

# Use, Perception and Attitude of University Students Towards Facebook and Twitter

Kevin Johnston, Mei-Miao Chen and Magnus Hauman

University of Cape Town, Cape Town, South Africa

[kevin.johnston@uct.ac.za](mailto:kevin.johnston@uct.ac.za)

**Abstract:** As social computing systems persist over time, many elements such as user experience, perceptions, attitudes and interactions may change. Facebook and Twitter are two social computing systems that have become increasingly popular among university students. This research replicated previous studies by Lampe, Ellison and Steinfield (2008), and Johnston, Tanner, Lalla and Kawalski (2013) to assess how Facebook and Twitter use, perception and attitude have changed among university students. Because online social networks, social networking sites and micro-blogging sites are relatively new as areas of academic research, there is limited research into the impacts of these social networking and micro-blogging sites. A sample of 486 students from the University of Cape Town (UCT), South Africa completed a survey. The results were then compared to research data from previous studies by Lampe et al. (2008) and Johnston et al. (2013). The results showed that the percentage of students using Facebook increased to 95%, Facebook daily usage and the number of Facebook friends doubled from previous surveys. This results also found that the South African students are more dependent on using Facebook, in comparison to using Twitter; that their perception of Facebook privacy has led to a decrease in personal information shared on Facebook as well as a change in audience perception. The data also shows that UCT students perceive friends and total strangers to be their main audiences on Twitter; the attitude of UCT students towards Facebook remained positive, on the other hand, a less positive attitude was experienced from the students using Twitter; and Facebook is a more popular method for communication between students. The results clearly highlight the changes in usage, attitude and perception of Facebook over time, and provide a starting point for assessing how usage and attitude to Twitter may change. The results also suggest that should therefore make use of social networking software such as Facebook and Twitter both in their personal lives, and in classrooms.

**Keywords:** Attitude, change, Facebook, perception, students, Twitter, use

---

## 1. Introduction

Over the years, there has been an increase in user participation in social computing systems such as online communities, media sharing sites and Social network sites (SNSs). This research replicated aspects of studies into Social network sites (SNSs) previously conducted at Michigan State University (MSU) by Lampe, Ellison and Steinfield (2008), and of South African (SA) university students by Johnston, Tanner, Lalla and Kawalski (2013), adding an additional element of micro-blogging (Twitter). The aim was to establish the usage, user perception of and attitude to Facebook and Twitter among students at the University of Cape Town (UCT) in 2011, and compare the Facebook data to the Lampe et al. (2008) and Johnston et al. (2013) studies. The Twitter data was analysed but could not be compared, as no similar data was found on Twitter. A positivist philosophy was adopted, a survey instrument adapted with permission from Johnston et al. (2013) was used, and all respondents remained anonymous. Limitations included the fact that 85% of the student respondents were first-year students in Information Systems. Hence respondents were likely to be more computer literate, and have greater interest and access to computers and the internet in comparison to other students.

The paper is divided into six sections. Section two is a Literature Review of Facebook and Twitter, which looked at the changes in use, perception and attitude of Facebook and Twitter as well as how Facebook and Twitter are used as a communication channel. The research questions were derived from the themes identified in the literature. Section three explains the methodology used to answer the research questions, as well as the design and process of the research. Findings and analysis of the data researched was detailed in section four, followed by discussion of implications in section five. The final section draws conclusions of the research.

## 2. Literature review

The literature was sourced using Google Scholar, EBSCO host Science Direct, and JSTOR. The Facebook and Twitter phenomena are fairly new which limited the number of available and relevant journal and conference papers.

Two main research papers were used for Facebook, the first by Lampe et al. (2008) was conducted between 2006-2008, and the second by Johnston et al. (2013) was conducted in 2008. Lampe et al. (2008) focused on the change in use and perception of Facebook among students at Michigan State University (MSU). Johnston

et al. (2013) focused on the use of Facebook amongst students at seven South African (SA) universities, and the impact of Facebook friends on social capital. For Twitter, the primary papers were by Java, Song, Finin, and Tseng (2007), and Zhao and Rosson (2009) who focused on how and what micro-blogging was used for.

Social Network Sites (SNS) are an internet-based media platform that has grown in popularity in recent years (Roblyer, McDaniel, Webb, Herman, & Witty, 2010), and been embraced by university students (Johnston, 2013). Lampe et al. (2008, p721) defined SNSs such as Facebook, to have three main characteristics which allowed users to “(1) 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”. SNSs create an online community that relies on user participation and contribution (Waters, Burnett, Lamm & Lucas, 2009). Typical SNSs provide users with profile space, and allow users to upload content (such as photographs, statuses and interests) about themselves. SNSs also provide a platform where users can connect and communicate with one another (Joinson, 2008). Furthermore, an SNS acts like an online bulletin board allowing users to view other people’s posts and content (Pempek, Yermolayeva & Calvert, 2009). The core of SNSs is its users and the connections between them, therefore SNSs are primarily organised around people (Boyd & Ellison, 2007; Joinson, 2008). The students of today “have redefined communication not only by their acceptance of and hunger for new devices, but because of their sometimes overwhelming reliance on technology for being in touch with others and interpreting their world” (Waldron, 2011, 2-3).

Micro-blogging is a variant of blogging where short messages are posted instantly, and are within the prescribed character range (Fischer & Reuber, 2010; Java et al., 2007; Thomases, 2010). Micro-blogging is used by both consumers and businesses to share news, post status updates and carry on conversations (Reinhardt, Ebner, Beham & Costa, 2009). Messages can be restricted to a certain number of individuals, sent exclusively to a specific contact, or made available to the Worldwide Web (Reinhardt et al., 2009). Mico-blogging requires less time and thought investment from the user for content generation; compared to regular blogging where users update their blog every few days, the nature of micro-blogging allows them to update several times within a day (Java et al., 2007; Zhao & Rosson, 2009). “Twitter is an Internet social-network and micro-blogging platform with both mass and interpersonal communication features for sharing 140-character messages, called Tweets, with other people, called followers” (Chen, 2011, p. 755). Student use of social media such as Facebook and Twitter is integrally related to how students view and engage with the world (Junco, Elavsky & Heiberger, 2012), and is changing communication patterns (McArthur & Bostedo-Conway, 2012).

## **2.1 Facebook**

Facebook is an SNS used primarily to connect, interact and stay in touch with contacts that the user knows personally, such as friends, family and colleagues (Ellison, Steinfield, and Lampe, 2007). Facebook is one of the most popular SNSs (Lampe et al., 2008), and has been widely adopted by students (Johnston, 2013; Roblyer et al., 2010). A typical Facebook user spends 10-20 minutes a day on the site, and around two-thirds logged in more than once a day according to (Ellison et al., 2007) A 2010 survey of 2368 students at a University in the USA, found that students spent a mean of 101.09 min per day on Facebook, and checked the site a mean of 5.75 per day (Junco, 2012).

Hew (2011) stated that there are four elements within a Facebook profile, namely: control elements, referents elements, preference elements, and contact elements. Control elements include a users gender and time they have been a member, referent elements are fields such as home town and high schools, where common points of reference among users can be established. Preference elements are fields that express the personal interests of the user and short biographies (Hew, 2011). Contact elements are fields such as mobile contact numbers and e-mail addresses (Hew, 2011). Furthermore, users can set their privacy settings to include or exclude certain users from viewing parts of their profile (Pempek et al., 2009). Joinson (2008) found various heterogeneous uses of Facebook such as keeping contact awareness, photo sharing, group organisations, and application participation. Several studies have shown that the use of Facebook is associated with social capital gains (Ellison et al., 2007; Johnston et al., 2013; Ryan & Xenos, 2011).

Studies conducted by Lampe et al. (2008) on MSU students, and Johnston et al. (2013) on SA students showed responses to the question “I use Facebook to...” were similar. The main uses of Facebook were– “keeping in touch with old friends” and to “check out someone I met socially”. Manago, Taylor and Greenfield (2012)

found that on average 21% of university student Facebook friends were close connections, 18% were connections from the past (maintained contacts), 27% were acquaintances, 24% were teammates, classmates etc, 4% were strangers, 2% were online connections, and 4% were classified as other. Thus, only 39% of Facebook friends were close or maintained contacts.

There are seven motives why users use Facebook. Firstly, *to maintain existing relationships*, to stay in touch and maintain relations with people (Hew, 2011; Roblyer et al., 2010). Secondly, *to meet new people*, find out information about people previously met, and meet others online with the intention of meeting them offline later (Hew, 2011; Joinson, 2008). Thirdly, *using Facebook is perceived as “cool” and “fun”*, as people enjoy following trends and don't like to feel left out (Hew, 2011). Fourthly, *to raise public awareness of oneself*, where users can gain popularity through having Facebook friends (Hew 2011; Pempek et al., 2009). Fifthly, the *ability to express or present oneself*, by updating their profiles and statuses (Hew, 2011; Smith & Kidder, 2010). The sixth motive – *for learning purposes* – lets users communicate with one another, ask and share questions and information (Hew, 2011; Roblyer et al., 2010). The seventh motive – *enabling of student activism* – lets students provide general information about activities, and express their viewpoints (Hew, 2011).

The perception users have of their audience plays an important role in the usage of Facebook, as if the user perceives no audience for his or her profile, he or she is less likely to make use of Facebook (Lampe et al., 2008). The type of perceived audience also determines the type of information and content users are likely to share on their profiles (Pempek et al., 2009). Studies conducted by Lampe et al. (2008) on MSU students, and Johnston et al. (2013) on SA students showed that as the offline relations become weaker, the less students consider them as perceived audiences. Manago, Taylor and Greenfield (2012) found that females are communicate more than males on Facebook.

The overall student attitude towards communicating on Facebook is positive (Hew, 2011). Lampe et al. (2008) observed a significant increase in positive attitudes towards Facebook between 2006 and 2008, despite a small increase in some negative effects.

## **2.2 Twitter**

Twitter is a micro-blogging platform that allows users to share their thoughts, information and links in real time, and to communicate directly, privately or publicly with other Twitter users (Thomases, 2010). Users can tweet about any topic within the 140-character limit (Fischer & Reuber, 2010; Junco, Elavsky & Heiberger, 2012; Thomases, 2010). A *follower* is someone who has opted to receive tweets from a specific person, whereas *following* is whom the person has opted to follow and receive tweets from (Java et al., 2007; Thomases, 2010). Pennacchiotti and Popescu (2011, p.281) stated that the success of Twitter has lead Twitter to “become an integral part of the daily lives of millions of users”.

Users update their daily life activities with friends, families and co-workers; share information, news, and opinions with interested observers; and seek knowledge and expertise in public tweets (Browning & Sanderson, 2012; Java et al., 2007; Pennacchiotti & Popescu, 2011). Honeycutt and Herring (2009) stated that Twitter has the potential to be used for idea sharing and coordination of activities, similar to instant messaging in a more dynamic way. McArthur and Bostedo-Conway (2012, p291) suggest that “one-to-many (or many-to-many) communication channel may offer instructors an opportunity to efficiently contact and create learning opportunities for many students at once”. The main types of user intentions on Twitter are: daily conversations, sharing information and website URLs, and reporting news (Honeycutt & Herring, 2009; Java et al., 2007). Twitter is also used for keeping in touch with friends and colleagues, sharing interesting information within one's network, seeking help and opinions, and releasing emotional stress (Ehrlich & Shami, 2010; Zhao & Rosson, 2009). A Twitter user can create a public profile which entails full name, location, a web page, a short biography and the tweets of the user (Kwak, Lee, Park & Moon, 2010; Pennacchiotti & Popescu, 2011). The people who follow the user and those that the user follows are also listed (Pennacchiotti & Popescu, 2011). Ehrlich and Shami (2010) indicated that users are less likely to post confidential information on Twitter.

## 2.3 Johnston (2013), and McArthur and Bostedo-Conway (2012) encourage academics to use technologies such as Facebook, Twitter and mobile phones to communicate and educate students. The South African context

One cannot conduct a study on South Africa without understanding the social context of the country. Apartheid in SA played a major role in creating gaps and inequalities between the different races (Johnston et al., 2013). Apartheid actively humiliated and oppressed races that were considered 'non-white', limiting the 'non-whites' in their education and the ability to accumulate and use assets, only 9% of South Africans are white (Johnston et al., 2013). Although South Africa was not the only country to propose and implement racial segregation, it has been "a distinctive feature through which communities and neighbourhoods in South African cities have been understood" (Oldfield, 2004, p.190). The racial segregation within South Africa had a formative impact on urban economic, social and political form (Oldfield, 2004). The racial segregation made South Africa a country with a high GINI coefficient, and one of the most unequal societies in the world (Armstrong, Lekezwa, & Siebrit, 2008).

### 3. Methodology

The study was done on the 2011 cohort of UCT students in the Faculty of Commerce, and aimed to understand the use, attitudes and perceptions of Facebook and Twitter. The philosophy was positivist. The questionnaires relied on the subject's subjective observations of themselves. Hence, there was bias in the data; however it is assumed that the biases average out, and compensate for individual differences. The data analysis was quantitative to correspond with the studies done by Lampe et al. (2008) and Johnston et al. (2013). As in the two previous studies, five-point Likert scales were used extensively in the questionnaire with 1 = strongly disagree or very unlikely, and 5 = strongly agree or very likely. Data could therefore be compared and analysed. The sample comprised all 1231 UCT Commerce students registered for a first year Information Systems course in 2011. An online survey was made available to students and obtained 488 responses. The raw data was cleaned and formatted, two responses were not fit to be used, reducing the sample to n=486.

### 4. Data analysis

The results of the research (referred to as '2011 UCT' as the data was collected in 2011) were compared with results from previous studies done by Michigan State University (referred to as '2008 MSU') (Lampe et al., 2008) and Johnston et al. (2013) (referred to as '2008 SA' as it was completed in 2008). The Facebook intensity scale which attempted to obtain a measure of Facebook usage and duration of use was adopted from the 2008 SA study (Johnston et al., 2013).

In the 2008 SA study, 67% of students were members of Facebook (Johnston *et al.*, 2013), whereas 95% of the UCT students surveyed in 2011 were members of Facebook. Table 1 compares the statistics of Facebook (FB) intensity for the 2008 MSU students (Lampe et al., 2008), the 2008 SA students (Johnston et al., 2013), and the 2011 UCT students.

**Table 1:** Summary statistics for Facebook intensity

Individual items and scales	2008 MSU		2008 SA		2011 UCT	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
About how many Facebook friends do you have? 0=<10, 1=11-50, 2=51-100, 3=101-150, 4=151-200, 5=201-250, 6=251-300, 7=301-400, 8=401-500, 9=>501	7.33		3.17	2.31	6.78	2.35
In the past week, on average, approximately how many minutes per day have you spent on Facebook 0=<10, 1=10-30, 2=31-60, 3=1-2 hours, 4=2-3 hours, 5=>3 hours	3.37		1.69	1.44	2.18	1.44
Facebook is part of my everyday activity	3.85	1.12	3.03	1.31	3.72	1.05
I am proud to tell people I am on Facebook	3.34	0.85	3.53	1.00	3.68	0.91
Facebook has become part of my daily routine	3.66	1.19	3.07	1.27	3.59	1.04
I feel out of touch when I haven't logged onto FB for a while			2.74	1.37	3.14	1.23
I feel I am part of the Facebook community			3.36	1.08	3.53	0.96
I would be sorry if Facebook shut down	3.72	1.34	3.58	1.23	3.64	1.17
My Facebook has caused me problems	2.20	1.12			2.37	1.13

The 2008 MSU students had an average of 333 friends (mean of 7.33), whereas the 2008 SA students had an average of 134 friends (mean 3.17). In the 2011 study of UCT students, students had an average of 251–300 friends (mean of 6.78). All groups of students in Table 1 leaned towards agreeing that Facebook was part of their daily routine and everyday activity. Similarly, all groups are leaning towards agreeing that they would be sorry if Facebook had to shut down, thus students have an overall positive attitude towards Facebook. When students were asked about problems caused by Facebook, the means were below 2.50 indicating that the majority disagreed with the statement.

Figure 1 shows that 72% of the 2011 UCT students indicated that they used Facebook to view the profiles of other students in one of their classes; 55% used Facebook to contact another student with questions relating to class work; 40% used Facebook to arrange study groups and meetings; and 25% were given Facebook-related class assignments. Facebook was used by students to assist in their education by this group of students, and thus could be used as a communication channel to assist academics.

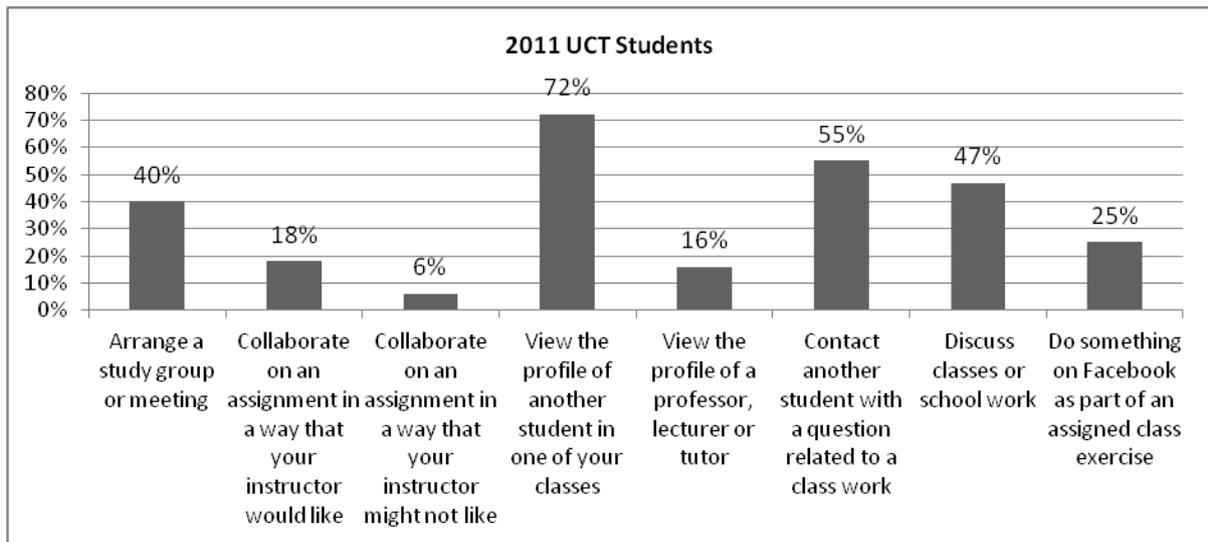


Figure 1: Usage of Facebook within an educational context

Table 2 shows that students were less inclined to use Facebook to meet new people (overall mean of 2.41), and strongly inclined to use Facebook to maintain existing contacts. When asked to rate the statement “I use Facebook to keep in touch with my old friends,” 2008 MSU students had a 4.50 mean, the 2008 SA study had a 4.47 mean, and 2011 UCT study had the highest mean of 4.56. The second highest set of means related to the statement, “I have used Facebook to check out someone I met socially.” Table 2 shows that the main uses of Facebook by all groups are the same, namely: to keep in touch with old friends, and to check out someone they have met socially, in other words to connect with offline contacts, rather than to meet new people.

Table 2: Facebook use for prior contacts and meeting new people

Individual items and scales	2008 MSU		2008 SA		2011 UCT	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
Off to Online: Use Facebook to connect with offline contacts	3.79	0.90	3.56	1.17	3.75	0.99
I have used FB to check out someone I met socially	3.94	0.89	3.57	1.33	4.03	1.05
I use FB to learn more about other people living near me	2.95	1.15	2.64	1.29	2.65	1.25
I use FB to keep in touch with my old friends	4.50	0.67	4.47	0.89	4.56	0.66
On to Offline: I use Facebook to meet new people	1.88	1.04	2.55	1.45	2.41	1.17
I use FB people to find people to date	1.62	0.95			1.50	0.92
I use FB to find people to add to my 'friends' list					2.02	1.23
I use FB to meet new people	2.14	1.12	2.25	1.45	2.05	1.29
I use FB to find out things that's happening around me	3.51	1.10			3.72	1.14
I use FB to find out worldwide news or facts					2.74	1.27
I use FB to find out about specials and promotions					2.26	1.26

Figure 2 shows which elements students included in their Facebook profiles. The most commonly selected elements in 2008 were contact details (78%) and a photo of the student (66%); whereas 88% of the 2011 students included educational details, and 83% a photo. Although 80% of 2011 students included their home town, only 14% included an address. There has been a decrease from 78% to 65% in sharing contact details such as email and mobile numbers.

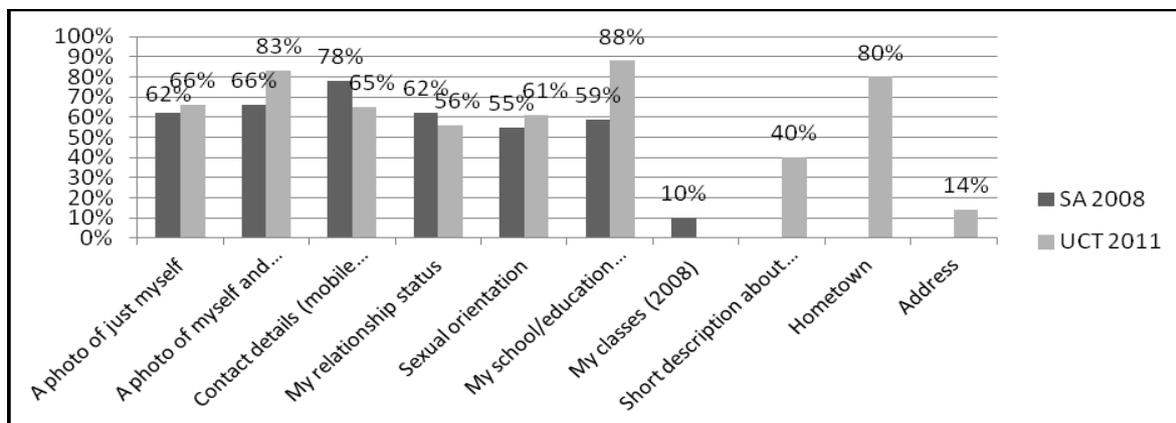


Figure 2: Profile elements included for Facebook

The 2008 MSU, 2008 UCT and 2011 studies revealed similar results with regards to perceived profile view (Figure 3), with friends perceived as the main audience. ‘High school friends’ are still being perceived as the main profile audience (2008 MSU had 94%, 2008 UCT had 88% and 2011 UCT had 97%). The biggest variation was the perceived profile audience of ‘someone I met at a party or social’, 2008 MSU study had 72%, the 2008 UCT study had 40%, and the 2011 UCT study had 64%. When asked about perceived professional audiences viewing the profile, only 7% of the 2011 UCT students perceived that companies would view their Facebook sites.

Table 3 provides a comparison of Facebook members across the studies. The number of Facebook members within South Africa increased from 67% to 95% in 2011. In both the 2008 SA study and the 2011 UCT study, over 26% of the Facebook respondents were white, whereas only 9% of the country’s population is white. This is a reflection of the inequality in the country.

Of the students surveyed, 34% (163 respondents) were members of Twitter. Table 4 shows that most spent less than 10 minutes per day on Twitter, and claimed to have between 11-50 followers, while following 11–50 Twitter users. Respondents did not consider Twitter a part of their daily activity (mean of 2.38), or daily routine (mean of 2.46) as they did with Facebook.

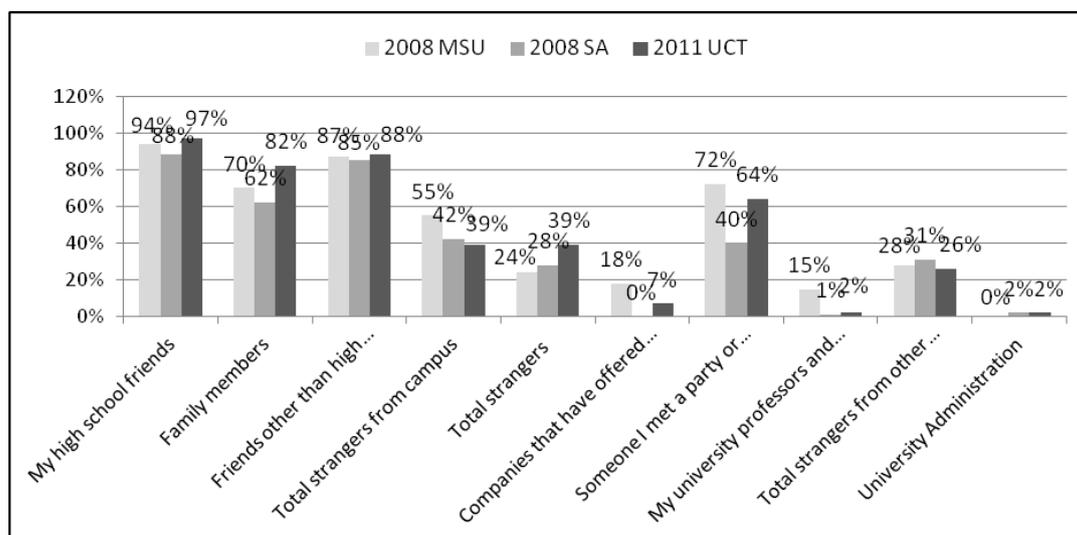


Figure 3: Perceived profile viewers for Facebook

**Table 3:** Comparison of Facebook members

	2008 MSU	2008 SA	2011 UCT
Number of respondents	n = 286	n = 572	n = 486
Facebook members	94%	67%	95%
Facebook use (minutes per day)	10-30 minutes	10-30 minutes	31-60 minutes
Facebook friends	151-200	101-150	251-300
Ethnicity of FB members (White/Black)	82%/18%	28%/72%	27%/73%

**Table 4:** Statistics for Twitter intensity (n=163)

Individual items and scales	2011 UCT	
	Mean	Std. Dev
About how many Twitter followers do you have? 0=<10, 1=11-50, 2=51-100, 3=101-150, 4=151-200, 5=201-250, 6=251-300, 7=301-400, 8=401-500, 9=>501	1.08	1.59
About how many people are you following on Twitter? same scale as above	1.62	1.77
In the past week, on average, approximately how many minutes per day have you spent on Twitter 0=<10, 1=10-30, 2=31-60, 3=1-2 hours, 4=2-3 hours, 5=>3 hours	0.81	1.22
Twitter is part of my everyday activity	2.38	1.41
I am proud to tell people I am on Twitter	3.33	1.14
Twitter has become part of my daily routine	2.46	1.36
I feel out of touch when I haven't logged onto Twitter for a while	2.06	1.21
I feel I am part of the Twitter community	2.56	1.24
I would be sorry if Twitter shut down	2.59	1.31
My Twitter has caused me problems	1.80	1.02

Figure 4 shows that 7% of Twitter respondents had used Twitter to arrange study groups and meetings, while 4% had contacted other students relating to class work. However, 18% of 2011 UCT students indicated that they had used Twitter to view the profile of a fellow student, and 9% had used Twitter to view the profile of a professor, lecturer or tutor.

Twitter was mainly used by UCT students to find out worldwide news or facts (mean of 3.43), secondly to find out local news and events (mean of 3.16), thirdly to find out about specials and promotions (2.38), and only fourthly to keep in touch with old friends (mean of 2.35) as seen in Table 5. Twitter was used to find out about issues, rather than to socialise.

Sixty-five percent of the students using Twitter indicated that they had included their real name in their profile, and 60% also included a pen name; 42% included a profile picture of themselves and 44% included location within their profile. Students are more likely to share personal confidential details on Facebook than on Twitter, as stated by Ehrlich and Shami (2010).

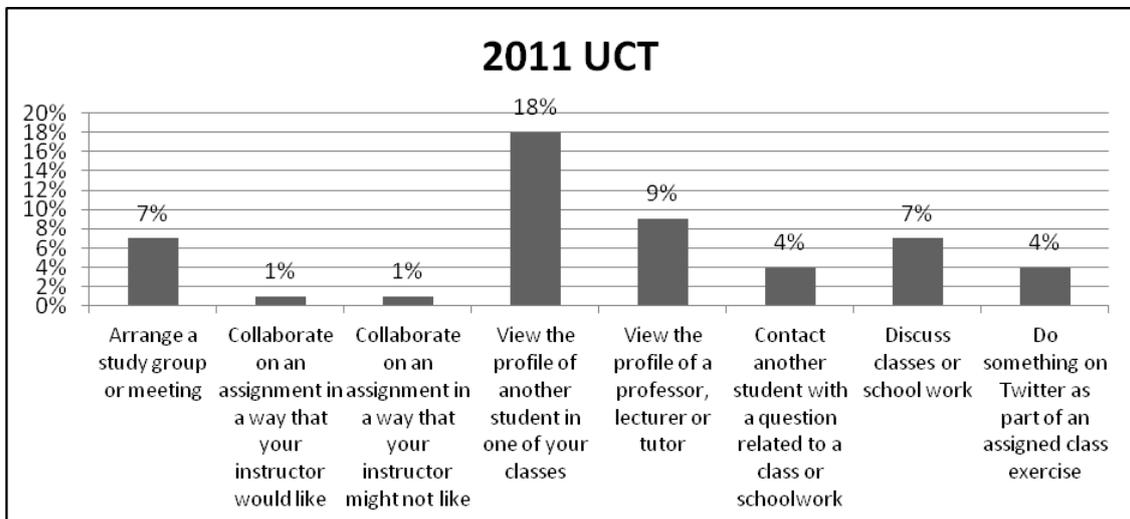


Figure 4: Usage of Twitter within education context

Table 5: Twitter use for prior contacts and meeting new people

Individual items and scales	2011 UCT	
	Mean	Std. Dev
Off to Online: Use Twitter to connect with offline contacts	2.19	1.31
I have used Twitter to check out someone I met socially	2.13	1.33
I use Twitter to learn more about other people living near me	2.09	1.22
I use Twitter to keep in touch with my old friends	2.35	1.39
On to Offline: I use Twitter to meet new people	2.40	1.26
I use Twitter people to find people to date	1.48	0.86
I use Twitter to find people to add to my 'friends' list	1.96	1.22
I use Twitter to meet new people	1.96	1.23
I use Twitter to find out things that's happening around me	3.16	1.50
I use Twitter to find out worldwide news or facts	3.43	1.50
I use Twitter to find out about specials and promotions	2.38	1.44

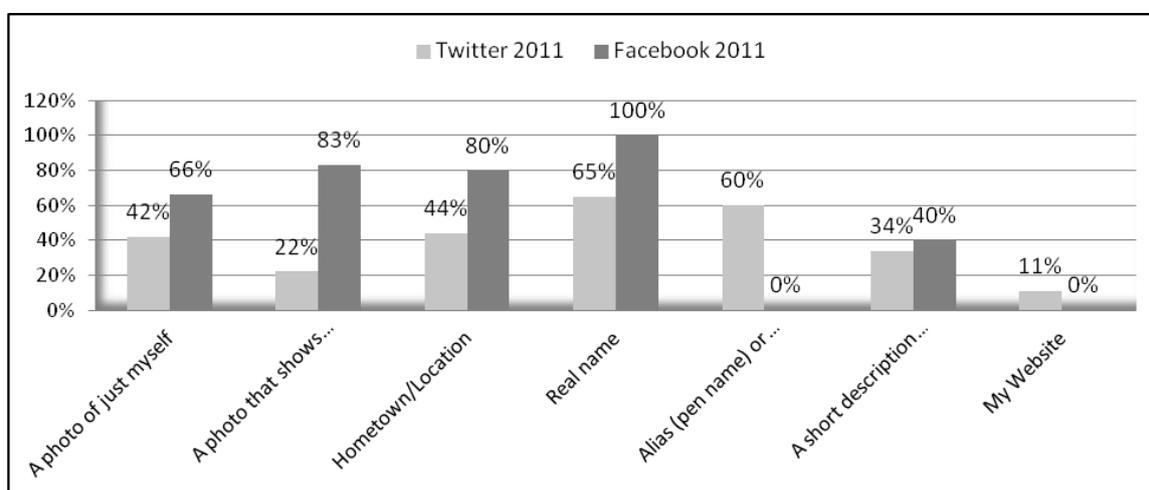


Figure 5: Profile elements included for Twitter vs. Facebook

Sixty-one percent allowed anyone to view their Twitter profile, 15% did not indicate their privacy setting, and only 24% restricted views to approved audiences. Similarly to Facebook, high school friends were perceived as the main audience (75%), whereas only 14% perceived someone they have met socially to be their audience. Figure 6 shows who respondents perceived as viewers of their Twitter and Facebook profiles, and as expected the percentages of Twitter viewers were lower than the percentages of Facebook users.

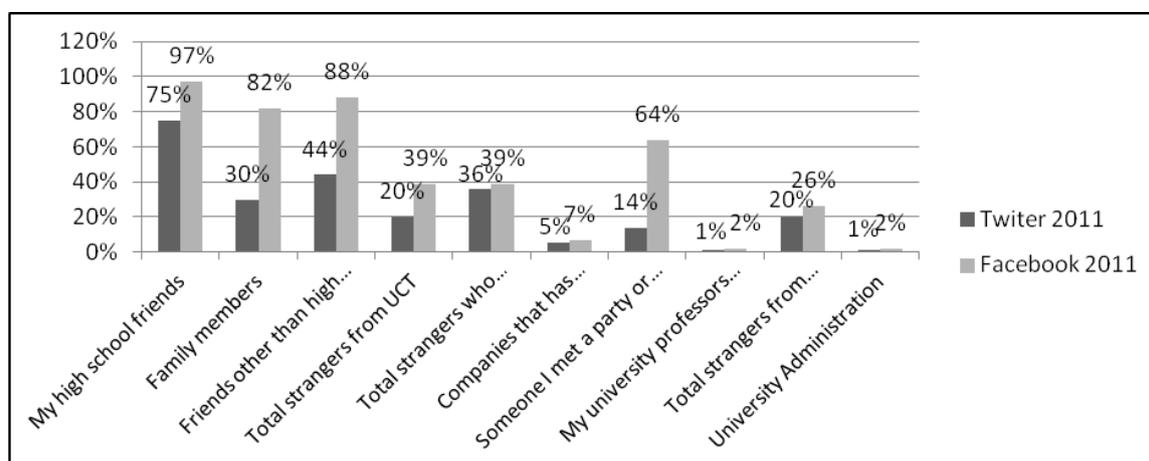


Figure 6: Perceived profile viewers for Twitter vs. Facebook

Out of the total number of Twitter members in the current study, 25% indicated that they were white. The ethnicity among students who were members of Twitter and Facebook was unsurprisingly similar.

## **5. Discussion**

Of the students surveyed (N=486), 95% were Facebook users and 33% were Twitter users. The 2008 MSU study indicated that 6% of the students surveyed were not registered Facebook members, whereas 33% of 2008 UCT students surveyed were not registered on Facebook. In the current study only 5% of respondents were not registered on Facebook. With regard to Twitter, 67% of 2011 UCT respondents were not Twitter members, while 95% of these respondents were members of Facebook. The current study indicated that time spent using Facebook per day (24%) fell within the 30 to 60-minute category, higher than the MSU and 2008 UCT study, but almost half of the 101.09 min per day reported by Junco's (2012) 2010 study. Irrespective of which figures one uses, students are spending a sizeable portion of their days on Facebook. Similarly, the number of Facebook friends increased, 2008 MSU students had 150 – 200 friends, the 2008 UCT students had 101 – 150 friends, whereas the 2011 UCT students had between 400 – 500 friends. This may be because the 2011 students have been using Facebook for a longer period. With regards to Twitter, the average time spent was under 10 minutes (28%), and most members are following and are being followed by 11 – 50 fellow Tweeters. The main goal UCT students used Twitter for was to 'find out about things happening around them and in the world' rather than to socialise.

The study has shown an increase in registered Facebook members when compared to previous studies (Johnston et al., 2013), indicating that Facebook is becoming more popular amongst South African tertiary students. South African students have been slow to adopt Twitter. The research established that there has been an increase in popularity of Facebook within the South African tertiary student community. The main use of Facebook remained consistent with the literature, Facebook was mainly used for "keeping in touch with old friends" and to "check out someone I met socially" (Ellison et al., 2007; Hew, 2011; Johnston et al., 2013; Lampe et al., 2008; Pempek et al., 2009; Roblyer et al., 2010).

Hew (2011) and Pempek et al. (2009) both stated that although 'learning purposes' was listed as a motive for students making use of Facebook, Facebook was not widely used for learning purposes. However, our study proved the opposite, with 55% of the students surveyed using Facebook to contact other students for questions relating to class work, and 47% making use of Facebook to discuss class work. The literature indicated that Twitter is mainly used for daily conversations, sharing information and website URLs and reporting news (Honeycutt & Herring, 2009; Zhao & Rosson, 2009). Our study revealed that students at UCT mainly used Twitter to find out world-wide facts and events happening around them. Ehrlich and Shami (2010) and Zhao and Rosson (2009) stated that users made use of Twitter to keep in touch with friends and colleagues. However, our findings proved the opposite; students at UCT in 2011 did not make extensive use of Twitter to keep in touch with friends.

The literature revealed that the perception users have of their audience plays a role in determining the type of information and contents which users are more likely to share on their profiles (Pempek et al., 2009). The current study established that 2011 UCT students are less likely to share confidential information such as their contact details in comparison to 2008 students (Johnston et al., 2013). Lampe et al. (2008) and Johnston et al. (2013) both identified that student Facebook users were more likely to consider their peers as their main audience. Furthermore, Lampe et al. (2008) found that as Facebook became more popular, student Facebook users perceived more family members as their profile audience. The current study found similar results with regard to perceived Facebook audience.

The students' attitudes towards Facebook and Twitter at UCT in 2011 was positive. The literature (Lampe et al., 2008) stated that Facebook had slowly become an important part of the lives of the students and would be missed if it had to close down. The statement was supported by the current study. Lampe et al. (2008) indicated that Facebook had become a popular method for communicating between college-age users; this was supported by the current study. The main use of Facebook was for communication with friends and to keep in touch with old friends (Pempek et al., 2009).

Although literature stated that Twitter is the most popular micro-blogging tool among other existing equivalents (Zhao & Rosson, 2009), and that Twitter has seen a dramatic growth in the number of registered

users, our findings showed a low percentage of respondents (34%) were Twitter users. The main purpose of Twitter users at 2011 UCT was to be kept updated with world-wide facts and happenings around them.

## **6. Conclusion**

The research replicated aspects of studies performed at MSU in 2008, and in South Africa in 2008. The study aimed to assess the change in Facebook usage, perception and attitude among UCT students and whether or how it is used as a communication channel, drawing comparisons to the 2008 MSU and 2008 SA study. The study included Twitter as there appeared to be a gap in the academic literature.

The research questions were to establish the usage of Facebook and Twitter at UCT, and the user perception and attitude towards Facebook and Twitter at UCT. The main use of Facebook remained consistent with the literature, "keeping in touch with old friends" and to "check out someone I met socially", while Twitter was mainly used for finding news and information. Facebook was also used for learning purposes; with 55% of respondents using Facebook to contact other students with academically related issues, and 47% using Facebook to discuss class work.

The student's perception and attitude towards Facebook was extremely positive, and the vast majority are members, and would be sad should Facebook close down. UCT students in 2011 are less likely to share confidential information such as their contact details in comparison to students in prior years.

This study was conducted only on registered UCT students and is not an accurate sample of the entire South African populace. The research questions provide new avenues for future research regarding Facebook and Twitter, or more generally, online social networking within South Africa. Future research could attempt to replicate the Twitter study to see the growth of Twitter within the South African tertiary institution context. Future studies could also address the use of mobile technology within social networking in the South African context.

It is clear that university students are strong users of technology, spend time daily using technology, and have positive perceptions and attitudes towards technology. The one area of their lives which often avoids technology is academic programs. McArthur and Bostedo-Conway, (2012, p286) "encourages teachers to join the digital age and begin to experiment with any new tool that is available to students". Failure to do so, could alienate students to academics and education (Johnston, 2013). Academics should therefore make use of social networking software such as Facebook and Twitter both in their personal lives, and in classrooms. Academics could use social media to communicate (listen and answer) with students in an more immediate and personal capacity.

## **References**

- Armstrong, P., Lekezwa, B., & Siebrit, K. (2008). *Poverty in South Africa: A profile based on recent household surveys*. Stellenbosch: Economic Research at the University of Stellenbosch.
- Boyd, D. M., & Ellison, N. (2007). Social network sites: Definition, history, and scholarship. *Computer Mediated Communication*, 13(1), 1-11.
- Browning, B., & Sanderson, J. (2012). The Positives and Negatives of Twitter: Exploring How Student-Athletes Use Twitter and Respond to Critical Tweets. *International Journal of Sport Communication*, 2012(5), 503-521.
- Chen, G. M. (2011). Tweet this: A uses and gratifications perspective on how active Twitter use gratifies a need to connect with others. *Computers in Human Behaviour*, 27(2), 755-762.
- Ehrlich, K., & Shami, S. (2010). Micro-blogging Inside and Outside the Workplace. *ICWSM* (pp. 42 - 49). Association for the Advancement of Artificial Intelligence.
- 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*, 1143-1168.
- Fischer, E., & Reuber, R. A. (2010). Social interaction via new social media: (How) can interactions on Twitter affect effectual thinking and behaviour? *Journal of Business Venturing*, 26(1), 1-18.
- Hew, K. F. (2011). Students' and teachers' use of Facebook. *Computers in Human Behavior*, 27, 662-676.
- Honeycutt, C., & Herring, S. C. (2009). Beyond Micro-blogging: Conversation and Collaboration via Twitter. *Proceedings of the 42nd Hawaii International Conference on System Sciences* (pp. 1-10). IEEE Press.
- Java, A., Song, X., Finin, T., & Tseng, B. (2007). Why we twitter: Understanding micro-blogging usage and communities. *Proceedings of the 13th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (pp. 56-65). New York: ACM.
- Johnston, K., Tanner, M., Lalla, N., & Kawalski, D. (2013). 'Social capital: the benefit of Facebook 'friends''. *Behaviour & Information Technology*. 32 (1), 24-36.

- Johnston, K.A. (2013). A guide to educating different generations in South Africa. *Issues in Informing Science and Information Technology*, 10(36), 261-273
- Joinson, A. N. (2008). 'Looking at', 'Looking up' or 'Keeping up with' People? Motives and Uses of Facebook. *Conference on Human Factors in Computing Systems* (pp. 1027-1036). New York: ACM Press.
- Junco, R. (2012). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 58 (2012), 162–171.
- Junco, R., Elavsky, C.M., & Heiberger, G. (2012). Putting twitter to the test: Assessing outcomes for student collaboration, engagement and success. *British Journal of Educational Technology*, 44(2), 273-287.
- Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a Social Network or a News Media? *Proceedings of WWW*, (pp. 591-600). Raleigh.
- Lampe, C., Ellison, B., & Steinfield, C. (2008). Changes in Use and Perception of Facebook. *Proceedings of the 2008 ACM conference on Computer supported cooperative work* (pp. 721-730). New York: ACM.
- Lampe, C., Ellison, N., & Steinfield, C. (2006). A Face(book) in the Crowd: Social Searching vs. Social Browsing. *Computer Supported Cooperative Work* (pp. 167-170). Alberta: ACM.
- Lupton, D. (2013). Twitter: social communication in the digital age. *Information, Communication & Society*.
- Manago, A. M., Taylor, T., & Greenfield, P.M. (2012). Me and my 400 friends: The anatomy of college students' Facebook networks, their communication patterns, and well-being. *Developmental Psychology*, 48(2), 369-380.
- McArthur, J.A., & Bostedo-Conway, K. (2012). Exploring the Relationship Between Student-Instructor Interaction on Twitter and Student Perceptions of Teacher Behaviors. *International Journal of Teaching and Learning in Higher Education*, 24(3), 286-292.
- Mischaud, E. (2007). Twitter: Expressions of the Whole Self. An investigation into user appropriation of a web-based communications platform. *Media@lse*, London School of Economics and Political Science, London.
- Oldfield, S. (2004). Urban networks, community organising and race: an analysis of racial integration in a desegregated South African neighbourhood. *Geoforum*, 35(2), 189 - 201.
- Pennacchiotti, M., & Popescu, A.-M. (2011). A Machine Learning Approach to Twitter User Classification. *ICWSM-11* (pp. 281-288). Barcelona: Association for the Advancement of Artificial Intelligence.
- Pempek, T.A., Yermolayeva, Y.A., & Calvert, S.L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30, 227–238
- Reinhardt, W., Ebner, M., Beham, G., & Costa, C. (2009). How people are using twitter during conferences. *Proceeding of 5. EduMedia*, (pp. 145-156). Salzburg.
- Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *Internet and Higher Education*, 13(2010), 134–140.
- Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior*, [Article in Press].
- Smith, W. P., & Kidder, D. L. (2010). You've been tagged! (Then again, maybe not): Employers and Facebook. *Business Horizons*, 53, 491-499.
- Thomas, H. (2010). *Twitter marketing: An hour a day*. Wiley publishing, Indianapolis.
- Waldron, K. (2012). *The iGeneration: Technology Guidelines for Parents and Teachers*. Education Faculty Research. Paper 2. [http://digitalcommons.trinity.edu/educ\\_faculty/2](http://digitalcommons.trinity.edu/educ_faculty/2).
- Waters, R.D., Burnett, E., Lamm, A & Lucas J (2009). Engaging stakeholders through social networking: How nonprofit organizations are using Facebook. *Public Relations Review*, 35(2), 102–106.
- Zhao, D., & Rosson, M. (2009). How and why people Twitter: the role that micro-blogging plays in informal communication at work. *Proceedings of the ACM 2009 International conference on Supporting group work* (pp. 243-252). New York: ACM.