

*Does Sociality Become Virtual or Natural in Social Network Services? The  
Example of Facebook*

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Asian Conference on Psychology and Behavioral Sciences 2015  
Official Conference Proceedings

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## **Introduction**

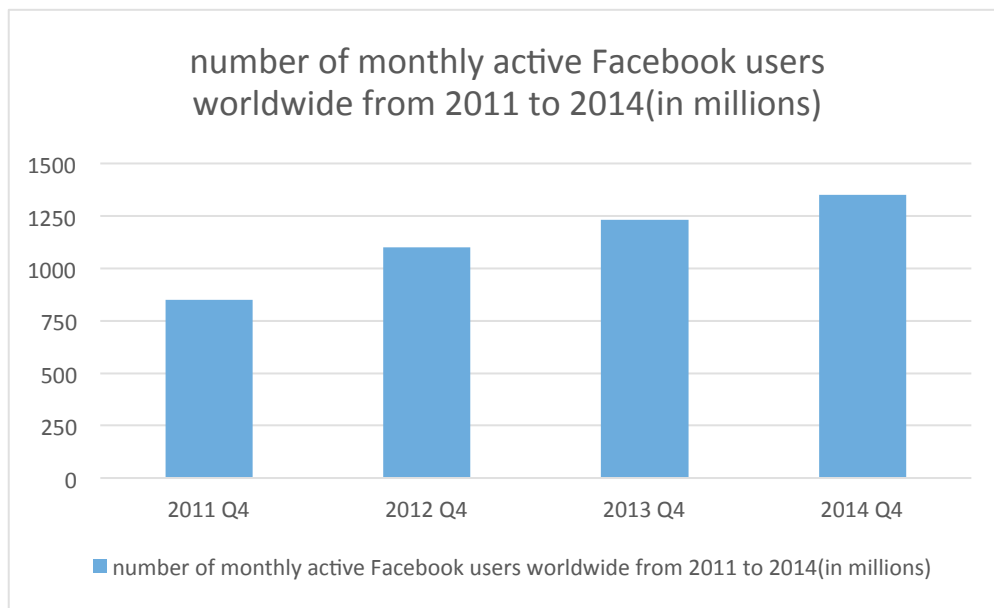
Sociality means a number of individuals living and interacting together, which can lead to complicated social relationships and structure. In recent years, Social network services (SNSs) and online communities have been growing quickly. SNSs offer a variety of social behaviors that simultaneously expand and challenge our conventional understanding of sociability. Specifically, SNSs provide flexible and personalized modes of sociability, which allow individuals to sustain strong or weak ties through a variety of online tools and strategies. Social networking sites such as MySpace, LinkedIn and Facebook have become hugely popular in the last few years. These sites can be oriented towards work-related contexts (e.g., LinkedIn.com), romantic relationship initiation (the original goal of Friendster.com), connecting those with shared interests such as music or politics (e.g., MySpace.com), or the college student population (the original incarnation of Facebook.com)

In recent years there has been a significant shift in the nature of social interactions from face-to-face to web-based social communication. Social network sites such as Facebook have affected social relationships in ways that researchers are only beginning to understand. Social networking sites typically provide users with a profile space, facilities for uploading content (e.g. photos, music), messaging in various forms and the ability to make connections to other people. These connections (or ‘friends’) are the core functionality of a social network site although most also provide opportunities for communication, the forming of groups, hosting of content and small applications.

### **An overview of Facebook**

Facebook now has more than 1.1 billion active members worldwide, 800 million of which access the site via smartphones, and user numbers have been growing at an annual rate of 20 percent. The site is tightly integrated into the daily media practices of its users: The typical user spends about 20 minutes a day on the site, and two-thirds of users log in at least once a day (Cassidy, 2006; Needham & Company, 2007).

According to Facebook data released earlier this year, the number of active Facebook users in Taiwan has reached 14 million per month, or about a 60 percent penetration rate, while the number of daily users has hit 10 million. That figure represents the highest penetration rate in Asia, edging out Hong Kong — with about 58 percent — for the top spot. Facebook’s overall penetration rate in the region at the end of last year was 6.5 percent.



Source: Facebook statistics 2015

Much of the existing academic research on Facebook has focused on identity presentation and privacy concerns (e.g., Gross & Acquisti, 2005; Stutzman, 2006). Other recent Facebook research examines student perceptions of instructor presence and self-disclosure (Hewitt & Forte, 2006; Mazer, Murphy, & Simonds, 2007), temporal patterns of use (Golder, Wilkinson, & Huberman, 2007), and the relationship between profile structure and friendship articulation (Lampe, Ellison, & Steinfield, 2007).

## Literature review

### Sociality:

author	paper	definition
TINA WEY, DANIEL T. BLUMSTEIN, WEIWEI SHEN&FERENC JORDA´N (2008)	Social network analysis of animal behaviour: a promising tool for the study of sociality	Sociality implies a number of individuals living and/or interacting together, which can lead to complex social relationships and structure.
Alan Page Fiske(1992)	The four elementary forms of sociality: Framework for a united theory of social relations	Four elementary forms of sociality: in <i>communal sharing</i> , people treat all members of a category as equivalent; in <i>authority ranking</i> , people attend to their positions in a liner ordering; in <i>equality matching</i> , people keep track of the imbalances among them; in <i>market pricing</i> , people orient to ratio values.
Alan J. Fridlund(1991)	Sociality of Solitary Smiling: Potentiation by an Implicit Audience	That sociality could mediate both public and private faces would be compatible with more traditional role and impression-management theories of behavior, which hold that expressions are a means "to control images that are projected in real or imagined social interactions" (Schlenker, 1980, p. 6; see also Baldwin & Holmes, 1987; Greenwald & Breckler, 1985; Schlenker, 1985; Schlenker & Weigold, 1989; Snyder, 1979).

Strong ties (bonding social capital):

Social capital has been linked to a variety of positive social outcomes, such as better public health, lower crime rates, and more efficient financial markets (Adler & Kwon, 2002). Social capital may also be used for negative purposes, but in general social capital is seen as a positive effect of interaction among participants in a social network (Helliwell & Putnam, 2004).

In Putnam's (2000) view, bonding social capital reflects strong ties with family and close friends, who might be in a position to provide emotional support or access to scarce resources. Bonding social capital is found between individuals in tightly-knit, emotionally close relationships, such as family and close friends. When social capital declines, a community experiences increased social disorder, reduced participation in civic activities, and potentially more distrust among community members. Greater social capital increases commitment to a community and the ability to mobilize collective actions, among other benefits. Social capital may also be used for negative purposes, but in general social capital is seen as a positive effect of interaction among participants in a social network (Helliwell & Putnam, 2004).

Weak ties (bridging social capital):

Access to individuals outside one's close circle provides access to non-redundant information, resulting in benefits such as employment connections (Granovetter, 1973). Moreover, social capital researchers have found that various forms of social capital, including ties with friends and neighbors, are related to indices of psychological well-being, such as self-esteem and satisfaction with life (Bargh & McKenna, 2004; Helliwell & Putnam, 2004).

Putnam (2000) distinguishes between bridging and bonding social capital. The former is linked to what network researchers refer to as "weak ties," which are loose connections between individuals who may provide useful information or new perspectives for one another but typically not emotional support (Granovetter, 1982).

Social capital and Internet:

The Internet has been linked both to increases and decreases in social capital. Nie (2001), for example, argued that Internet use detracts from face-to-face time with others, which might diminish an individual's social capital.

Recently, researchers have emphasized the importance of Internet-based linkages for the formation of weak ties, which serve as the foundation of bridging social capital.

Because online relationships may be supported by technologies like distribution lists, photo directories, and search capabilities (Resnick, 2001), it is possible that new forms of social capital and relationship building will occur in online social network sites. Donath and boyd (2004) hypothesize that SNSs could greatly increase the weak ties one could form and maintain, because the technology is well-suited to maintaining such ties cheaply and easily.

Based on this prior work, I propose the following hypothesis:

H1. Intensity of Facebook use will be positively associated with individuals' perceived bridging social capital (weak ties).

It is clear that the Internet facilitates new connections, in that it provides people with an alternative way to connect with others who share their interests or relational goals (Ellison, Heino, & Gibbs, 2006; Horrigan, 2002; Parks & Floyd, 1996). However, it is unclear how social capital formation occurs when online and offline connections are closely coupled, as with Facebook. Williams (2006) argues that although researchers have examined potential losses of social capital in offline communities due to increased Internet use, they have not adequately explored online gains that might compensate for this. We thus propose a second hypothesis on the relationship between Facebook use and close ties:

H2. Intensity of Facebook use will be positively associated with individuals' perceived bonding social capital (strong ties).

Some research has shown, for example, that the Internet might help individuals with low psychological well-being due to few ties to friends and neighbors (Bargh & McKenna, 2004). Some forms of computer-mediated communication can lower barriers to interaction and encourage more self-disclosure (Bargh, McKenna, & Fitzsimons, 2002; Tidwell & Walther, 2002); hence, these tools may enable connections and interactions that would not otherwise occur. For this reason, we explore whether the relationship between Facebook use and social capital is different for individuals with varying degrees of self-esteem (Rosenberg, 1989) and satisfaction with life (Diener, Suh, & Oishi, 1997; Pavot & Diener, 1993), two well-known and validated measures of subjective well-being. This leads to the two following pairs of hypotheses:

H3. The degree of a person's satisfaction with life will be positively associated with individual's intensity of facebook use.

H4. The degree of a person's self-esteem will be positively associated with individual's intensity of facebook use.

### **Method**

The survey was hosted on bbs NCHU , a social network site, and was fielded in March 2015.

Data will be collected among Facebook users using an online survey. Subsequent statistical analyses will be conducted to test whether SNSs-based sociality is virtual or natural.

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