

Relationship between self-esteem and facebook usage amongst black Generation Y students

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Abstract

The purpose of this study was to determine the link between number of Facebook friends, time spent on Facebook, the perceived benefits of Facebook-facilitated friendship and self-esteem amongst black Generation Y students in South Africa. In South Africa, the black Generation Y cohort (individuals born between 1986 and 2005) represents an important but under researched market segment in that it makes up 33 percent of the country's population. As one of the major new recreational activities to have gained popularity in recent years, social networking on sites such as Facebook is attracting interest from academics and marketing practitioners. From a marketing perspective, understanding the social networks of target markets is crucial because members of such networks serve as points of reference for each other, thereby influencing the behaviour of members, including their consumption-related behaviour. The study, utilising a questionnaire designed to measure black Generation Y students' Facebook usage, perceived Facebook-facilitated friendship benefits and self-esteem, was undertaken on a convenience sample of 400 students across three South African public higher education institutions' campuses situated in the Gauteng province. Data analysis was done using t-tests, Pearson's correlation coefficient and regression analysis. The findings suggest that black Generation Y students are relatively heavy users of Facebook and have high levels of self-esteem. Facebook usage also has a positive influence on the perceived value of the site's friendship-facilitating features. The findings suggest that individuals with lower levels of self-esteem perceive greater benefits from the friendship-facilitating features of Facebook than those with higher levels of self-esteem.

Keywords: Facebook usage, perceived friendship benefits, self-esteem, black Generation Y students.

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Introduction

More so than any previous generation, Generation Y (individuals born between 1986 and 2005) (Markert, 2004) is presented with an ever-increasing array of new recreational options. An emergent recreational pursuit that has gained popularity in recent years is virtual social networking on sites such as Facebook, Twitter, MXit, MySpace and LinkedIn. As it approaches the 1 billion-user mark, Facebook is proving to be one of the most successful social networking sites in the world (Socialbakers.com, 2012a).

Social networking is an important recreational activity in itself, as well as an important benefit of recreational pursuits. It is through social networking that individuals build their social capital, which Ellison, Steinfield and Lampe (2007) describe as the resources accrued through interpersonal relationships. Amongst the youth in particular, the recreational activity of social networking is important in that it serves to build self-esteem (Reynolds, 2007), as social relations are fundamental to well being (van der Horst & Coffé, 2012). Keenan and Shiri (2009) add that social interaction on Facebook is an extension to offline social interaction and, as such, serves to encourage socialising. This suggests that Facebook manifests as an important social networking tool in contemporary society.

From a marketing perspective, understanding the social networks of target markets is crucial because members of such networks serve as a point of reference to each other, thereby influencing the behaviour of members, including their consumption-related behaviour (Schiffman, Kanuk & Wisenblit, 2010). A member's susceptibility to the influence of others in a social network is thought to be dependent on the individual's level of self-esteem, where individuals with a lower self-esteem are more reliant on social approval and are therefore more susceptible to the influence of others (Loudon & Della Bitta, 1993). The size and growth rate of Facebook has naturally caught the attention of marketers across industry sectors and around the world. However, marketers have to contend with the modalities of co-opting Facebook into their marketing programmes (Hof, 2012). As such, the marketing potential of Facebook and other virtual social networks remains largely unexploited (Bullas, 2012).

In South Africa, one target market that holds much promise for marketers is that consisting of African Generation Y members (hereafter referred to as black Generation Y) as it accounts for an estimated 33 percent of the country's population (Statistics South Africa, 2011). Black Generation Y students enrolled at tertiary institutions represent an especially appealing target market to marketers, given that tertiary education is positively correlated with a higher earning potential (Loudon & Della Bitta, 1993; Schiffman & Kanuk, 2007) as well as a higher social status (Schiffman & Kanuk, 2007). Therefore, a combination of these two factors is likely to catapult them to the level of trendsetters amongst the wider black Generation Y cohort in South Africa.

Despite the importance of this cohort, South African black Generation Y members remain gravely under-researched. Furthermore, even though more published research on the social phenomenon of Facebook is emerging, there is a dearth of such research, which focuses specifically on the South African black Generation Y cohort. Therefore, the purpose of the current study was to determine the link between number of Facebook friends, time spent on

Facebook, the perceived benefits of Facebook-facilitated friendship and self-esteem amongst black Generation Y students in South Africa.

Recreational benefits of Facebook usage

Schiffman et al. (2010) opine that the need to forge meaningful relationships with other people that provide a sense of belonging and acceptance is a fundamental human characteristic. Virtual social network sites such as Facebook enable individuals to forge and maintain more friendships than would otherwise be possible in that they overcome the barriers of distance and time that typically hinder meeting and keeping friends.

Launched in 2004, Facebook, which was originally intended as an online forum for college students in the United States of America (Tosun, 2012), currently has an estimated 873 899 300 users across 213 countries (Socialbakers.com, 2012a) and continues to grow. With a 12 percent penetration rate of the world's population, Facebook grew by 171 492 820 users between the first quarter of 2011 and the first quarter of 2012 (Internetworldstats.com, 2012). In December 2011, there were 845 million monthly average Facebook users, 483 million daily average users, 100 billion registered friend connections, 250 billion photographs uploaded daily and an average of 2.7 billion Likes and Comments per day (Wilhelm, 2012). By 31 March 2012, this number had increased to an average of 526 million daily active users, 125 billion registered friend connections, 300 million uploaded photographs per day and an average of 3.2 billion Likes and Comments per day (The Telegraph, 2012). In July 2012, Facebook had 5 139 240 South African users, which had grown by 316 420 users in the previous six months. While this only represents 10.46 percent of the population, it represents a staggering 96.97 percent of South Africa's online population. Of these users, 49 percent are male and 51 percent female. The majority of these users are between the ages of 18 and 34, with an even split of 30 percent between 18 and 24 and 30 percent between 25 and 34 years of age (Socialbakers.com, 2012b). These statistical permutations suggest that Facebook continues to grow phenomenally and it may be very difficult for any competing social networking platforms to match this explosive growth.

As a virtual microcosm of society (Shu & Chuang, 2011), Facebook creates many social networking opportunities, some of which extend to the offline environment. Individuals and groups using Facebook can participate in online gaming, put up statuses on their thoughts, activities, concerns and observations and check in to alert others of their offline location. In addition, they can add photographs, pictures, videos and quotes, tag, comment or press like on friends' photographs, status updates, check ins and videos, make and accept friend requests, make friend suggestions, create and suggest groups, share links, chat online, send messages, update their profile information in real time and view the

profiles of other people. These features enable people to satisfy their social needs both online and offline because they empower individuals to organise social events, learn of social events, meet new friends, and maintain contact with current and old friends, even those who live far away. Tosun (2012) adds that the site may also be used for the romantic purposes of meeting and dating. While Ellison et al. (2007) found a positive relationship between university students' Facebook use and both the creation and maintenance of relationships, Tosun (2012) report that university students use Facebook more as a way of maintaining existing relationships rather than initiating new relationships.

Marketers can harness these relationship initiating and building features to build Facebook-based brand communities. Establishing and maintaining such linkages necessitates engaging with audiences in such a way that they feel a sense of belonging within that brand community (Yan, 2011) and, at all times, respecting the very essence of social networks, which includes fun, interesting, interactive and sincere communication that is on a voluntary basis (Dong-Hun, 2010). If successfully managed, facebook-based brand communities can be used to not only provide vital feedback concerning the brand strategy but also to create external brand ambassadors who spread brand awareness amongst their Facebook friends and, ultimately, to create greater brand equity (Yan, 2011).

Ellison et al. (2007) report that university students spend an average of 10 to 30 minutes per day on Facebook and have between 150 and 200 registered Facebook friends. Backstrom (2012) reports that most people have in excess of 100 Facebook friends; with the average being 190 friends. Special and Li-Barber (2011) found that university students log into Facebook a few times a day and spend between 5 and 10 minutes per log-in session. This suggests that Facebook forms part of university students' daily recreational activities.

The findings of a study conducted by van der Horst and Coffé (2011), which focused on friendship networks, indicate that having a higher number of friends and a higher frequency of contact leads to the positive outcomes of greater social trust, improved health and lower stress. Given the Facebook features that support the initiation and maintenance of friendships, the site is likely to be of particular benefit to individuals with lower self-esteem who might otherwise struggle to form friendships.

Self-esteem

Self-esteem is defined in the Concise Oxford English Dictionary (2004:1305) as "confidence in one's own worth or abilities". Robbins (1989) highlights that self-esteem is one of the common reasons why individuals join groups, in that acceptance into a group provide members with a sense of acceptance and self-

worth. This implies that there is an important link between group membership, including Facebook group membership, and self-esteem.

Reynolds (2007) argues that friendship networks contribute to people's health, self-esteem and general well-being. Kujath (2011) suggests that social networking sites such as Facebook may be used to increase social connections and strengthen existing interpersonal relationships, which may potentially result in a wider and stronger friendship circle and greater social capital. Some studies (Mehdizadeh, 2010; Lee, Moore, Park & Park, 2012) have found a significant negative relationship between Facebook usage and self-esteem. Lee et al. (2012) propose that low esteem may motivate people to increase their number of Facebook friends in an effort to compensate for their sense of inadequacy. However, Ellison et al. (2007) found evidence that less intense facebook usage resulted in lower reported levels of self-esteem amongst undergraduate students and that Facebook usage offered greater benefits for individuals with low self-esteem by facilitating the formation and maintenance of their social capital.

Generation Y

Generational cohort research is based on the assumption that each generation experiences a shared distinctive combination of circumstances and environmental forces that are prevalent during their formative years, and that these shape their behaviour and distinguish them from other generations (Bakewell & Mitchell, 2003; Twenge & Cambell, 2008). The identified generational cohorts include seniors, Baby Boomers, Generation X and Generation Y (Schiffman et al., 2010). Experts differ as to the exact start and end dates of the Generation Y cohort. However, Markert (2004) suggests using 20-year increments to divide generational cohorts and, together with Eastman and Liu (2012), defines Generation Y as individuals born between 1986 and 2005.

In South Africa, the black Generation Y cohort represents a segment of significant proportion. Working within the categorical parameter limitations used to report population counts in South Africa, Generation Y is estimated to account for approximately 40 percent of South Africa's population of 50 586 757 people. Members of the black Generation Y cohort account for 33 percent of the total South African population and a significant 84 percent of South Africa's Generation Y population (Statistics South Africa, 2011). Therefore, the marketing dynamics associated with such a large proportion of the country's population cannot be underestimated and merits empirical research.

As the first generation to grow up in the post-apartheid South Africa, black Generation Y members have had far more opportunities than those afforded to their predecessors in terms of education, wealth creation and being able to mix freely with other racial groups. Typically, black Generation Y students are the

first in their family to enjoy the opportunity of studying towards a university qualification, which serves to elevate their social standing in the community, as well as their self-esteem. In similar fashion to their overseas counterparts, black Generation Y individuals have grown up in a world dominated by the Internet, mobile technologies (Nicholas, Rowlands, Clark & Williams, 2011), global media (Durvasula & Lysonski, 2008) and virtual social network sites (Nicholas et al., 2011), with South Africans gaining public Internet access in late 1993, followed by access to mobile telephony in mid-1994. This has resulted in Generation Y members being more informed, more connected and more technologically literate than any previous generation (Autry & Berge, 2011). The Internet represents the Generation Y cohort's habitat, the place where they congregate, interact with others, learn, play, work (Spero & Stone, 2004) and shop (Nicholas et al., 2011), and the place that they turn to first for information (Schwalbe, 2009). Evidence suggests that they are also more avid users of virtual social networking than other generations, with Facebook acting as their "docking bay" (Nicholas et al., 2011). In comparison to other generational cohorts, Generation Y members not only make more use of virtual social networking and have a consequently wider social network but they also tend to favour brands that have a Facebook page (Barton, Fromm & Egan, 2012). In marketing terms, understanding the significantly sized black Generation Y cohort's Facebook usage may offer important insights into how best to initiate and maintain relationships with members of this cohort using Facebook-based brand communities.

Methodology

Sample

The sampling frame utilised in the study comprised a list of the 23 public South African higher education institutions (HEIs) situated in the Gauteng province. Gauteng province has the highest percentage (26%) of South Africa's public HEIs, the highest percentage (26%) of these institutions' 95 campuses (Note: certain higher education institutions have more than one campus, which may be located in different provinces) (IEASA, 2012) and the highest percentage of individuals classified under the black Generation Y cohort (Statistics South Africa, 2011). As such, it was deemed appropriate to limit the study to the Gauteng province. A non-probability judgement sample of three HEI campuses was selected from the sampling frame – one from a comprehensive university, one from a traditional university and one from a university of technology.

Sampling method

For the main study, a non-probability convenience sample of 400 students across the three campuses was taken. Lecturers at each of the campuses were contacted

and requested to ask their students to complete the questionnaire. These questionnaires were distributed amongst the three HEIs by fieldworkers. Participation in the study was on a voluntary basis and no incentives were offered to encourage participation. In addition, full confidentiality was assured concerning both the respondents' names and the names of the participating campuses.

Research instrument

A self-administered questionnaire was used to collect the required data. This questionnaire was pilot-tested on 50 students registered at a public South African HEI campus outside of the Gauteng province in order to ascertain the reliability of the scales used in the instrument within the South African context.

Rosenberg's (1965) 10-item Self-Esteem Scale was used to measure black Generation Y student's self-esteem. This scale delivered a satisfactory Cronbach alpha of 0.783 in the pilot study and an average inter-item correlation of 0.278, there by indicating good reliability (Pallant, 2010).

In order to measure black Generation Y students' perceived friendship benefits of Facebook, sub-scales developed by Shu and Chuang (2011) were utilised. This scale comprised the four constructs of meeting new friends (eight items), maintaining relationships (six items), searching for friends (seven items) and social involvement (eight items). The Cronbach alpha for these constructs ranged between a satisfactory 0.761 and 0.928 in the pilot test. However, the average inter-item correlation for some of these constructs fell close to or slightly above the recommended range of 0.2 to 0.4, indicating that certain items were perceived as measuring the same thing (Pallant, 2010). As such, certain items that were very similar were removed from the final scale, with meeting new friends having five items, maintaining relationships three items, searching for friends four items and social involvement eight items. The scaled responses were measured on a six-point Likert scale that ranged from strongly disagree (1) to strongly agree (6). The Likert scale was selected as it is a commonly used interval scale for measuring attitudes (Schiffman et al., 2010; Malhotra, 2010) and was used in both the Rosenberg (1965) scale and the Shu and Chuang (2011) scale.

Questions involving the respondents' demographical information were included. In addition, there were two questions from Ellison et al. (2007) concerning approximate number of Facebook friends and approximate time spent on Facebook per day in the past week.

Reliability

The reliability coefficients for the scales in the main survey were both in line with the recommended level of $\alpha=0.700$ (Nunnally, 1978). A Cronbach alpha of 0.906 was computed for the overall perceived friendship benefits scale and an average inter item correlation of 0.329. The Cronbach alphas for the constructs within this scale ranged from 0.630 to 0.860, which, according to Malhtra (2010), is acceptable. The average inter-item correlation on the construct measuring the perceived benefit of meeting new friends was higher than the recommended 0.2 to 0.4 range (Pallant, 2010) but those of the other constructs fell within the range. The self-esteem scale delivered a Cronbach alpha of 0.752 and an average inter-item correlation of 0.247.

Results

Of the 400 questionnaires distributed, 346 completed ones were returned, which equates to an 86.5 percent response rate. Respondents ranged from 18 to 24 years of age, with the majority (57%) being between 19 to 22 years old. While Each of South Africa's nine provinces was represented, the majority of respondents indicated their province of origin to be Gauteng (50.9%), followed by Limpopo (17.6%). The sample contained more female respondents (55.2%) than male respondents (44.8%). The respondents' demographic information is outlined in Table 1.

Table 1: Sample description

| Age | Percent (%) | Gender | Percent (%) | Province | Percent (%) |
|-----|-------------|--------|-------------|---------------|-------------|
| 18 | 9.9 | Male | 44.8 | Eastern Cape | 3.2 |
| 19 | 25.0 | Female | 55.2 | Free State | 9.4 |
| 20 | 21.5 | | | Gauteng | 50.9 |
| 21 | 17.2 | | | KwaZulu-Natal | 4.1 |
| 22 | 14.8 | | | Limpopo | 17.6 |
| 23 | 5.2 | | | Mpumalanga | 5.3 |
| 24 | 2.0 | | | North West | 8.5 |
| | | | | Northern Cape | 0.3 |
| | | | | Western Cape | 0.6 |

The collected data suggest that black Generation Y students are relatively heavy users of Facebook. The respondents' reported Facebook usage is presented in Table 2. The majority of the respondents (10.4%) indicated having between 201-250 Facebook friends. No respondents indicated having more than 400 Facebook

friends but 8.1 percent indicated having between 301 and 400 Facebook friends. Only 4 percent of the respondents indicated having 10 or less Facebook friends. The majority (34.7%) indicated spending an average of 10 to 30 minutes on Facebook per day. Interestingly, 14.5 percent indicated that they spent in excess of 3 hours on Facebook per day.

Table 2: Facebook usage

| Number of Facebook friends | Percent (%) | Time | Percent (%) |
|-----------------------------------|--------------------|--------------------|--------------------|
| 10 or less | 4.0 | 10 minutes or less | 15.6 |
| 11-50 | 4.0 | 10-30 minutes | 34.7 |
| 51-100 | 9.8 | 31-60 minutes | 17.1 |
| 101-150 | 9.8 | 1-2 hours | 9.0 |
| 151-200 | 9.2 | 2-3 hours | 9.2 |
| 201-250 | 10.4 | More than 3 hours | 14.5 |
| 251-300 | 9.5 | | |
| 301-400 | 8.1 | | |
| More than 400 | | | |

Negatively worded items in the self-esteem scale were reverse scored and the scale returned a mean of 4.63, which suggests that black Generation Y students have a high level of self-esteem. Among the perceived friendship benefits of Facebook, maintaining relationships had the highest mean (mean=5.14) and social involvement the lowest mean (mean=3.50). In order to determine whether these computed means are significant, a one-tailed t-test was performed. The expected mean was set at $X > 3$ and the significance level at the conventional $\alpha=0.05$.

Table 3 reports on the calculated t-values and p-values. A p-value of $p < 0.05$ was computed on all four of the perceived friendship benefits of Facebook, as well as on the self-esteem scale indicating each to be statistically significant. This infers that black Generation Y students perceive Facebook as beneficial for meeting new friends ($p=0.000 < 0.05$), maintaining relationships ($p=0.000 < 0.05$), searching for friends ($p=0.000 < 0.05$) and social involvement ($p=0.000 < 0.05$). These findings also infer that black Generation Y students have a healthy self-esteem ($p=0.000 < 0.05$).

In order to determine the relationship between the number of Facebook friends, time spent on Facebook per day, perceived friendship benefits of Facebook and self-esteem, Pearson’s Product-Moment correlation coefficient was calculated. The results are presented in Table 4.

Table 3: Perceived friendship benefits of Facebook and self-esteem

| Construct/Scale | Mean N=346 | Standard deviation | Standard error | t-value | p-value |
|---------------------------|---------------|-----------------------|-------------------|---------|---------|
| Meeting new friends | 3.84 | 1.06 | 0.06 | 14.74 | 0.000* |
| Maintaining relationships | 5.14 | 0.98 | 0.05 | 40.62 | 0.000* |
| Searching for friends | 3.67 | 1.06 | 0.06 | 11.76 | 0.000* |
| Social involvement | 3.50 | 1.10 | 0.06 | 8.46 | 0.000* |
| Self-esteem | 4.63 | 0.75 | 0.04 | 40.43 | 0.000* |

*Significant at the 0.05 level

The results indicate a statistically significant positive relationship between number of Facebook friends and time spent on Facebook ($r=0.318$, $p=0.000<0.05$), meeting new friends ($r=0.188$, $p=0.000<0.05$), maintaining relationships($r=0.168$, $p=0.002<0.05$), searching for friends ($r=0.147$, $p=0.006<0.05$), social involvement ($r=0.163$, $p=0.002<0.05$) and self-esteem ($r=0.116$, $p=0.031<0.05$).

Table 4: Relationship between number of Facebook friends, time spent on Facebook, perceived friendship benefits of Facebook and self-esteem

| Variable | Number of Facebook friends | Time on Facebook | Meeting new friends | Maintaining relationships | Searching for friends | Social involvement | Self-esteem |
|----------------------------|-------------------------------|---------------------|------------------------|------------------------------|--------------------------|-----------------------|-------------|
| Number of Facebook friends | 1 | 0.318* | 0.188* | 0.168* | 0.147* | 0.163* | 0.116* |
| | | 0.000 | 0.000 | 0.002 | 0.006 | 0.002 | 0.031 |
| Time on Facebook | | 1 | 0.254* | 0.195* | 0.187* | 0.262* | 0.008 |
| | | | 0.000 | 0.000 | 0.000 | 0.000 | 0.883 |
| Meeting new friends | | | 1 | 0.492* | 0.597* | 0.657* | - |
| | | | | 0.000 | 0.000 | 0.000 | 0.152* |
| Maintaining relationships | | | | 1 | 0.428* | 0.440* | -0.030 |
| | | | | | 0.000 | 0.000 | 0.584 |
| Searching for friends | | | | | 1 | 0.570* | - |
| | | | | | | 0.000 | 0.106* |
| Social involvement | | | | | | 1 | - |
| | | | | | | | 0.168* |
| Self-esteem | | | | | | | 1 |
| | | | | | | | 0.002 |

*Significant at $p<0.05$.

This suggests that the more Facebook friends that black Generation Y students have, the more time they spend on Facebook, the more beneficial they perceive Facebook to be as a friendship tool and the higher their self-esteem.

A statistically significant positive relationship also exists between time spent on Facebook and meeting new friends ($r=0.254, p=0.000<0.05$), maintaining relationships ($r=0.195, p=0.000<0.05$), searching for friends ($r=0.187, p=0.000<0.05$) and social involvement ($r=0.262, p=0.000<0.05$). As such, it appears that the more time that black Generation Y students spend on Facebook, the more they appreciate its value in meeting new friends, maintaining relationships, searching for friends and improving their social involvement. There is no significant relationship between time spent on Facebook and self-esteem.

There is a statistically significant negative relationship between self-esteem and meeting new friends ($r=-0.152, p=0.005<0.05$), searching for friends ($r=-0.106, p=0.049<0.05$) and social involvement ($r=-0.168, p=0.002<0.05$). These findings imply that black Generation Y students with lower self-esteem perceive Facebook as being a valuable tool for meeting new friends, searching for friends and improving their social involvement. There is no significant relationship between self-esteem and maintaining relationships using Facebook.

In order to determine whether number of Facebook friends predicts time spent on Facebook per day, perceived friendship benefits of Facebook and self-esteem, regression analysis was undertaken. As shown in Table 4, number of Facebook friends has a significant positive influence on the amount of time black Generation Y students spend on Facebook ($\beta=0.318, p=0.000<0.05$).

It also has a significant positive influence on their perceptions of the benefits of Facebook in terms of meeting new friends ($\beta=0.188, p=0.000<0.05$), maintaining relationships ($\beta=0.168, p=0.002<0.05$), searching for friends ($\beta=0.147, p=0.006<0.05$) and social involvement ($\beta=0.163, p=0.002<0.05$). In addition, number of Facebook friends has a significant positive influence on their self-esteem ($\beta=0.116, p=0.031<0.05$).

It was then necessary to determine whether time spent on Facebook influenced the perceived friendship benefits of Facebook, again using regression analysis. Table 6 shows that amount of time spent on Facebook has a significant positive influence on black Generation Y students' perceptions of the benefits of Facebook in terms of meeting new friends ($\beta=0.254, p=0.000<0.05$), maintaining relationships ($\beta=0.195, p=0.000<0.05$), searching for friends ($\beta=0.187, p=0.000<0.05$) and social involvement ($\beta=0.262, p=0.000<0.05$).

Table 5: Influence of number of Facebook friends on time spent on Facebook, perceived friendship benefits of Facebook and self-esteem

| Variable | Standardised Beta Coefficient | Adjusted R squared | t-value | Significance level |
|------------------------------|-------------------------------|--------------------|---------|--------------------|
| Independent variable: | | | | |
| Number of Facebook friends | | | | |
| Dependent variable: | | | | |
| Time spent on Facebook | 0.318* | 0.098 | 6.216 | 0.000 |
| Meeting new friends | 0.188* | 0.033 | 3.552 | 0.000 |
| Maintaining relationships | 0.168* | 0.025 | 3.153 | 0.002 |
| Searching for friends | 0.147* | 0.019 | 2.764 | 0.006 |
| Social involvement | 0.163* | 0.024 | 3.065 | 0.002 |
| Self-esteem | 0.116* | 0.011 | 2.167 | 0.031 |

* Significant at the 0.05 level (2-tailed).

Table 6: Influence of time spent on Facebook on perceived friendship benefits of Facebook

| Variable | Standardised Beta Coefficient | Adjusted R squared | t-value | Significance level |
|------------------------------|-------------------------------|--------------------|---------|--------------------|
| Independent variable: | | | | |
| Time spent on Facebook | | | | |
| Dependent variable: | | | | |
| Meeting new friends | 0.254* | 0.062 | 4.877 | 0.000 |
| Maintaining relationships | 0.195* | 0.035 | 3.684 | 0.000 |
| Searching for friends | 0.187* | 0.032 | 3.526 | 0.000 |
| Social involvement | 0.262* | 0.066 | 5.034 | 0.000 |

* Significant at the 0.05 level (2-tailed).

Regression analysis was then conducted to determine the influence of self-esteem on those perceived Facebook-friendship benefits that were significantly correlated with self-esteem. The results are reported in Table 7. Self-esteem has a significant negative influence on black Generation Y students' perceptions of the benefits of Facebook in terms of meeting new friends ($\beta=-0.152$, $p=0.005<0.05$), searching for friends ($\beta=-0.106$, $p=0.049<0.05$) and social involvement ($\beta=-0.168$, $p=0.002<0.05$). Therefore, black Generation Y students with higher levels of self-esteem place less value on Facebook as a tool for meeting friends, searching for friends and improving their social involvement.

Table 7: Influence of self-esteem on perceived friendship benefits of Facebook

| Variable | Standardised Beta Coefficient | Adjusted R squared | t-value | Significance level |
|------------------------------|-------------------------------|--------------------|---------|--------------------|
| Independent variable: | | | | |
| Self-esteem | | | | |
| Dependent variable: | | | | |
| Meeting new friends | -0.152* | 0.020 | -2.858 | 0.005 |
| Searching for friends | -0.106* | 0.008 | -1.971 | 0.049 |
| Social involvement | -0.168* | 0.025 | -3.165 | 0.002 |

* Significant at the 0.05 level (2-tailed).

Discussion

This study set out to determine the link between Facebook usage, perceived friendship benefits of Facebook and self-esteem amongst black Generation Y students in South Africa. The findings indicate that black Generation Y students are relatively heavy users of Facebook, with the majority of the respondents reporting having between 201 and 250 Facebook friends and spending between 10 and 30 minutes per day on the site. The reported number of Facebook friends is slightly higher than that reported on in the studies of Ellison et al. (2007) and Backstrom (2012) but the time spent per day fits with the findings of Ellison et al. (2007). Being relatively heavy Facebook users suggests that Facebook-based brand communities would be a viable method of targeting this segment, especially given that Barton et al. (2012) report that this generation tends to prefer brands with Facebook pages.

Black Generation Y students perceive Facebook as a valuable tool for meeting new friends, maintaining relationships, searching for friends and improving their social involvement. Marketers seeking to tap into Facebook's relationship-building capabilities need to ensure that they understand the protocols of virtual social networking in terms of ensuring that their Facebook page content is sincere, topical, interactive and current (Dong-Hun, 2010), and that they create a sense of belonging for the brand's Facebook fans (Yan, 2011).

The evidence in the sample suggests that black Generation Y students have a high self-esteem. In contrast to previous studies by Mehedizadeh (2010) and Lee et al. (2012), having more Facebook friends predicts higher self-esteem amongst black Generation Y students. Individuals with high self-esteem are more confident in their own judgement and less susceptible to the influence of marketing messages. However, individuals with greater self-esteem are likely to have more influence over others, which would make them better brand ambassadors. Therefore, engaging black Generation Y students with higher levels of self-esteem in Facebook-based brand communities may aid in creating greater brand awareness amongst the wider South African black Generation Y market, especially given their larger social network.

The value of any market offering, including recreational offerings, lies in the fact that the more it is used, the more benefits are perceived from its use and this certainly seems to be the case with Facebook. Facebook usage, measured here in terms of number of Facebook friends and time spent on the site, positively predicts black Generation Y students' perceptions of its friendship benefits. These findings are similar to those of Ellison et al. (2007), who found a positive relationship between Facebook usage and the creation and maintenance of social capital amongst university students.

A negative relationship was established between self-esteem and Facebook's perceived friendship benefits of meeting new friends, searching for friends and social involvement. This suggests that black Generation Y students with lower levels of self-esteem may gain greater benefits from the friendship-facilitating features of Facebook than those with higher levels of self-esteem. Such individuals may also perceive greater benefits from joining Facebook-based brand communities, especially those that create a sense of belonging and inclusiveness for members.

Limitations and implications for future research

The study has several limitations worth noting when interpreting the results. The most important limitation is that a non-probability convenience sampling was utilised, which does not allow for an objective assessment of the exactitude of the sample findings (Malhotra, 2010). As such, caution is advised in interpreting these results. In addition, even though the sample included respondents from each of South Africa's nine provinces, the study focused exclusively on the HEI campuses in the Gauteng province. Students registered at university campuses outside the Gauteng province may exhibit very different Facebook usage patterns and may perceive the relationship benefits of Facebook differently. A further limitation is that the research design followed was cross-sectional in nature, offering only a snapshot in time. As Facebook seeks to expand revenues by selling more advertising space, so the popularity of the site and its perceived friendship benefits may diminish over time. As such, a longitudinal study would provide data that are more useful. Furthermore, the study utilised a self-administered questionnaire that relied on the respondents recall abilities rather than actual observation, which may have resulted in the inaccurate reporting of number of Facebook friends and time spent on the site.

The present study has implications for further study. First, a longitudinal study using a probability sample of black Generation Y university students across all of South Africa's nine provinces that includes the observation data collection method is suggested, as this would render results that are more meaningful. There is also a need to determine black Generation Y students' attitudes towards advertising messages placed on Facebook, as well as their attitudes towards Facebook-based brand communities.

Conclusion

As Facebook approaches the one billion-user mark, it is manifesting as significant microcosm of the global society. For members of Generation Y in particular it appears to have become their primary virtual playground. Facebook-based brand communities offer an important opportunity to engage with members of the Generation Y cohort. By understanding the inner workings of

this social network, international and local marketers may gain important insights into the consumer behaviour dimensions of the significantly sized black Generation Y segment that will aid in the design and implementation of Facebook-based brand communities, which if properly managed have the potential of being a powerful brand communication tool.

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