationship between Facebook browsing and individual social well-being and affect. That is the better they perceived

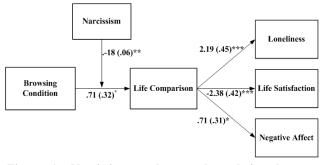


Figure 1: Narcissism moderates the relation between browsing condition and life comparison, and life comparison mediates the relation between browsing condition and social well-being measurements. The  $\beta$  coefficients with standard errors are in parentheses. \* p < .05,\*\* p < .01,\*\*\* p < .001.

their friends' life than theirs, the more loneliness, lower life satisfaction and more negative emotion they experienced. Meanwhile, we also found that narcissism moderated the relationship between Facebook browsing and life comparison, with participants low in narcissism evaluating others' lives to be better after Facebook browsing, while those high in narcissism evaluating their lives to be at least as good as others'.

#### 4. GENERAL DISCUSSION

Our two studies suggest that Facebook browsing can affect individuals' public self-awareness and social well-being. However, such effects depend on individual's narcissistic personality. While results found in our studies are short-term effects, future research is needed to investigate if such short-term effects can lead to long-term social consequences.

# 5. REFERENCES

- [1] Lampe, C., Ellison, N., and Steinfield, C. 2006. A face(book) in the crowd: social Searching vs. social browsing. In *Proceedings of the 20th Anniversary Conference on Computer Supported Cooperative Work* (Alberta, Canada, November 4-8). CSCW'06. ACM, New York, NY, 167-170.
- [2] Fenigstein, A., Scheier, M., and Buss, A. 1975. Public and private self-consciousness: assessment and theory. J. Consult. Clin. Psych. 43, 4 (August, 1975), 522-527.
- [3] Valkenburg, P. and Peter, J. 2009. Social Consequences of the Internet for Adolescents. *Curr. Dir. Psychol. Sci.* 18, 1 (Feb. 2009), 1-5.
- [4] Burke, M., Marlow, C., and Lento, T. 2010. Social network activity and social well-being. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (Atlanta, Georgia, April 10 – 15, 2010). CHI'10. ACM, New York, NY, 1909-1912.
- [5] Marcus, B., Machilek, F., and Schutz, A. 2006. Personality in cyberspace: personal web sites as media for personality expressions and impressions. *J. Pers. Soc. Psychol.* 90, 6, (June 2006), 1014-1031.
- [6] Raskin, R. and Terry, H. 1988. A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *J. Pers. Soc. Psychol.* 54, 5 (May 1988), 890-902.
- [7] Matheson, K. and Zanna, M. 1988. The impact of computer-mediated communication on self-awareness. *Comput. Hum. Behav.* 4, 3 (1988), 221-233.
- [8] Diener, E. 1984. Subjective well-being. *Psychol. Bull.* 95, 3 (March 1984), 542-575.
- [9] Shaver, P.F.W. and Buhrmester, D. 1985. Transition to college: Network changes, social skills, and loneliness. In *Understanding personal relationships: An interdisciplinary* approach, S. Duck and D. Perlman, Ed. Sage Publications, London, 193-219.
- [10] Thompson, E. 2007. Development and validation of an internationally reliable short-form of the positive and negative affect schedule (PANAS). J. Cross. Cult. Psychol. 38, 2 (March 2007), 227-242.
- [11] Cantril, H. 1966. *The pattern of human concerns*. Rutgers University Press, New Brunswick, N.J.