

## Exploring patterns of Facebook usage, social capital, loneliness and well-being among a diverse South African student sample

### ABSTRACT

There has been much debate over whether the use of social network sites (SNSs) isolates people and truncates their relationships or, alternatively, provides beneficial connections with others. This debate has been framed by a growing body of international literature that explores the triadic relationship between the intensity of use of SNSs, the maintenance of social capital and the relationship between *social capital* and well-being/life satisfaction. Our exploratory research findings among students at Rhodes University, a small South African higher education institution, indicate that the historically shaped race and class cleavages impact on how this triadic relationship plays out.

*Prof. Charles Young (DCounsPsych) is an associate professor and counselling psychologist in the Psychology Department at Rhodes University, South Africa. His research interests lie primarily in student mental health and well-being. Larry Strelitz is a professor of media studies in the School of Journalism and Media Studies at Rhodes University. Much of his previously published work is in the area of qualitative audience research.*

## INTRODUCTION

A recently published national survey by the Pew Research Centre into how social networking sites (SNSs) are used by American adults highlighted the debate regarding and disagreement over whether these technologies isolate people and truncate their relationships or, alternatively, provide beneficial connections with others (Hampton, Goulet, Rainie & Purcell, 2011). This debate has been framed by a growing body of international literature exploring the relationship between the intensity of use of SNSs to the maintenance of *social capital*, which, although a contested term (see for example Ellison, Steinfield & Lampe, 2007, 2011; Lee & Lee, 2010; Morrow, 1999; Steinfield, Ellison & Lampe, 2008), is often described as the “connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them” (Putnam, 2000:19). Social capital allows individuals to benefit in various ways – through support, relationships, shared identities, shared information and other resources that emerge from these connections (Paxton, 1999). Social capital is thus a resource derived from people’s social ties (Morrow, 1999) or, in Lin’s structuralist definition, is “captured from embedded resources in social networks” (1999:28). According to Portes (1998:2), the heuristic power of social capital emanates from two sources: firstly, the concept draws attention to the positive consequences of sociability and, secondly, it “places those positive consequences in the framework of a broader discussion of capital and calls attention to how such nonmonetary forms can be important sources of power and influence, like the size of one’s stock holdings or bank account”.

Social capital as measured by the strength of social ties – particularly those between close friends – seems to be strongly implied in indicators of subjective well-being (Helliwell & Putnam, 2004) in that they serve as an important resource for identity validation and moreover provide an important buffer against potential stressors (Valkenburg & Peter, 2007a). Like the concept of social capital, subjective well-being has different meanings across different disciplines. Our conceptualisation is based on the influential work of Ed Diener (1984) and his colleagues who suggest that subjective well-being involves two related components: the cognitive involves people’s judgements about their overall life satisfaction, while the affective is the frequency of positive feelings compared with negative feelings that people experience in their lives. Though the affective and cognitive components can be at odds with each other, usually they are at least moderately, if not strongly, correlated. There are numerous determinants of subjective well-being, and a comparison of happy and unhappy students suggests that prominent among these are good social relationships (Diener & Seligman, 2002). Therefore, the issue of whether web-based social networking truncates or elaborates social relationships has important implications for people’s subjective well-being.

While social networks – a configuration of people connected to each other through interpersonal means (Coyle & Vaughn, 2008) – are clearly no new phenomenon, they have been expanded and transformed in unanticipated ways through the introduction of networked computers and social networking sites. Social network sites are “web-based services that allow individuals (1) to construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (boyd & Ellison, 2008:210). Although only one of a

number of competing social networking sites, Facebook may be unique in its market penetration and its trend of changing offline relationships into online relationships that allow for the easy accumulation and maintenance, particularly of weak social ties (Ellison et al., 2007). Weak ties – also known as *bridging social capital* as opposed to the close emotional ties that constitute *bonding social capital* (Putnam, 2000) – are important in that they give people access to networks outside of their close social circles (Granovetter, 1973). In one geographically bound sample of students, Facebook appeared to reduce the obstacles to social participation for students with low self-esteem and also for students with low life satisfaction (Steinfeld et al., 2008).

These are issues that have been explored in some of the international research but never within the context of South Africa with its class and race cleavages that are materially lived out and experienced in our education institutions. It is within this socio-political context that this study explores how these cleavages impact on Facebook access and usage among students at Rhodes University, a small South African higher education institution.

## **1. THE SOCIAL CONTEXT OF THE RESEARCH**

Despite the demise of legally sanctioned apartheid, an informal segregation between black and white students at many historically white universities seems commonplace: researchers at one such university have indicated that seating patterns in residence dining halls are racialised (Schrieff, Tredoux, Dixon & Finchilescu, 2005), while similar observations have been made in respect of seating patterns in lecture theatres at another (Koen & Durrheim, 2010). At Rhodes University, there is a suggestion that racialised drinking practices might demarcate and reinforce informally segregated racial boundaries (Young & Mayson, 2010). These realities, as this paper will demonstrate, not only impact on well-being, but also on access to and use of social media, and on the accumulation of social capital. In other words, how this triadic relationship plays out is deeply context dependent and, in the case of South African university students, is deeply structured by race and class.<sup>1</sup> Foregrounding the structural shapers of identity and experience, and hence SNS use, involves shifting our focus from viewing technology as it is used as a cause, to viewing it as an effect and – in the words of Raymond Williams (1974:10) forces us to ask “[To] what other kinds of cause, and other kinds of action, should we refer and relate our experience of its uses?”.

## **2. THE AIMS OF THE STUDY**

Broadly, the aim of this study is to explore the triadic relationship between social networking, social capital and well-being in this divided social context. We do this, firstly, by profiling Facebook usage according to race and social class. Specifically, we compare the average number of

---

<sup>1</sup> Our focus on a deeply divided student body would seem to contrast with many studies from the North that treat their student research subjects as a homogeneous body (see, for example, Amichai-Hamburger, Wainapel & Fox, 2002; Baym, Zhang, Kunkel, Ledbetter & Lin, 2007; Ellison et al., 2007; Shaw & Gant, 2002; Steinfeld et al., 2008; Turkle, 2011; Valenzuela, Park & Kee, 2009; Valkenburg & Peter, 2007a, 2007b).

'friends', the proportion of those friends who are also other Rhodes university students, the average amount of time that students spend logged onto their Facebook accounts, the length of time that students have had their Facebook accounts, attitudes towards Facebook, and access to Facebook among white students, among black students and among black extended studies students.<sup>2</sup> Secondly, we explore the relative contributions of the variables of race, social class and intensity of Facebook usage to the participants' bridging and bonding social capital, and to their loneliness and well-being scores.

### 3. METHOD

#### 3.1 Sampling

In September 2011, an online survey was hosted on the RUconnected website hosted by Rhodes University and which provides access only to those on campus. Students were emailed and invited to complete the survey. A lucky-draw cash prize of R1000 was offered as an incentive. A random list of 1168 students was drawn from the total student body and invited to participate in the survey.<sup>3</sup> In total, 491 students completed the survey (a response rate of 42%), with a mean age of 21.3 (SD = 3 years) and an age range of 17 to 44. Of these, 292 (59%) were female students and 199 (41%) were male students. These gender proportions were identical to the University's 2010 headcount ( $\chi^2 = 0.08$ ;  $df = 1$ ;  $p = 0.783$ ). Of the 483 who answered the item asking participants to identify their race, 251 (51%) identified themselves as African, 190 (39%) as white, 22 (4%) as Indian and 20 (4%) as coloured. These race proportions were also representative of the 2011 student headcount ( $\chi^2 = 1.43$ ;  $df = 3$ ;  $p = 0.688$ ). Of the 491 students who completed the survey, 68 students were on the Extended Studies Programme.

For the purposes of this study, students were categorised into three distinct groups: white students, black students not on the extended studies programme and black students on the extended studies programme. The first two groups represent students from typically middle-class and educationally advantaged backgrounds. The third group represents students primarily from working-class and educationally disadvantaged backgrounds (Rhodes University, 2010).

---

<sup>2</sup> The Extended Studies Programme at Rhodes University provides an alternative access route for students from disadvantaged educational backgrounds. Their acceptance to Rhodes University depends on their going onto this programme. It entails an extended curriculum – by at least one year – with additional academic support in their first year of study. Given the intersection of race and class in South Africa, the majority of students are black and from relatively impoverished backgrounds. In our study, all of the extended studies students identified themselves as black.

<sup>3</sup> From a list of all the students at Rhodes University, we employed an interval sample (every 5th student) in order to create a random questionnaire distribution list. Because of the relatively small number of extended students on the Rhodes University campus, we sent the questionnaire to all of these.

### **3.2 Measures**

The measure of socio-economic status was based on the one described by Letseka, Breier and Visser (2009) in a South African study of poverty, race and achievement in Higher Education. The measure is an aggregate of four ordinal variables that include the highest educational qualification and income level of the father/male guardian and the highest educational qualification and income level of the mother/female guardian. For level of education, the categories scored none to some schooling as 1; completed schooling (either Matric or Grade 12 or technical college certificate) as 2; and a post-schooling qualification, being either a university or technikon (university of technology) certificate, diploma or degree as 3. Earning an income of less than R1600 per month was scored as 1; one of between R1601 and R12 800 per month was scored as 2; and one of more than R12 800 per month was scored as 3 (see Letseka et al., 2009). Variables for both parents/guardians were summed and divided by four. In cases where participants reported having only one parent or guardian, a score of 0 was assigned in respect of the missing details.

While no psychometric results are reported for the measure by Letseka et al. (2009), the Cronbach alpha reported for this study is 0.68. Although lower than the indicators of internal consistency reported for the other measures used in this study, this is an adequate result given that the measure comprises only four items and one would expect inconsistencies between parental education and income.

The Facebook intensity scale developed by Ellison et al. (2007) was adapted for this study. This scale lists various items, including number of Facebook friends, time spent on Facebook and a number of attitudinal items that are designed to gauge participants' emotional connection to the social-networking site. The adaptations, though minor, were necessary to ensure that the scale would be relevant to our context. This adapted version reported an acceptable Cronbach alpha of 0.87, slightly better than the Cronbach alpha of 0.83 reported by Ellison et al. (2007).

The 9-item bridging-capital measure was adapted by Ellison et al. (2007) and it was further adapted for this study. This adapted version reports an acceptable Cronbach alpha of 0.88, almost identical to the Cronbach alpha of 0.87 reported by Ellison et al. (2007).

With only five items, the bonding-capital measure, also adapted and used by Ellison et al. (2007), was adapted for this study. This adapted version reports an acceptable Cronbach alpha of 0.77, almost identical to the Cronbach alpha of 0.75 reported by Ellison et al. (2007).

Developed by Diener, Emmons, Larsen and Griffin (1985), the 5-item Satisfaction with Life Scale (SWLS) is a measure of well-being that is one of the most widely used measures in psychology. The measure reports an acceptable Cronbach alpha of 0.81 that is slightly less than the Cronbach alpha of 0.87 reported by Ellison et al. (2007), though their scale was adapted to reflect satisfaction with life specifically at the university in which they collected their data, which may have affected the internal consistency of the measure.

Self-esteem was measured with Rosenberg's 10-item self-esteem scale (Rosenberg, 1965). For this measure, a Cronbach alpha of 0.85 was obtained, which is nearly identical to the Cronbach alpha of 0.87 reported by Ellison et al. (2007) for the same measure.

The 8-item UCLA Loneliness Scale (Russell, 1996) was used to measure loneliness. An acceptable Cronbach alpha of 0.88 was reported for this measure. In addition to these measures, we included items to explore both access to Facebook and the extent to which use of this social network site helps them feel a part of the Rhodes University community.

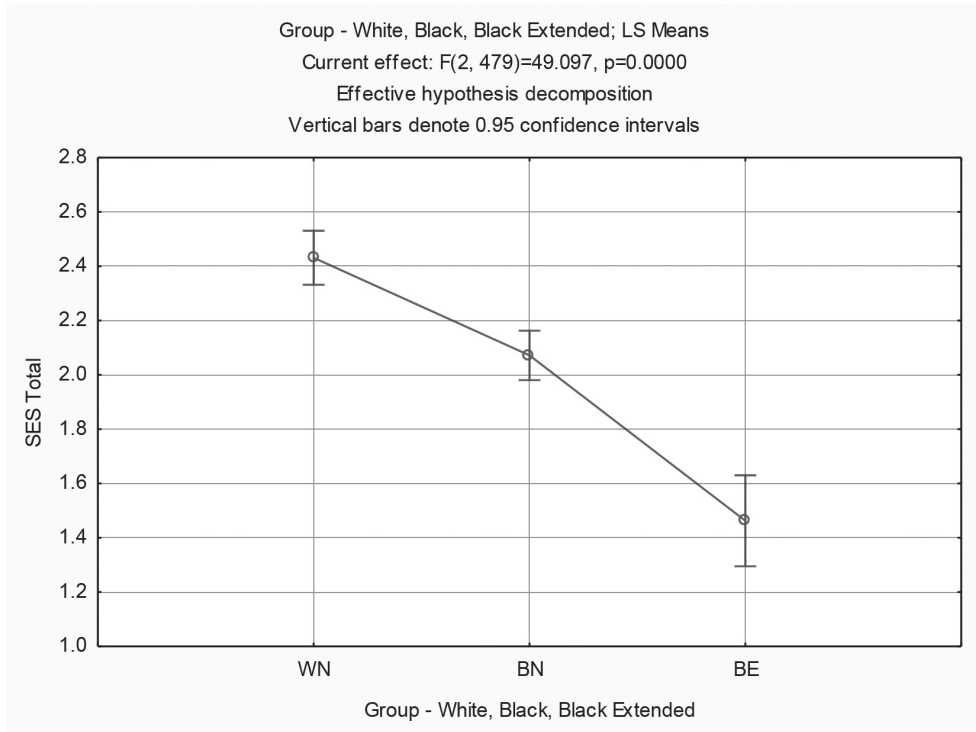
### **3.3 Statistical analysis**

By using a one-way ANOVA statistical test, differences in socio-economic status scores were compared across the three categories of students to determine whether these were in fact three distinct cohorts. Then – by using ANOVA and chi-squared tests – similar comparisons were made for the various Facebook usage variables to profile Facebook usage across the three cohorts. Finally, hierarchical multiple regression analyses were used to determine the relative contribution of the Facebook intensity scores to bridging and bonding capital, and to determine the relative contribution of Facebook intensity scores and social capital scores to measures of loneliness and satisfaction with life.

## **4. RESULTS**

### **4.1 Socio-economic status**

The composite measure of socio-economic status suggested, as was to be expected, stark differences according to the following three group categories: white, black and black extended studies ( $F(2, 479) = 49.1, p = 0.00$ ) (see Figure 1). Tukey post-hoc analyses confirmed that the three groups of white students, black students and black extended studies students did indeed comprise three distinct socio-economic groups.



**Figure 1: Facebook usage for white students, black students and black extended studies students**

The vast majority (97.8%) of the participants reported that they had Facebook profiles. Despite stark differences in socio-economic status, differences in the intensity of Facebook usage<sup>4</sup> in respect of the three groups were found not to be statistically significantly different ( $F(2, 479) = 0.75, p = 0.472$ ).

However, while intensity of usage may not have been statistically significantly different between these groups, there were significant differences in respect of both the variables that constitute the Facebook intensity index and other variables related to Facebook usage. This suggests that important differences exist in the way in which these three social groups use Facebook.

---

<sup>4</sup> A composite measure of number of friends, time and attitude towards Facebook developed by Ellison et al. (2007) and used in a number of Facebook studies (cf. Steinfield et al., 2008; Valenzuela et al., 2009)

*Number of Facebook 'friends':* Participants were asked to indicate their number of Facebook friends by selecting one option from the following choices: Fewer than 50, between 50 and 100, 101–200, 201–400, 401–600, and more than 600. Taking the midpoint of these categories, the estimated means are 456 for white students, 417 for black students and 353 for extended studies students – a difference that is statistically significant ( $F(2, 465) = 6.52$ ,  $p = 0.002$ ).

*Proportion of Facebook 'friends' who are at Rhodes University:* Unlike the other students, extended studies students reported having a higher proportion of Facebook friends who were other Rhodes students than the other students: 40% of black extended studies students reported that more than half of their Facebook friends were other Rhodes students, while only 24% of black and 14% of white students reported that more than half of their Facebook friends were other Rhodes students – a difference that is statistically significant ( $\chi^2 = 20.0$ ;  $df = 2$ ;  $p < 0.001$ ).

*Length of time since creating a Facebook account:* Only 56% of extended studies students had had a Facebook account for more than two years, while 77% of black students not on the Extended Studies Programme and 93% of white students had had Facebook accounts for more than two years. These differences are statistically significant ( $\chi^2 = 17.5$ ;  $df = 2$ ;  $p < 0.001$ ).

*Access to Facebook account:* Participants were asked where they had mainly accessed their Facebook accounts by choosing one of the following options: on my own laptop/computer; at the computer labs on campus; on my phone; on a friend's computer or phone. Findings show that there are statistically significant differences in how these three groups of students access their Facebook accounts, with extended studies students being less likely to access their Facebook accounts from their own computer and more likely to access their accounts in the student computer labs ( $\chi^2 = 23.9$ ;  $df = 4$ ;  $p < 0.001$ ).

*Time spent on Facebook:* Though extended studies students proved less likely than other students to access Facebook on their own computers, they were more likely than other students to have spent more than three hours on Facebook daily. Though a quarter of all black extended studies students spent more than three hours a day on Facebook, only 11% and 3% of black and white students, respectively, not on the Extended Studies Programme spent this much time on Facebook, a difference that is statistically significant ( $\chi^2 = 30.4$ ;  $df = 2$ ;  $p < 0.001$ ).

*The extent to which participants believe that Facebook helps them feel a part of the Rhodes University community:* Extended studies students were more likely to have endorsed the item that asked them to say whether Facebook had helped the student to feel a part of the Rhodes University student community. Again, this was statistically significant ( $F(2, 479) = 4.75$ ,  $p = 0.009$ ).



#### 4.2 Hierarchical multiple regression analyses

Intensity of Facebook usage, as measured by an adapted version of the scale developed by Ellison et al. (2007), adds a very small though statistically significant contribution to the variance of both measures of bridging (3.4%) and bonding (3.8%) capital (see Table 1). For bonding capital – not bridging capital – the most powerful predictor is race.

**Table 1: Hierarchical regressions predicting bridging and bonding capital**

	Bridging		Bonding	
	Beta	P	Beta	P
SES	-0.06	0.24	0.062	0.187
Black	-0.07	0.13	<b>-0.227</b>	<b>0.000</b>
Sex	-0.01	0.90	0.062	0.146
<b>R<sup>2</sup> (%)</b>	0.4%	0.575	<b>8.1%</b>	<b>0.00</b>
Year of study	-0.03	0.58	<b>0.157</b>	<b>0.000</b>
Extended studies	-0.00	0.95	0.027	0.572
<b>R<sup>2</sup>Change (%)</b>	0.2%	0.64	<b>2.1%</b>	<b>0.00</b>
Facebook intensity	<b>0.186</b>	<b>0.00</b>	<b>0.196</b>	<b>0.000</b>
<b>R<sup>2</sup>Change (%)</b>	<b>3.4%</b>	<b>0.00</b>	<b>3.8%</b>	<b>0.00</b>
<b>Final R<sup>2</sup> (%)</b>	<b>4.0%</b>	<b>0.00</b>	<b>14.0%</b>	<b>0.00</b>

Intensity of Facebook usage is positively though very weakly associated with loneliness (see Table 2). Other variables associated with loneliness include race, sex, and bridging and bonding capital. Bonding capital, in particular, is strongly inversely associated with loneliness. The model accounts for a significant 28% of the variance in loneliness scores.

Intensity of Facebook usage does not appear to be associated with well-being. The variables only account for 11% of the variance in satisfaction with life scores. Bridging and bonding capital are the only two variables that are associated with satisfaction with life.

**Table 2: Hierarchical regressions predicting loneliness and satisfaction with life**

	Loneliness		Satisfaction with life	
	Beta	P	Beta	P
SES	0.003	0.937	0.071	0.140
Black	<b>0.124</b>	<b>0.004</b>	0.020	0.678
Sex	<b>-0.106</b>	<b>0.007</b>	0.052	0.229
<b>R<sup>2</sup> (%)</b>	<b>9.0%</b>	<b>0.00</b>	1.8%	0.333
Year of study	-0.024	0.559	0.037	0.416
Extended studies	-0.076	0.084	0.053	0.273
<b>R<sup>2</sup>Change (%)</b>	<b>1.6%</b>	<b>0.015</b>	0.7%	0.167
Facebook intensity	<b>0.111</b>	<b>0.006</b>	-0.062	0.163
<b>R<sup>2</sup>Change (%)</b>	0%	0.716	0%	0.904
Bridging capital	-0.101	0.027	<b>0.191</b>	<b>0.000</b>
Bonding capital	<b>-0.387</b>	<b>0.000</b>	<b>0.165</b>	<b>0.002</b>
<b>R<sup>2</sup>Change (%)</b>	<b>17.2%</b>	<b>0.000</b>	<b>8.6%</b>	<b>0.000</b>
<b>Final R<sup>2</sup> (%)</b>	<b>27.9%</b>	<b>0.000</b>	<b>11.1%</b>	<b>0.000</b>

**5. DISCUSSION**

Though the student body comprises a highly selected group of youth, socio-economic inequalities remain stark. White students, black students and black extended studies students comprise three distinct socio-economic groups and these differences are consistent with wider social inequalities reported at the start of this paper.

**5.1 Facebook usage according to race and socio-economic status**

Almost all of the students who participated in the survey had a Facebook account. There might be a slight bias in that people who use the Internet and who are willing to participate in a survey of this nature are obviously more likely to have a Facebook account than those who fear or dislike the Internet or do not have access to it. On the other hand, the response rate was high for a survey of this kind and was seemingly representative of the various important student demographics. Students and youth in general need to be computer literate, suggesting that the results are likely to be at least reasonably accurate.<sup>5</sup>

Class and race seem to influence the ways in which students use Facebook, even though the groups do not statistically significantly differ according to the composite *Facebook Intensity*

---

<sup>5</sup> At Rhodes University, it is common practice for lecturers to put course material online for student use.

measure used by Ellison et al. (2007). In other words, there are significant and important differences in the various variables that go to make up this composite score and which are lost when combined.

To start, there are differences in respect of where students access their Facebook accounts, which, in turn, reflect differences of socio-economic status. White students are much more likely to access Facebook on their own personal computers, while black extended studies students must rely on the University's computer laboratories. Yet despite not having equally easy access to the computer network, extended studies students spend more time on Facebook than do other students.

The statistically significant data also reflect that white students tend to have had their Facebook accounts for longer than black students, who, for their part, have had their Facebook accounts for longer than have black extended studies students. This is not surprising given the different socio-economic status correlates with Internet access (University of the Witwatersrand, 2012) and that for many disadvantaged students, university may be their first opportunity to have had regular access to the Internet<sup>6</sup>. Furthermore, the proportion of friends who are other Rhodes students is highest for black extended studies students and lowest for white students, with black students lying between the two. Together, these findings suggest that white students are more inclined than the other students to use Facebook to maintain existing social ties. The latter are often with longstanding friends and family relations – what Ellison et al. (2007) term *maintained social capital* – and have been accumulated prior to starting at university or new ties accumulated outside of the university. This is, however, an unlikely explanation given Rhodes University's relative geographical isolation and the finding that, for students, the direction of Facebook friending is typically from offline to online, which might otherwise have been lost with the geographical and social transition from high school to university. Older ties with close friends and family are more likely to provide emotionally supportive bonding capital. Black students, on the other hand, especially extended studies students, seem primarily to use Facebook to connect with other Rhodes students. Such students are possibly less able to maintain social capital because their high school friends often do not have easy access to the Internet. This perhaps explains why neither race nor class predicts bridging capital, but race not class does predict bonding capital. While white students benefit most from maintained relationships with older ties that are more likely to provide emotional support, black students primarily connect with new, weaker ties.

Another, related explanation for these differences regarding bonding capital, one that does not however involve access to Facebook, is that black students, whether on the Extended Studies

---

<sup>6</sup> A recent study indicates that a mere 22% of South Africans use the Internet on a daily basis and that 20% have Internet access at home. English language proficiency, age, class, employment status and degree of urbanisation are indicators of Internet use. As the report notes: "If you cannot easily read or write in English, if you are over 44, if you are very poor, if you are unemployed, or if you live in a rural area you are very unlikely to be an Internet user" (University of the Witwatersrand, 2012). This set of demographic characteristics would fit many of the extended studies students at Rhodes University.

Programme or not, are often first-generation university students and their families and friends outside of the university are perhaps unable to relate to their university experiences. This once again deprives them of an important source of bonding capital (Ellison, Wohn, Khan & Fewins-Bliss, 2012). In line with this, Bangeni and Kapp (2005) have explored the gulf that often emerges between first-generation South African black university students and their parents and 'home' peers. Drawing on interviews with University of Cape Town students, their study indicates how the increased access to the range of university discourses is concomitant with the "increased closing off of connections to their township communities ..." (Bangeni & Kapp, 2005:2). The authors (2005:10) thus note that Sisanda, one of their informants, was "highly motivated to succeed in this [University of Cape Town] environment" but that her achievements undermined "home discourses" and simultaneously provided "a refuge from the rejection of the community". Both Sisanda and a second informant, Andrew, reported experiencing rejection from their township communities because of their perceived sense of intellectual superiority (2005:13). Furthermore, in another, more recent study, Sennett, Finchilescu, Gibson and Strauss (2003) point to the low levels of education among their parents as a contributing factor to the underachievement of many black African university students.

These barriers that seemingly hinder black students' accumulation of bonding capital as compared with white students, do not however extend to the accumulation of bridging capital, which, apparently, is not affected by race and class. In a relatively geographically isolated, small residential university, weak ties are probably easily accumulated, regardless of race or social class, as students have a great deal of interaction in residences, dining halls, lectures and elsewhere. The low commitment levels of Facebook ties (West, Lewis & Currie, 2009) might mean that these weak connections are easily accumulated in spite of the obstacle of informal social segregation (cf. Koen & Durrheim, 2010; Schrieff et al., 2005) that might hinder more meaningful social relationships. Indeed, perhaps the reason why these students spend more time on Facebook than their white counterparts is that Facebook serves as a mechanism of social compensation to bridge the informal segregation that is still commonly encountered at Rhodes University, a historically white South African campus. Indeed, in a recent proposal, Ellison et al. (2012) argue that social media might serve as an important source of support and information for minority and first-generation students in the USA. They suggest that social media may enhance adjustment to university because it has the potential to reshape social networks to provide marginalised students with access to social capital that would otherwise be unavailable, may lower the barriers to receiving informational resources, may help students retain connections with providers of support, may facilitate peer interactions and may present a medium for developing and exploring identity (Ellison et al., 2012). If this is true in America, then there is reason to think that social media platforms, such as Facebook, have the potential to perform a similar function in South Africa. In fact, this hypothesis that black extended studies students might use Facebook to bridge social divisions is supported by the local finding that they were more likely than the other students to endorse the questionnaire item that asked whether Facebook had helped the student to feel a part of the Rhodes University student community.

Of course, a further explanation for the finding that black extended studies students spend the most time on Facebook despite having less easy access than other students, concerns the fact that many of these students do not have the financial means to socialise the way others students do – which inevitably reinforces social division<sup>7</sup>. With its pervasive drinking culture (Young & De Klerk, 2008), Rhodes University, some suggest, offers few social opportunities for students who do not drink or who do not have the means to do so. Access to the Internet, and Facebook in particular, is an alternative form of entertainment that is offered free of charge. Either way, the present research suggests that, for extended students in particular, Facebook might serve an important social function at university.

However, the picture is complicated because a regression analysis indicates that black students, who appear to spend more time on Facebook than do white students, also report being lonelier than white students. So, even though other research (Ellison et al., 2007; Steinfield et al., 2008) has suggested that Facebook usage supports the accumulation of bridging capital, it is obviously not sufficient to compensate for the other social factors that cause alienation on campus. Our data, in contrast to Ellison et al. (2007), suggest that while the intensity of Facebook usage predicts both bridging and bonding capital, the actual effect is very slight. In both cases the contribution is less than 4% of the variance of bridging and bonding scores. While this should allay the concerns of those cyber-pessimists who believe that the effects of Facebook are pernicious, it also suggests that some of the claims regarding the benefits of Facebook are overstated.

Indeed, it is possible that the effects of Facebook usage are mixed. Some of the benefits enabled through Facebook in terms of the accumulation of weak ties and the maintenance of strong ties are offset – certainly for more marginalised students – by observing the active and carefully selected representations of other students' social lives, particularly when they themselves have neither the means nor the access to participation in these social activities. A recent article (Copeland, 2011) suggests that Facebook might exacerbate an existing tendency for people to underestimate the negative emotions and overestimate the positive emotions of their peers (cf. Jordan, Monin, Dweck, Lovett, John & Gross, 2011). Facebook does this by functioning as an online portfolio of exaggerated social success represented by upbeat pictures and status updates. In other words, too much time on Facebook, especially when other social opportunities are few, can lead to a greater sense of alienation. While we are not aware of any empirical research that tests this claim, our results show that black students are lonelier than the white students, which, in part, support the claim.

Interestingly, though race, gender, bridging capital and bonding capital predict loneliness, these variables do not predict satisfaction with life. While university study might be a lonelier experience for black students at Rhodes University – precisely because opportunities for bonding capital are curtailed – it does not appear to detract from their satisfaction with life. An explanation may be that they are in the process of acquiring a university qualification that can potentially increase job

---

<sup>7</sup> Sennett et al. (2003) point to the financial strain faced by many black students as one of the sources of the difficulties they face at university.

opportunities, status and the possibility of social mobility, which greatly outweighs the effects of loneliness. In other words, students can be lonely without feeling dissatisfied with their lives.

## 6. CONCLUSION

In this paper, we have noted that many recent studies on Facebook usage treat youth users as homogeneous. Our data would suggest otherwise. The central finding of this South African research is that usage is socially patterned, with race and class as important variables. Moreover, intensity of Facebook use is weakly associated with bridging and bonding capital, very weakly associated with loneliness, and does not appear to be associated with well-being. The reasons we provide are sometimes speculative, but this should not undermine our demonstration of differential usage and consequence. Our follow-up qualitative research will explore the reasons underlying our findings.

## REFERENCES

- Amichai-Hamburger, Y., Wainapel, G. & Fox, S. (2002). 'On the internet no one knows I'm an introvert': extroversion, neuroticism, and internet interaction. *CyberPsychology & Behaviour*, 5:125–128.
- Bangeni, B. & Kapp, R. (2005). Identities in transition: shifting conceptions of home among 'black' South African university students. *African Studies Review*, 48:1–19.
- Baym, N.K., Zhang, Y.B., Kunkel, A., Ledbetter, A. & Lin, M-C. (2007). Relational quality and media use in interpersonal relationships. *New Media and Society*, 9, 735–752.
- boyd, d.m. & Ellison, N.B. (2008). Social network sites: definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13:210–230.
- Copeland, L. (2011). The anti-social network. Slate. Retrieved 26 January 2011 from [http://www.slate.com/articles/double\\_x/doublex/2011/01/the\\_antisocial\\_network.html](http://www.slate.com/articles/double_x/doublex/2011/01/the_antisocial_network.html)
- Coyle, C.L. & Vaughn, H. (2008). Social networking: communication revolution or evolution. *Bell Labs Technical Journal*, 13:13–18.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95:542–575.
- Diener, E., Emmons, R.A., Larsen, R.J. & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49:71–75.
- Diener, E. & Seligman, M.E.P. (2002). Very happy people. *Psychological Science*, 13:81–84.
- Ellison, N.B., Steinfield, C. & Lampe, C. (2007). The benefits of Facebook "friends": social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12:1143–1168.
- . (2011). Connection strategies: social capital implications of Facebook-enabled communication practices. *New Media and Society*, 13(6):873–892.
- Ellison, N. B., Wohn, D.Y., Khan, M. L. & Fewins-Bliss, R. (2012). Reshaping access: an overview of research on access to higher education, social media and social capital. White paper prepared with funding from the Bill and Melinda Gates Foundation.
- Granovetter, M.S. (1973). The strength of weak ties. *The American Journal of Sociology*, 78: 1360–1380.

- Hampton, K.N., Goulet, L.S., Rainie, L. & Purcell, K. (2011). Social networking sites and our lives: how people's trust, personal relationships, and civic and political involvement are connected to their use of social networking sites and other technologies. Pew Research Center's Internet & American Life Project: Washington DC. Retrieved 26 June 2011 from <http://pewinternet.org/Reports/2011/Technology-and-social-networks.aspx>
- Helliwell, J.F. & Putnam, R.D. (2004). The social context of well-being. *Philosophical Transactions of the Royal Society*, 359:1435–1446.
- Jordan, A.H., Monin, B., Dweck, C.S., Lovett, B.J., John, O.P. & Gross, J.J. (2011). Misery has more company than people think: underestimating the prevalence of others' negative emotions. *Personality and Social Psychology Bulletin*, 37:120–135.
- Koen, J. & Durrheim, K. (2010). A naturalistic observational study of informal segregation: seating patterns in lectures. *Environment and Behavior*, 42:448–468.
- Lee, J. & Lee, H. (2010). The computer-mediated communication network: exploring the linkage between the online community and social capital. *New Media and Society*, 12:711–727.
- Letseka, M., Breier, M. & Visser, M. (2009). Poverty, race and student achievement in seven higher education institutions. In M. Letseka, M. Cosser, M. Breier & M. Visser (Eds.). *Student retention and graduate destination: higher education and labour market access and success* (pp. 25–40). Cape Town: HSRC Press.
- Lin, N. (1999). Building a network theory of social capital. *Connections*, 22:28–51.
- Morrow, V. (1999). Conceptualising social capital in relation to the well-being of children and young people: a critical review. *The Sociological Review*, 47:744–765.
- Paxton, P. (1999). Is social capital declining in the United States? A multiple indicator assessment. *American Journal of Sociology*, 105:88–127.
- Portes, A. (1998). Social capital: its origins and applications in modern sociology *Annual Review of Sociology*, 24:1–24.
- Putnam, R. (2000). *Bowling alone: the collapse and revival of American community*. New York: Simon & Schuster.
- Rhodes University. (2010). *Extended studies at Rhodes University*. Grahamstown: Rhodes University.
- Rosenberg, M. (1965). *Society and the adolescent child*. Princeton, NJ: Princeton University Press.
- Russell, D.W. (1996). UCLA loneliness scale (Version 3): reliability, validity, and factor structure. *Journal of Personality Assessment*, 66:20–40.
- Schrieff, L., Tredoux, C., Dixon, J. & Finchilescu, G. (2005). Patterns of racial segregation in university residence dining-halls. *South African Journal of Psychology*, 35:433–443.
- Sennett, J., Finchilescu, G., Gibson, K. & Strauss, R. (2003). Adjustment of black students at a historically white South African university. *Educational Psychology*, 23:107–116.
- Shaw, L. H., & Gant, L. M. (2002). In defense of the Internet: The relationship between Internet communication and depression, loneliness, self-esteem, and perceived social support. *CyberPsychology & Behavior*, 5: 157-171.
- Steinfeld, C., Ellison, N.B. & Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: a longitudinal analysis. *Journal of Applied Developmental Psychology*, 29:434–445.

- Turkle, S. (2011). *Alone together*. New York: Basic Books.
- University of the Witwatersrand. (2012). *The new wave*. Johannesburg: Wits Journalism.
- Valenzuela, S., Park, N. & Kee, K.F. (2009). Is there social capital in a social network site?: Facebook use and college students' life satisfaction, trust and participation. *Journal of Computer Mediated Communication*, 14:875–901.
- Valkenburg, P.M. & Peter, J. (2007a). Internet communication and its relation to well-being: identifying some underlying mechanisms. *Media Psychology*, 9:43–58.
- . (2007b). Online communication and adolescent well-being: testing the stimulation versus the displacement hypothesis. *Journal of Computer Mediated Communication*, 12:1169–1182.
- West, A., Lewis, J. & Currie, P. (2009). Students' Facebook 'friends': public and private spheres. *Journal of Youth Studies*, 12:615–627.
- Williams, R. (1974). *Television: technology and cultural form*. London: Fontana/Collins.
- Young, C. & De Klerk, V. (2008). Patterns of alcohol usage on a South African university campus: the findings of two annual drinking surveys. *African Journal of Drug and Alcohol Studies*, 7:101–112.
- Young, C. & Mayson, T. (2010). The alcohol use disorders identification scale (AUDIT) normative scores for a multiracial sample of Rhodes University residence students. *Journal of Child and Adolescent Mental Health*, 22:15–23.