

## **ONLINE BEFRIENDING ON FACEBOOK AND SOCIAL CAPITAL: A SOCIO- PSYCHOLOGICAL STUDY ON UNIVERSITY STUDENTS OF ASSAM**

by

**Dr. Ayesha Tahera Rashid**

Assistant Professor  
Department of Mass Communication,  
Assam University, Silchar  
Email: ayeshatr@gmail.com

### **Abstract**

*Several studies have identified a strong relationship between the use of social networking sites, particularly Facebook, and positive outcomes such as social capital. In recent times, different academic surveys have been conducted, each focusing to some extent on the impact of social networking use on the quantity and quality of interpersonal communication and sociability. At the heart of this debate is whether SNS use can be a potentially isolating activity or one that leads to substantially greater communication among people and thus enhances human connectivity and sociability. Based on an analysis of these studies' key findings and methodological approaches, this study attempts to understand the role of the Facebook in shaping our interpersonal relations. The study explores the social experiences of 456 Facebook users in three universities in Assam to investigate the role of Facebook in helping build these young users' social networks and potentially extend their social capital. The findings reveal that Facebook allows its users to manage a wider network of weak ties and thus increase bridging social capital. Survey data reveals that our weak ties with friends of friends, past colleagues, or other acquaintances are valuable conduits to diverse perspectives and new information. The application of the Rosenberg Self-Esteem Scale and the Life Satisfaction Scale to this study enabled the researcher to examine the psychological well-being parameters of self-esteem and life satisfaction among the respondents and explore its relationship with social capital.*

*Keywords: Social Capital, Facebook, Psychological well-being, Self-Esteem*

### **INTRODUCTION**

A social network is a structure made up of individuals with a commonality, be it friendship, an interest, relationship, knowledge, experience or belief system (Young). In the past, social networks were limited to one's geographical location, social standing or ethnicity. Today, with the global, intercultural and intergenerational composition of sites such as Facebook, social networks have become far more diverse and dynamic (Ofcom 2008).

Social capital is a sociological concept related to the connections between social networks. Putnam (2001) defined social capital as the collective value of all social networks and the inclinations that arise from these networks to do things for each other. Putnam (2001) believed that social capital could be measured by the amount of trust and reciprocity in a community or between individuals. Other researchers have found that social capital increases self-esteem and improves psychological well-being (Ellison, Steinfeld & Lampe 2007). Ofcom (2008) also suggests that individuals gain emotional benefits in feeling part of a group and gaining attention.

Several studies have identified a strong relationship between the use of social networking sites, particularly Facebook, and positive outcomes such as social capital. Facebook constitutes a rich site for researchers interested in the scope of social networks due to its heavy usage patterns and technological capacities that bridge online and offline connections. This research extends this understanding by exploring the relationship and the implications of the use of new online technologies like Facebook on social capital. Social networking sites (SNS) and research on their impact has reached a similar inflection point. Research has found that social network users, especially young people join these sites to keep strong ties with their existing friends, develop their relations with relatively new friends and to meet new people (Acquisti and Gross, 2006; Valenzuela et. al., 2008).

Ellison et al. (2007) suggest that intense Facebook use is closely related to the formation and maintenance of social capital. In line with these studies conducted earlier, this study investigates what kind of social relationships Facebook users in their virtual lives forge with friends online. A primary focus of this research is to examine the relationship between self-esteem, bonding–bridging social capital and the intensity of Facebook use. The relation between the demographic variables such as gender and age and dependent variables, bonding–bridging social capital and intensity of Facebook use have also been investigated.

Based on earlier work conceptualizing that self-esteem served to moderate the relationship between Facebook usage intensity and bridging social capital (Ellison et al., 2007), the researcher hypothesizes that:

*H1: There is a positive relation between self-esteem, intensity of Facebook use and social capital.*

In this survey of students at three universities in Assam, Facebook use was found to be associated with distinct measures of social capital, including bridging social capital (which

emphasises the informational benefits of a heterogeneous network of weak ties) and bonding social capital (which emphasises emotional benefits from strong ties to close friends and family). Moreover, the study found evidence that self-esteem may operate as a moderator of the relationship between social network site use and social capital.

### **METHOD:**

Survey data were collected from 403 university students, all active Facebook users, studying in three universities of Assam. These Facebook users' self-reported psychological well-being was measured by the Rosenberg Self-Esteem Scale developed by sociologist, Dr. Morris Rosenberg and the Life Satisfaction Scale by Ed Diener et al. (1985) in order to explore its relationship with social capital. A major thread of this research was to explore the effect of Facebook use on social capital, which, sociologist Mark Granovetter calls the 'strength of weak ties.'

### **Findings:**

Facebook has been embraced globally because of its capabilities for communication and connection – for creating, cultivating, and continuing social relationships. Technology experts see networked communications technologies to be useful in social relations. Survey participants were asked to reflect on their personal experiences relating to Facebook friendships.

### **Facebook Befriending:**

Some people like to have a few close friends on Facebook, while others have hundreds who they barely know. Respondents were asked about the size of their network connections on Facebook. The present study attempted to find out how many people were connected to a Facebook user as 'friends' on his/her network.

Table 1.1 shows that one-third of the respondents in this study (30.9 per cent) had less than 100 friends on Facebook. Majority of the respondents (56.1 per cent) had between 100-400 friends while around 13 per cent had more than 400 people listed on Facebook as 'friends'.

The study attempted to examine if there was any significant difference between the two genders when it came to befriending people on Facebook. The research tried to find out which gender had more friends on Facebook. It was found that there was significant difference in the way males and females added people to their Facebook profiles as 'friends'.

Table 1.1: How many friends do you have?				
		Frequency	Per cent	Valid Per cent
Valid	no friends	2	.5	.5
	1-5	4	1.0	1.0
	5-10	5	1.2	1.3
	10-20	21	5.2	5.4
	20-50	24	6.0	6.2
	50-100	64	15.9	16.5
	100-200	90	22.3	23.3
	200-300	81	20.1	20.9
	300-400	46	11.4	11.9
	400+	50	12.4	12.9
	Total	387	96.0	100.0
Missing	System	16	4.0	
	Total	403	100.0	

Table 1.2: How many friends do you have/Gender?												
		how many friends do you have										Total
		no friends	1-5	5-10	10-20	20-50	50-100	100-200	200-300	300-400	400+	
male	Count	2	3	3	9	5	26	43	54	26	36	207
	% within sex of the respondent	1.0%	1.4%	1.4%	4.3%	2.4%	12.6%	20.8%	26.1%	12.6%	17.4%	100.0%
female	Count	0	1	2	12	18	37	47	27	20	14	178
	% within sex of the respondent	.0%	.6%	1.1%	6.7%	10.1%	20.8%	26.4%	15.2%	11.2%	7.9%	100.0%
Total	Count	2	4	5	21	23	63	90	81	46	50	385
	% within sex of the respondent	.5%	1.0%	1.3%	5.5%	6.0%	16.4%	23.4%	21.0%	11.9%	13.0%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.526(a)	9	.000
Likelihood Ratio	32.151	9	.000
Linear-by-Linear Association	10.781	1	.001
N of Valid Cases	385		
(a): 6 cells (20.0%) have expected count less than 5. The minimum expected count is .92.			

Symmetric Measures					
		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	-.168	.051	-3.326	.001(c)
Ordinal by Ordinal	Spearman Correlation	-.207	.049	-4.145	.000(c)
N of Valid Cases		385			
(a): Not assuming the null hypothesis.					
(b): Using the asymptotic standard error assuming the null hypothesis.					
(c): Based on normal approximation.					

A chi-square test of the survey data revealed that there was a marked difference in the number of friends that male and female respondents made on Facebook. The chi-square value for the association between Number of friends on Facebook and Gender was obtained as 30.536 with 9 degrees of freedom and a Significance Probability less than 0.000 - i.e. a very highly significant result. On the evidence of this data, there would appear to be no doubt that there is an association between number of friends on Facebook and gender in the population from which this sample of 403 respondents was drawn.

The findings show that women tend to lag behind men when it comes to communicating with others through social media, which debunks other recent studies that suggest that women are more savvy networkers between the sexes. Data revealed that 23 per cent of males had less than 100 friends on Facebook as compared to 39.32 per cent females who had less than 100 Facebook friends. Furthermore, 17.39 per cent of males had more than 400 friends as compared to only 7.8 per cent of females.

The results could indicate that males are benefitting greater social capital from Facebook in comparison to females. This could also be because of greater privacy concerns among female respondents.

Overall, males engaged in far more Facebook befriending activity than did females. Data revealed that 23 per cent of males had less than 100 friends on Facebook as compared to 39.32 per cent females who have less than 100 Facebook friends. Furthermore, 17.39 per cent of males had more than 400 friends as compared to only 7.8 per cent of females. The results could indicate that males are benefitting greater social capital from Facebook in comparison to females. This could also be because of greater privacy concerns among female respondents.

Online network sites like Facebook are changing the nature of social relationships and recent scholarship in the area shows that these sites are becoming viable places for romance. Facebook users especially young people are therefore, increasingly using the site to connect with an unprecedented number of 'friends' from the opposite gender.

The present research sought to find out whether Facebook users were creating contacts more with people from the opposite gender or were using the site to connect with people of the same gender.

<b>Table 1.3: Approximately, what percentage of them is from the opposite gender?</b>				
		<b>Frequency</b>	<b>Per cent</b>	<b>Valid Per cent</b>
<b>Valid</b>	<b>less than 10%</b>	<b>31</b>	<b>7.7</b>	<b>8.1</b>
	<b>10-20%</b>	<b>28</b>	<b>6.9</b>	<b>7.3</b>
	<b>20-30%</b>	<b>69</b>	<b>17.1</b>	<b>18.1</b>
	<b>30-50%</b>	<b>134</b>	<b>33.3</b>	<b>35.1</b>
	<b>50-60%</b>	<b>82</b>	<b>20.3</b>	<b>21.5</b>
	<b>60-80%</b>	<b>22</b>	<b>5.5</b>	<b>5.8</b>
	<b>more than 80%</b>	<b>15</b>	<b>3.7</b>	<b>3.9</b>
	<b>80</b>	<b>1</b>	<b>.2</b>	<b>.3</b>
	<b>Total</b>	<b>382</b>	<b>94.8</b>	<b>100.0</b>
<b>Missing</b>	<b>System</b>	<b>21</b>	<b>5.2</b>	
	<b>Total</b>	<b>403</b>	<b>100.0</b>	

Table 1.3 shows that majority of the respondents in this study (68.6 per cent) had less than 50 per cent friends from the opposite gender. This indicates that these people were connecting mainly with people from the same gender. However, 31.4 per cent of the respondents claimed that more than half of their Facebook friends were from the opposite gender.

Another stream of the study attempted to examine how careful people were about their Facebook security and friend requests. To check the vulnerability quotient of Facebook users, respondents were asked if they became friends on Facebook with people they had never met in person. It was surprising to find that an overwhelming 71.2 per cent of the Facebook users in this study added people they had never met to their friends list. This indicates the apparent lack of concern about privacy among respondents who seemed to be at ease with the fact that their private information was being made available to unknown people.

<b>Table 1.4: Are any of your friends on Facebook people you have never met in person?</b>				
		<b>Frequency</b>	<b>Per cent</b>	<b>Valid Per cent</b>
<b>Valid</b>	<b>YES</b>	<b>272</b>	<b>67.5</b>	<b>71.2</b>
	<b>NO</b>	<b>110</b>	<b>27.3</b>	<b>28.8</b>
	<b>Total</b>	<b>382</b>	<b>94.8</b>	<b>100.0</b>
<b>Missing</b>	<b>System</b>	<b>21</b>	<b>5.2</b>	
	<b>Total</b>	<b>403</b>	<b>100.0</b>	

Table 1.4 shows that only 28.8 per cent of the respondents were careful about who they added as friends on Facebook. This group of Facebook users said that none of their friends on Facebook were people they had never met in person.

It has been seen in social networking behaviour that there is a manifold increase in a users network size because of the tendency to add ‘friends of friends’. Often these ‘friends of friends’ are people the user does not know personally but still includes into his/her network because of mutual friends in the network. The data gathered from this study reveals that almost half of the people who add unknown people as ‘friends’ on Facebook do so despite not having any common connection or mutual friends. Needless to say, this befriending pattern of young Facebook users exposes them to threats of hacking and stalking besides pilferage of private and sensitive data.

		Frequency	Per cent	Valid Per cent
Valid	YES	147	36.5	49.8
	NO	148	36.7	50.2
	Total	295	73.2	100.0
Missing	System	108	26.8	
	Total	403	100.0	

Table 1.5 shows that almost 50 per cent of Facebook users connect with completely unknown people adding them as friends on the social networking platform. It is interesting to note that 49.8 per cent of users added people who they had never met in person and people who also had no connection whatsoever with their online or offline friends. The other half of the respondents admitted that they added unknown people as friends because of mutual connections with their online or offline friends.

### **Facebook and Social Capital**

Online communication in general and the use of social networking sites in particular have the potential to change the costs of communication, the number and character of people with whom one keeps in touch, and the nature of the communication one has with them. As a result, many researchers have proposed that online communication and participation in social networking will influence one’s social capital and the downstream psychological consequences.

The main argument of this research is that the use and impacts of media are dependent on the type of **tie** connecting communicators. The tie determines the ways, means, and expression of

communications, and it determines the motivation, needs, and desires for communication. Both positive and negative impacts can be expected as a result of this differential use of Facebook, affecting strong and weak tie connections differently.

Strong ties may be affected positively by the addition of new means of communication when that medium provides further means and opportunities for contact and acts as a complement to existing communications methods (Lind & Zmud, 1995;McKenney et al., 1992; Rice, 1992a; Rice & Case, 1983;Rice & Shook, 1990a; Sproull & Kiesler, 1991; Wellman et al., 1996). Weak ties may be affected positively when the medium expands the reach and basis for initiating and maintaining ties, providing a means through which previously unconnected individuals can now initiate contact (Constant et al., 1996; Culnan & Markus, 1987; Wellman et al., 1996).

Any individual is likely to maintain a range of ties with others, and a range of strengths of ties with friends and co-workers across groups, organizations, and communities. For each of us, there is a continual tension between maintaining strong ties with friends or co-workers, and weaker ties with the group as a whole, or with people outside the group (see also Haythornthwaite, 2002).

The present study distinguishes between three kinds of social behaviour in Facebook. These behaviours are measurable through site logs on Facebook, but generalizable to other platforms.

The first type of behaviour is:

- *Converting latent ties to weak ties*, the type of social behaviour where the use of Facebook removes or overrides the way in which ties have been maintained in the past.

The second type of behaviour identified in this research is:

- *Maintaining existing relationship*: This type of communication is the core of the Facebook experience. Facebook and other social media allow for a type of communication that is somewhat less taxing than direct communication. Technologies like News Feed and RSS readers allow people to consume content from their friends and stay in touch with the content that is being shared.



The third behaviour Facebook users are believed to be engaging in is:

- *Resurrecting past relationship:* Most people use Facebook to keep in touch with family and current friends as well as connecting with old ones.

According to a study by Pew Internet and American Life Project, over half of all computer users have used the Internet in general, and Facebook specifically, to track down someone from their past.

Respondents in this study were asked which of the above-mentioned social behaviour they engaged in the most. Type of social behaviour was correlated with the number of online friends respondents made on Facebook. Results indicated that most of the respondents used Facebook to connect with people they are currently sharing offline ties with. Maintained relationships formed the core of most Facebook friendships as shown by the present study.

Table 1.6 shows that overall 80 per cent of the respondents use Facebook, mostly to maintain existing relationships.

While 10.5 per cent respondents mostly used the site to reconnect with past relationships, another 9.5 per cent of the users said they were converting the latent ties they had on Facebook to weak ties by using the site.

		What type of social behaviour?			Total
		converting latent ties to weak ties	maintaining existing relationships	resurrecting past relationships	
1-100	Count	12	87	15	112
	% within how many friends do you have	10.7%	77.67%	13.3%	100%
100-200	Count	10	71	8	89
	% within how many friends do you have	11.2%	79.8%	9.0%	100.0%
200-300	Count	3	66	11	80
	% within how many friends do you have	3.8%	82.5%	13.8%	100.0%
300-400	Count	5	31	4	40
	% within how many friends do you have	12.5%	77.5%	10.0%	100.0%
400+	Count	5	41	3	49
	% within how many friends do you have	10.2%	83.7%	6.1%	100.0%
<b>Total</b>	Count	35	296	39	370
	% within how many friends do you have	9.5%	80.0%	10.5%	100.0%

A Chi-square test conducted on the survey data indicate a significant relationship between the number of friends on Facebook and the type of social behavior, a user engages in on the social networking site.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	57.909(a)	18	.000
Likelihood Ratio	38.743	18	.003
Linear-by-Linear Association	1.811	1	.178
N of Valid Cases	370		
a 16 cells (53.3%) have expected count less than 5. The minimum expected count is .19.			

Symmetric Measures					
		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.070	.062	1.347	.179(c)
Ordinal by Ordinal	Spearman Correlation	.019	.056	.369	.713(c)
N of Valid Cases		370			
a Not assuming the null hypothesis. b Using the asymptotic standard error assuming the null hypothesis. c Based on normal approximation.					

### Self-Esteem and Social Capital:

The purpose of this study is also to examine the relationship between self-esteem and social capital. First, all respondents in the study were divided into three categories of self-esteem and attempt was made to check if the number of online friends, respondents made on Facebook were different across the three categories of self -esteem.

Survey data shows that the number of Facebook friends was not found to interact with measures of self-esteem. Among people with low self-esteem, while 28.7 per cent had less than 100 friends on Facebook, 19.4 per cent had between 100-200. Only 0.5 per cent of these respondents with low self-esteem had more than 500 friends. The online befriending pattern was no different among people with moderate and high self-esteem. Of those respondents with moderate self-esteem, 32.4% had less than 100 friends while only 0.9 per cent had more than 400 online friends.

Overall, majority of the respondents across the three different categories of self-esteem had between 100-300 online friends. Psychological well-being did not appear to affect the ‘friend adding’ behaviour of Facebook users.

		How many friends do you have?										Total
		no friends	1-5	5-10	10-20	20-50	50-100	100-200	200-300	300-400	400+	
Low self-esteem	Count	0	1	1	7	5	26	27	37	12	23	139
	% within Rosenberg Self-Esteem Scale	.0%	.7%	.7%	5.0%	3.6%	18.7%	19.4%	26.6%	8.6%	16.5%	100.0%
Moderate self Esteem	Count	2	3	4	14	19	38	63	43	34	27	247
	% within Rosenberg Self-Esteem Scale	.8%	1.2%	1.6%	5.7%	7.7%	15.4%	25.5%	17.4%	13.8%	10.9%	100.0%
High self-esteem	Count	0	0	0	0	0	0	0	1	0	0	1
	% within Rosenberg Self-Esteem Scale	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
Total	Count	2	4	5	21	24	64	90	81	46	50	387
	% within Rosenberg Self-Esteem Scale	.5%	1.0%	1.3%	5.4%	6.2%	16.5%	23.3%	20.9%	11.9%	12.9%	100.0%

Relationships between individuals are an area of influence within a social setting. How we relate within these relationships can be impacted by not only our perception of others, but also our perception of ourselves (Josephs, Markus, Tafarodi, 1992). Research indicates that an individual’s self-worth is integral in the development of a variety of social relationships (Kleck & Strenta, 1980). Differences exist surrounding the influence of an individual’s self-perception, impacting their relationships with others. As individuals have differing relationship types with different individuals, this can be expected. This is particularly true for opposite-sex relationships, and romantic relationships. Past research has shown that self-esteem is associated with the kind of social interaction one has with the opposite sex.

The present study also assessed the association between self-esteem and friendship on Facebook with the opposite sex.

Table 1.8 shows that self-esteem did not particularly affect the number of friends a Facebook user included from the opposite sex. Among the respondents with low self-esteem, 69.1 per cent had less than half of their friends on Facebook belong to the opposite sex. However 30.9

per cent of these people claimed that more than half of their online networks comprised of members of the opposite sex.

Among those respondents with moderate and high self-esteem, these figures did not change significantly. Of the moderate self-esteem Facebook users, 68.1 per cent had more than half of the friends from the same gender. For those with high self-esteem, all respondents had between 30-50 per cent of Facebook friends from the opposite sex.

**Table 1.8: Rosenberg Self-Esteem Scale/What percentage of your Facebook friends are from the opposite gender?**

		What percentage of your Facebook friends are from the opposite gender?							
		less than 10%	10-20%	20-30%	30-50%	50-60%	60-80%	more than 80%	Total
Low self-esteem	Count	6	13	26	47	29	7	5	133
	% within Rosenberg Self-Esteem Scale	4.5%	9.8%	19.5%	35.3%	21.8%	5.3%	3.8%	100.0%
Moderate self-esteem	Count	25	15	43	86	53	15	10	248
	% within Rosenberg Self-Esteem Scale	10.1%	6.0%	17.3%	34.7%	21.4%	6.0%	4.0%	100.0%
High self-esteem	Count	0	0	0	1	0	0	0	1
	% within Rosenberg Self-Esteem Scale	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
Total	Count	31	28	69	134	82	22	15	382
	% within Rosenberg Self-Esteem Scale	8.1%	7.3%	18.1%	35.1%	21.5%	5.8%	3.9%	100.0%

**Facebook Use Intensity and Type of Social Capital:**

Facebook has been linked both to increases and decreases in social capital. Several studies have concluded that computer-mediated interactions on Facebook have had positive effects on community interaction, involvement, and social capital (Hampton & Wellman, 2003; Kavanaugh, Carroll, Rosson, Zin, & Reese, 2005). On the other hand, Nie (2001) argues that

use of Facebook detracts from face-to-face time with others, which might diminish an individual's social capital. However, this perspective has received strong criticism (Bargh & McKenna, 2004).

Recently, researchers have emphasised the importance of Facebook-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 networking sites. Bridging social capital might be augmented by such sites, which support loose social ties, allowing users to create and maintain larger, diffuse networks of relationships from which they could potentially draw resources (Donath & Boyd, 2004; Resnick, 2001; Wellman et al., 2001).

Based on this prior work, the researcher proposes the following hypothesis:

*H1: Intensity of Facebook use will be positively associated with individuals' perceived social capital.*

The categories of social relationship considered for the study were- maintained relationships, one-way communication and reciprocal communication.

- Maintained social capital, for the purpose of this study was a measure focusing specifically on the maintenance of existing social capital. Facebook allows for a type of communication that is somewhat less taxing than direct communication. Technologies like News Feed and RSS readers allow people to consume content from their friends and stay in touch with the content that is being shared.
- One-way communication implied the total set of people with whom a person has communicated.
- Reciprocal communication was a measure of a sort of core network, the count of the number of people with whom a person had had reciprocal communications, or an active exchange of information between two parties.

The study sought to examine if Facebook use intensity was correlated with the type of social relationships one forms on Facebook. Respondents were asked which type of relationship they shared more with their Facebook friends. They were asked to rank from 1-3, with rank 1

for the largest number of friends in that category and 3 for the least number of friends in that category.

### Maintained relationships

First, intensity of Facebook use was correlated with the preference given to maintained social relationships. A chi-square test revealed that there was a statistically significant relation between the intensity of Facebook use and the preference given to maintained relationships on Facebook.

It can be seen from the survey data that users with low Facebook use intensity prefer maintained social relationships on Facebook the most while those with high Facebook use intensity paid importance to the other two types of social relationships as well. These high intensity users were seen to be interested in forging the other types of relationships equally.

A Spearman's correlation was run to determine the relationship between 401 Facebook use intensity and preference to maintained relationships values. There was a weak but positive monotonic correlation between Facebook use intensity and maintained relationship on Facebook ( $r = .108$ ,  $n = 401$ ,  $p < .05$ ).

		Maintained relationships (for whom you had clicked on a News Feed story or visited their profile more than twice)			Total
		1	2	3	
Low intensity	Count	34	18	18	70
	% within Category of intensity	48.6%	25.7%	25.7%	100.0%
Moderate intensity	Count	114	82	84	280
	% within Category of intensity	40.7%	29.3%	30%	100.0%
High intensity	Count	17	11	23	51
	% within Category of intensity	33.3%	21.6%	45.1%	100.0%
Total	Count	165	111	125	401
	% within Category of intensity	41.1%	27.7%	31.2%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.815(a)	6	.045
Likelihood Ratio	8.036	6	.235
Linear-by-Linear Association	4.648	1	.031
N of Valid Cases	401		

a 3 cells (25.0%) have expected count less than 5. The minimum expected count is .25.

Symmetric Measures					
		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.108	.050	2.166	.031(c)
Ordinal by Ordinal	Spearman Correlation	.106	.050	2.139	.033(c)
N of Valid Cases		401			

a Not assuming the null hypothesis. b Using the asymptotic standard error assuming the null hypothesis. c Based on normal approximation.

**One-way communication:** Intensity of Facebook use was correlated with the preference given to one-way communication.

		One-way Communication (the total set of people with whom a person has communicated)			Total
		1	2	3	
Low intensity	Count	13	21	36	70
	% within Category of intensity	18.6%	30.0%	51.4%	100.0%
Moderate intensity	Count	68	100	114	282
	% within Category of intensity	24.1%	35.5%	40.4%	100.0%
High intensity	Count	9	19	23	51
	% within Category of intensity	17.6%	37.3%	45.1%	100.0%
Total	Count	90	140	173	403
	% within Category of intensity	22.3%	34.7%	42.9%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.579(a)	4	.047
Likelihood Ratio	3.591	4	.464
Linear-by-Linear Association	.352	1	.553
N of Valid Cases	403		
a 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.39.			

Symmetric Measures					
		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	-.030	.049	-.593	.554(c)
Ordinal by Ordinal	Spearman Correlation	-.035	.049	-.697	.486(c)
N of Valid Cases		403			
a Not assuming the null hypothesis. b Using the asymptotic standard error assuming the null hypothesis. c Based on normal approximation.					

A chi-square analysis revealed that there was a statistically significant relation between the intensity of Facebook use and the preference given to one-way relationships on Facebook ( $p=0.047$ ,  $df=4$ ). A Spearman's correlation was run to determine the relationship between 403 Facebook use intensity and preference to one-way communication values. There was a weak but positive monotonic correlation between Facebook use intensity and one-way communication on Facebook ( $r = .030$ ,  $n = 401$ ,  $p < .05$ ).

**Reciprocal Communication:** Intensity of Facebook use was correlated with the preference given to reciprocal communication.

Table 1.11 reveals that reciprocal communication on Facebook was the most preferred kind of social relationship. Across the three levels of Facebook Use Intensity, this type of social relationship was given the first rank. There was no significant relationship between intensity of Facebook use and the preference given to reciprocal communication on the social networking site. A chi-square test showed that with p value of 0.158 (ie.  $>0.05$ ) there is no statistically significant relationship between the intensity of use and reciprocal communication.



Table 1.11: Category of intensity/Reciprocal Communications					
		Reciprocal Communication (an active exchange of information between two parties )			
		1	2	3	Total
Low intensity	Count	32	18	18	69
	% within Category of intensity	46.4%	26.1%	26.1%	100.0%
Moderate intensity	Count	128	72	81	281
	% within Category of intensity	45.6%	25.6%	28.8%	100.0%
High intensity	Count	16	19	15	50
	% within Category of intensity	32.0%	38.0%	30.0%	100.0%
Total	Count	176	109	114	400
	% within Category of intensity	44.0%	27.3%	28.5%	100.0%

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.294(a)	6	.158
Likelihood Ratio	7.957	6	.241
Linear-by-Linear Association	.787	1	.375
N of Valid Cases	400		

a 3 cells (25.0%) have expected count less than 5. The minimum expected count is .13.

Symmetric Measures					
		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.044	.049	.887	.376(c)
Ordinal by Ordinal	Spearman Correlation	.050	.049	1.002	.317(c)
N of Valid Cases		400			

a Not assuming the null hypothesis. b Using the asymptotic standard error assuming the null hypothesis. c Based on normal approximation.

### Composition of Facebook Friends:

Developing social capital is one of the main functions of Facebook. People use Facebook for talking to friends and family who they see often, to get in touch with those they see rarely,

and also for looking for old friends who they have lost touch with. Over the years that Facebook has developed, in some circles there has been much importance placed on how many friends people can encourage to follow them, with some people even seeing it as a form of validation of how interesting others find their Facebook life. This study reveals very clearly that the focus is now shifting to being far more discerning about who people count among their Facebook friends. Indeed, the tide against amassing friends from 'just anywhere' is turning and now people are now becoming slightly discerning about who they add as Facebook friends.

The survey data shows that when people communicate through social networking sites it is mostly with people they know in some way, though some people were also found to be quite enthusiastic about interacting with strangers. About 36 per cent reported talking to friends and family, 53 per cent looked for old friends and 32 per cent talked to people who were friends of friends. In comparison, 40 per cent talked to people they didn't know.

The study brings to light the interesting finding that most young people extensively use Facebook to reconnect with old friends they had lost touch with. Facebook has a search feature that gives users a variety of options that can help them to find long lost friends. While this may seem like a passive approach to finding old friends on Facebook it can be very effective. It is especially effective when the lost friend is already a member of the community and is actively seeking to reconnect as well.

The site allows unobtrusive sharing of information considered important for solidifying friendships and making new friends. In the present research, 40 per cent of the respondents said that on Facebook they talked to people they did not know offline. Perhaps the factor of anonymity coupled with the bid to create an identity for themselves encouraged these respondents to indulge in communication with unknown people on the social networking site.

Facebook also proved to be of great help in creating and maintaining contact with friends and relatives respondents did not meet often. A considerable size of the research sample (46.3 per cent) said that they used Facebook to talk to friends and family who are otherwise very difficult to get through to or who the respondents rarely see. However, when it came to those real friends with whom the respondents spent time with outside the Internet, only 35 per cent said they spent time on Facebook interacting with this group.

This study also showed that among unknown people Facebook users interacted with; ‘friends of friends’ were very common. More than one-third of the respondents (32 per cent) revealed that they added unknown people to the circle of friends on Facebook if there were any mutual friends. There were again a number of people from among the respondents who used Facebook for some kind of ‘voyeuristic pleasure’. These respondents did not interact with their online friends but nevertheless kept track of their activities and lives by looking at their profiles silently. Surprisingly 67 per cent of the Facebook users in this study admitted that they visited their friends’ profiles often without leaving any message for them.

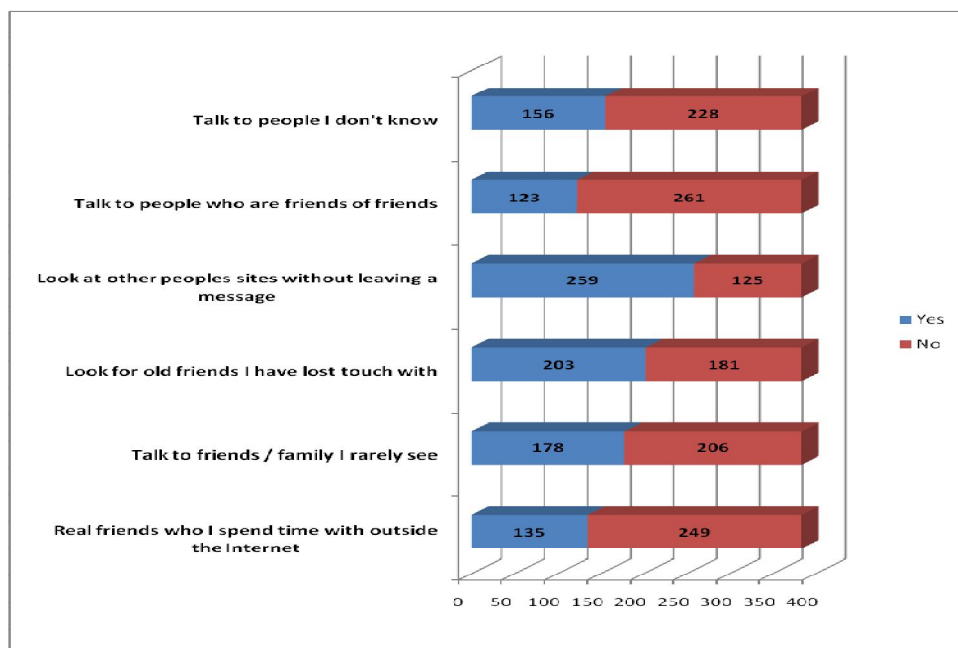


Figure 1h: Types of Communication on Facebook

### Bonding Social Capital and Self-Esteem:

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, the researcher explores whether the relationship between Facebook use and bonding social capital is different for individuals with varying degrees of self-esteem (Rosenberg, 1989). The study found that when it came to interactions with real friends who the respondents spend time with outside the Internet, Facebook social capital is more about virtual strangers and less about real relationships with friends.

<b>Table 1.12: Rosenberg Self-Esteem Scale/ Real friends who I spend time with outside the Internet</b>				
		<b>Real friends who I spend time with outside the Internet</b>		<b>Total</b>
		<b>Yes</b>	<b>No</b>	
<b>Low self-esteem</b>	<b>Count</b>	<b>50</b>	<b>86</b>	<b>136</b>
	<b>% within Rosenberg Self-Esteem Scale</b>	<b>36.8%</b>	<b>63.2%</b>	<b>100.0%</b>
<b>Moderate self-esteem</b>	<b>Count</b>	<b>85</b>	<b>162</b>	<b>247</b>
	<b>% within Rosenberg Self-Esteem Scale</b>	<b>34.4%</b>	<b>65.6%</b>	<b>100.0%</b>
<b>High self-esteem</b>	<b>Count</b>	<b>0</b>	<b>1</b>	<b>1</b>
	<b>% within Rosenberg Self-Esteem Scale</b>	<b>.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Total</b>	<b>Count</b>	<b>135</b>	<b>249</b>	<b>384</b>
	<b>% within Rosenberg Self-Esteem Scale</b>	<b>35.2%</b>	<b>64.8%</b>	<b>100.0%</b>

Table 1.12 shows that 64.8 per cent of the respondents in this study did not use Facebook to maintain friendships with people they spent time outside the Internet. Bonding social capital therefore appeared to be less. This was true for respondents belonging to low, moderate and high self-esteem alike. Hence, self-esteem did not appear to affect bonding social capital in this study.

### **Bridging Social Capital and Self-Esteem:**

Recently, researchers have emphasised 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 networking sites. Bridging social capital might be augmented by such sites, which support loose social ties, allowing users to create and maintain larger, diffuse networks of relationships from which they could potentially draw resources (Donath & Boyd, 2004; Resnick, 2001; Wellman et al., 2001). 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.

This study sought to understand how self-esteem determined whether Facebook users connected with past colleagues/school/university friends. It was found that 52.9 per cent of the respondents agreed that they used Facebook to reconnect with and revive past relationships with friends.

		past colleagues/school/University friends		Total
		Yes	No	Yes
<b>Low self-esteem</b>	<b>Count</b>	<b>90</b>	<b>46</b>	<b>136</b>
	<b>% within Rosenberg Self-Esteem Scale</b>	<b>66.2%</b>	<b>33.8%</b>	<b>100.0%</b>
<b>Moderate self-esteem</b>	<b>Count</b>	<b>112</b>	<b>135</b>	<b>247</b>
	<b>% within Rosenberg Self-Esteem Scale</b>	<b>45.3%</b>	<b>54.7%</b>	<b>100.0%</b>
<b>High self-esteem</b>	<b>Count</b>	<b>1</b>	<b>0</b>	<b>1</b>
	<b>% within Rosenberg Self-Esteem Scale</b>	<b>100.0%</b>	<b>.0%</b>	<b>100.0%</b>
<b>Total</b>	<b>Count</b>	<b>203</b>	<b>181</b>	<b>384</b>
	<b>% within Rosenberg Self-Esteem Scale</b>	<b>52.9%</b>	<b>47.1%</b>	<b>100.0%</b>

**Conclusion:**

Returning to the original research question, it can definitively be stated that there is a positive relationship between certain kinds of Facebook use and the maintenance and creation of social capital. Although it is difficult to say which precedes the other, Facebook appears to play an important role in the process by which young people form and maintain social capital, with usage associated with all three kinds of social capital included in the instrument.

The participants overwhelmingly used Facebook to keep in touch with old friends and to maintain or intensify relationships characterized by some form of offline connection. For many, Facebook provided a way to keep in touch with high school friends and acquaintances. Students in this study reported that the primary audiences for their profiles were high school friends and people they know from earlier times. This implies that highly engaged users are using Facebook to ‘crystallize relationships’ that might otherwise remain ephemeral.

Haythornthwaite (2005) discusses the implications of media that ‘create latent tie connectivity among group members that provides the technical means for activating weak

ties'. Latent ties are those social network ties that are 'technically possible but not activated socially'. Facebook might make it easier to convert latent ties into weak ties, in that the site provides personal information about others, makes visible one's connections to a wide range of individuals, and enables students to identify those who might be useful in some capacity, thus providing the motivation to activate a latent tie. These weak ties may provide additional information and opportunities, which are expressed as dimensions of bridging social capital that speak to interaction with a wide range of people and the more tolerant perspective this might encourage. Facebook seems well suited to facilitate these experiences in that detailed profiles highlight both commonalities and differences among participants.

The present research suggests that social networking sites can bolster past and weaker tie relationships as well as strengthen stronger ties. But it should not be seen as a technology of communication that is independent of other forms. The research found that Facebook adds to the repertoire of communications media that people use, with its application for different types of relationship very much evident, depending on the quality, longevity, intimacy and regular face-to-face contact nature of the existing relationship. Facebook did not affect existing close relationships. However, Facebook did allow participants to be social with a wider range of people by providing regular contacts and updates and by giving more choice to users over how they communicate. It did not, however, generate any new relationships, but it does appear to be changing the way people create new relationships.

There also appeared to be rules developing around Facebook use, for instance, people had to have met a Facebook friend at least once physically before they were accepted as a friend. The researcher found that there was no obligation to keep in constant touch with Facebook friends. Many lay dormant on the friends list for some time. Simply the fact that they are there appears good enough, according to the respondents.

Facebook offers capabilities to its users to create, cultivate, and continue social relationships. Richer social relations emerge from this greater awareness. All these trends will continue to hold strong over the next decade.

## **REFERENCES**

- Adler, P., & Kwon, S. 2002. Social capital: Prospects for a new concept. *Academy of Management Review*, 27, 17–40.
- Ahn, June. (2011). “Digital divides and social network sites: Which students participate in social media?”. *Journal of Educational Computing Research*, 45(2), 147-163.
- Albo, Jose Martin, Juan El Nunez et.al, 2007. “The Rosenberg Self-Esteem Scale: Translation and Validation in University Students”. *The Spanish Journal of Psychology*, Vol. 10, No. 2, 458-467
- Arif, Mohd, Lily-Suriani, Fazal Rahim Khan et al., 2012. “Explaining Social Capital: A study of the Effects of Satisfaction with Life on Social Capital”, Retrieved on March 20, 2013 from [www.ipedr.com/vol42/036-ICKCS2012-K10047](http://www.ipedr.com/vol42/036-ICKCS2012-K10047)
- Boyd, Danah. 2002. Taken Out of Context: American Teen Sociality in Networked Publics
- Boyd, Danah and Nicole Ellison, 2009. “Social Network Sites: Definition, History, and Scholarship”, *Journal of Computer Mediated Communication*.
- Boyd, D., and Heer, J. (2006). Profiles as conversation: Networked identity performance on Friendster. *Proceedings of Thirty-Ninth Hawai'i International Conference on System Sciences*. Los Alamitos, CA: IEEE Press.
- Blasio, Paola Di, Luca Milani and Dania Osualdella, 2009. Quality of Interpersonal Relationships and Problematic Internet Use in Adolescence. *Cyberpsychology and Behaviour*, Volume 12, Number 6, 2009
- Buckingham, David. 2000. *After the Death of Childhood: Growing Up in the Age of Electronic Media*. Cambridge, UK: Polity Press.
- Buxmann, Peter, Hanna Krasnova et.al. 2013. “Envy on Facebook: A Hidden Threat to Users’ Life Satisfaction?” *Conference paper at 11th International Conference on Wirtschaftsinformatik*, 27th February – 01st March 2013, Leipzig, Germany
- Caplan S. 2003. “Preference for online social interaction: a theory of problematic Internet use and psychosocial well-being.” *Communication Research* 30:625–48.
- Cranston, Pete and Tim Davies, 2008. *Youth Work and Social Networking*, Interim Report, The National Youth Agency.
- Dickman, K., Dutton, E., Gioia, C., Oberhausen, L., and Ravensberg, B. (2006). Facebook and college students' development of mature relationships. *Journal of the Indiana University Student Personnel Association*
- Donath, Judith S. 1999. “Identity and Deception in the Virtual Community.” Pp. 29–59 in *Communities in Cyberspace*, edited by Peter Kollock and Marc Smith. London, UK: Routledge.
- Donath, Judith and danah boyd. 2004. “Public Displays of Connection.” *BT Technology Journal* 22(4): 71– 82.
- Diener, E., Suh, E., & Oishi, S. 1997. Recent findings on subjective well-being. *Indian Journal of Clinical Psychology*, 24, 25–41.
- Ellison, Nicole B., Charles Steinfield, and Cliff Lampe. 2007. “The Benefits of Facebook “Friends:” Social Capital and College Students’ Use of Online Social Network Sites.” *Journal of Computer-Mediated Communication* 12(4): article 1. Retrieved December 3, 2008 (<http://jcmc.indiana.edu/vol12/issue4/ellison.html>).
- Ellison, Nicole B., Charles Steinfield, and Cliff Lampe. 2008. “Social capital, self-esteem, and use of online social network sites: A longitudinal analysis”, *Journal of Applied Developmental Psychology* 29 (2008) 434–445
- Golder, S., Wilkinson, D., & Huberman, B. A. (2007). Rhythms of social interaction: Messaging within a massive online network. In C. Steinfield, B. Pentland, M. Ackerman, & N. Contractor (Eds.), *Proceedings of the third international*

- conference on communities and technologies, Michigan State University (pp. 41–66). London: Springer.
- Golbeck, Jennifer and James Hendler, 2004. “Inferring Trust Relationships in Web-based Social Networks” in Proceedings of 14th *International Conference on Knowledge Engineering and Knowledge Management*, October 5-8, 2004, Northamptonshire, UK.
- Granovetter, M. S. (1973). The strength of weak ties. *American Economic Review*, 78, 1360–1480.
- Granovetter, M. S. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory*, 1, 201–233
- Hargittai, Eszter. 2007. “Whose Space? Differences among Users and Non-Users of Social Network Sites.” *Journal of Computer-Mediated Communication* 13(1): article 14. Retrieved December 3, 2008 (<http://jcmc.indiana.edu/vol13/issue1/hargittai.html>).
- Haythornthwaite, Caroline and Barry Wellman. 2002. “The Internet in Everyday Life: An introduction.” Pp. 3–41 in *The Internet in Everyday Life*, edited by Barry Wellman and Caroline Haythornthwaite. London, UK: Blackwell.
- Haythornthwaite, C., Wellman, B. and Garton, L. 1998. Work and community via computer-mediated communication. In J. Gackenbach (ed.), *Psychology and the Internet: Intrapersonal, interpersonal and transpersonal implications* (pp. 199–226). San Diego, CA: Academic Press.
- Hogg, Michael, A., Deborah J Terry, and Katherine M. White. 1995. “A Tale of Two Theories: A Critical Comparison of Identity Theory with Social Identity Theory.” *Social Psychology Quarterly*.
- Kee, Kerk F, Namsu Park and Sebastian Valenzuela, 2008. “Lessons from Facebook: The Effect of Social Network Sites on College Students’ Social Capital”, Conference paper Submitted to the 9th International Symposium on Online Journalism Austin, Texas, April 4-5, 2008
- Lampe, C., Ellison, N., & Steinfield, C. (2007, April). A familiar face (book): Profile elements as signals in an online social network. Proceedings of the SIGCHI conference on human factors in computing systems. San Jose, CA (pp. 435–444). New York: ACM.
- Lenhart, Amanda and Mary Madden. 2007a. *Social Networking Websites and Teens: An Overview*. Pew Internet and American Life Project. Retrieved December 3, 2008 ([http://www.pewinternet.org/PPF/r/198/report\\_display.asp](http://www.pewinternet.org/PPF/r/198/report_display.asp)).
- Lin, N. (1999). Building a network theory of social capital. *Connections*, 22, 28–51.
- Lipsman, Andrew. 2007. *Social Networking Goes Global*. comScore. Retrieved December 3, 2008 (<http://www.comscore.com/press/release.asp?press=1555>).
- Livingstone, Sonia M. 2002. *Young People and New Media: Childhood and the Changing Media Environment*. London, UK: Sage.
- Nie, N. 2001. Sociability, interpersonal relations, and the Internet: Reconciling conflicting findings. *American Behavioral Scientist*, 45, 420–435.
- Pavot, W., & Diener, E. 1993. Review of the Satisfaction with Life Scale. *Psychological Assessment*, 5, 164–172.
- Peluchette J, Karl K. Social networking profiles: an examination of student attitudes regarding use and appropriateness of content. *CyberPsychology & Behavior* 2008; 11:95–7
- Pew Report (2001). Teenage life online: the rise of the instant-message generation and the internet’s impact on friendships and family relationships. Available (15 April 2009) online: <[http://www.pewinternet.org/reports/pdfs/PIP\\_Teens\\_Report.pdf](http://www.pewinternet.org/reports/pdfs/PIP_Teens_Report.pdf)>.



- Putnam, R. D. 2000. *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster
- Raacke J, Bonds-Raacke J. 2008. MySpace and Facebook: applying the uses and gratifications theory to exploring friend- 758 PELLING AND WHITE networking sites. *Cyber Psychology & Behavior* 2008; 11: 169–74.
- Raghunathan, T. E., Rosenthal, R., & Rubin, D. B. 1996. Comparing correlated but nonoverlapping correlations. *Psychological Methods*, 1, 178–183.
- Resnick, P. 2001. Beyond bowling together: Sociotechnical capital. In J. Carroll (Ed.), *HCI in the new millennium* (pp. 647–672). New York: Addison-Wesley
- Sheldon, Pavica, 2007. *Student Favourite: Facebook and Motivations for Its Use*, Southwest Symposium of the Southwest Education Council for Journalism and Mass Communication
- Stefanone, M.A., Kwon, K.H., and Lackaff, D. (2012). Exploring the relationship between perceptions of social capital and enacted support online. *Journal of Computer-Mediated Communication*, 17, 451-466
- Stephen, Andrew T and Keith Wilcox, 2013. “Are Close Friends the Enemy? Online Social Networks, Self- Esteem, and Self-Control”, *Journal of Consumer Research*.
- Tu, Wanqing and Lei Zhang, 2008. “Six Degrees of Separation in Online Society”.
- Valkenburg, PM & Peter, J 2007, ‘Online communication and adolescent well-being: Testing the stimulation versus the displacement hypothesis’, *Journal of Computer-Mediated Communication*, vol. 12, no. 4, article 2, viewed 10 November 2008, <http://jcmc.indiana.edu/vol12/issue4/valkenburg.html>
- Wellman, B., Haase, A. Q., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? Social networks, participation and community commitment. *American Behavioral Scientist*, 45, 436–455.
- Williams, D. (2006). On and off the ‘net’: Scales for social capital in an online era. *Journal of Computer- Mediated Communication*, 11, 593–628.
- Young, K. (2011). Social Ties, Social Networks and the Facebook Experience. *International Journal of Emerging Technologies and Society*, 9(1), 20-34.
- Zhao, Shanyang. (2006). Do Internet Users Have More Social Ties? A Call for Differentiated Analyses of Internet Use. *Journal of Computer-Mediated Communication*, 11 (3), 844-862.
- Zywica, J., and Danowski, J. (2008). The Faces of Facebookers: Investigating Social Enhancement and Social Compensation Hypotheses; Predicting Facebook and Offline Popularity from Sociability and Self- Esteem, and Mapping the Meanings of Popularity with Semantic Networks. *Journal of Computer-Mediated Communication*, 14 (1), 1-34.