

# South African Generation Y students' self-disclosure on Facebook

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## Abstract

The advent of online social networking sites such as Facebook, Twitter, Bebo, MXit, and the like have revolutionised communication. Facebook, in particular, has witnessed phenomenal growth and in South Africa, the site is especially popular among the youth aged between 18 and 24 years who form part of the Generation Y cohort (individuals born between 1986 and 2005). Unfortunately, the ease at which information may be disclosed and shared on Facebook has raised serious privacy and security concerns among scholars and social critics. Consequently, this study seeks to explore information disclosure on Facebook by Generation Y students in South Africa by ascertaining the kind of information they disclose, and the likely factors that will influence their self-disclosures on Facebook. Following a descriptive research design, self-administered questionnaires were completed by a non-probability convenience sample of 281 students registered at the campuses of two registered public higher education institutions in the Gauteng province of South Africa – one from a traditional university and one from a university of technology. The captured data were analysed using correlation analysis and structural equation modelling. The findings suggest that site trust and access concerns predict member trust, which, in turn, predicts the level of self-disclosure on Facebook among Generation Y students in South Africa.

## Keywords

Facebook, Generation Y, information disclosure, privacy, SNS, South Africa

The communication processes in the 21st century are increasingly including new channels that facilitate and enhance interactive communication. These new interactive communication channels, facilitated by the connectivity of the Internet, have resulted in social networking sites (SNSs), such as Facebook, Bebo, MXit, MySpace, Friendster, Twitter, and the like, flourishing and becoming a communication phenomenon of the 21st century (Bateman, Pike, & Butler, 2011). The success of

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such sites rests in their ability to bridge space and time, and enable people to connect online with friends and family interactively 24/7 at a relatively low cost. Consequently, SNSs have evolved from being a niche phenomenon into being a global mass phenomenon that is increasingly becoming a ubiquitous part of many individuals' daily lives (Gross & Acquisti, 2005).

A large portion of the population of SNSs such as Facebook and Twitter is made up of adult Generation Y members (Duggan & Brenner, 2013), particularly those attending college or university (Mehdizadeh, 2010; Special & Li-Barber, 2012). The Generation Y cohort is defined as individuals born between 1986 and 2005 (Markert, 2004), with the tertiary student portion of this cohort typically including individuals between the ages of 18 and 24 years (Special & Li-Barber, 2012).

The popularity of these sites among this age cohort may be attributed to the fact that they provide platforms for self-presentation, as well as a way to create, establish, and maintain relationships (Mehdizadeh, 2010), which is one of the germane reasons for the existences of SNSs. These SNSs provide a convenient tool for sharing information and communicating with others, which is precisely what makes such sites so attractive to the Generation Y cohort. This suggests that the very nature of SNSs encourages information sharing, communication and, by implication, self-disclosure. This has led to the 'tsunami' of personal information being disclosed on SNSs (Carminati & Ferrari, 2008). The opportunity created by SNSs for interaction has resulted in significant levels of self-disclosure, hence 'one cannot help but marvel at the nature, amount, and detail of the personal information some users of social networking sites provide, and ponder how informed this information sharing is' (Acquisti & Gross, 2006, p. 37).

Such high levels of self-disclosure on SNSs raise concerns over the management of such data in the public domain as such data could be leaked and be hazardous to the disclosers (Chakraborty, Vishik, & Rao, 2013). The relative weakness of access controls in many SNSs and the low privacy and security settings of these sites may expose individuals to privacy invasion and even make them vulnerable to criminal activities such as identity theft, and the like (Acquisti & Gross, 2006). Indeed, there have been several cases of cloned SNS profiles. For example, in South Africa in May 2013, Facebook accounts were cloned by criminals who targeted the friends of cloned accounts and solicited money (Nair, 2013). In addition to the various potential physical, psychological, and cyber risks posed by self-disclosure on SNSs, there is the concern that such sites enable third-party organisations, such as schools, universities, employers, and government departments, to create digital dossiers on SNSs' members (Gross & Acquisti, 2005). For instance, in South Africa, several schools are now checking the SNS accounts of potential students before granting them admission (Pillay, 2013). Similarly, many employers are now checking the online status of their employees, with some even firing employees because of the information they have disclosed on such sites (Doyle, 2013). Likewise, many employers are allegedly checking the SNS accounts of potential employees to see if their disclosures are suitable (Nosko, 2011) and to ascertain the integrity of applicants (Flynn, 2012). This poses a particular danger to Generation Y students who have yet to use their tertiary education to gain entry into the job market.

Recognising the risks posed by uninhibited self-disclosure on SNSs, several studies have been undertaken across the world to investigate this issue (Bateman et al., 2011; Nguyen, Bin, & Cambell, 2012; Nosko, Wood, & Molema, 2010; Vitak, 2012).

Despite the clear dangers posed by unrestrained self-disclosure on SNSs, there is a dearth of such published studies in the South African context and none that focus specifically on the country's Generation Y cohort. As such, this study seeks to explore the concept of self-disclosure on Facebook among Generation Y students in South Africa.

The focus on tertiary students is deliberate and based on the assumption that they continue to represent a significant portion of the active Facebook users (Special & Li-Barber, 2012) and, due

to the higher social standing typically associated with a tertiary qualification (Schiffman & Kanuk, 2007), they are likely to present as important role models among the country's wider Generation Y cohort. Facebook was chosen over other SNSs as it has the largest active user base in South Africa (Wilson, 2013). Facebook is also one of the most significant global SNS, with an estimated 1.35 billion monthly active users in the third quarter of 2014 (Barnett, 2014; Facebook, 2014; Statista, 2014; Zephoria, 2014), which grew to 1.44 billion in the first quarter of 2015 (Statista, 2015).

## Self-disclosure and the Facebook environment

The self, according to the social identity model of deindividuation (SIDE), comprises two main dimensions, namely personal identity (an individual's defining unique inherent attributes) and social identity (the attributes of the social groups to which an individual belongs). In becoming part of a social group, individuals shift their criteria for action from the personal to the social level of identification as they take on the norms of the social group (Reicher, Spears, & Postmes, 1995). Being part of a social group implies some level of communication, which includes the act of self-disclosure. The term self-disclosure was first introduced into psychology literature by Jourard and Lasakow (1958), who conceptualise it as the process of communicating information about the self to others. The three parameters of self-disclosure are the intimacy of the information shared, the amount of information shared, and the amount of time taken in sharing that information (Cozby, 1973).

Self-disclosure typically involves sharing personal information with others as a method of self-presentation (Vitak, 2012), and is a key ingredient in the formation of relationships and the building of social capital (Bateman et al., 2011), that is, the creation of an individual's social identity. Using solidarity as a measure of the affective nature of interpersonal relationships, Wheelless (1976) found that higher levels of self-disclosure were positively associated with higher levels of solidarity. The very concept of social networking, offline or online, is based on acquiring social capital through the creation and building of relationships, which necessitates a modicum of information sharing and self-disclosure (Ellison, Steinfield, & Lampe, 2007). The only difference in the online world is that such disclosures have a wider audience and may even include unknown audiences (Bateman et al., 2011; Vitak, 2012). Typically, the type and extent of self-disclosure individuals engage in depends on at what point their relationship is, whereby as their relationship progresses, so too does the level of their self-disclosure to each other (Nguyen et al., 2012). In the offline world, people's access to such self-disclosures would be largely limited to those in whom the discloser had decided to confide personal information (Bateman et al., 2011). Given the existence of a certain level of trust in such relationships, it is reasonable to assume that such disclosures would not become public. However, the same assumption does not hold true in the world of online SNSs.

Reicher et al. (1995) indicate that the shortage of individuating cues in computer-mediated communication environments, such as that of online SNSs, reduces self-awareness and promotes more uninhibited communication behaviour. Such uninhibited communication behaviour might include making more detailed and more intimate levels of self-disclosure more frequently, especially if this is consistent with the social norms of that SNS. This line of reasoning is supported by the findings of a number of studies (Barak & Gluck-Ofri, 2007; Sheldon, 2009; Tidwell & Walther, 2002). Barak and Gluck-Ofri (2007), for example, found that there were significantly higher levels of self-disclosure on online support forums than on online discussion forums.

By providing a platform for reaching a wider audience, the online environment, particularly SNSs, extend the value of self-disclosure to individuals. Aside from the relationship development value of self-disclosure on SNSs, there is also the social validation value of gaining widespread

social acceptance and liking from fellow site members, as well as the self-expression value of being able to vent negative emotions and articulate problems to those members (Bazarova & Choi, 2014). While online self-disclosure has been found to have a positive influence on subjective well-being and relationship management, such behaviour may become habitual (Lee, Im, & Taylor, 2008).

As with most SNSs, creating a Facebook profile requires that certain personal information, including name, birth date, email address, and gender be disclosed (Bateman et al., 2011), which, depending on the individual's privacy settings, then becomes accessible to everyone on their 'friend list' at the least and to unknown audiences at the worst (Vitak, 2012). One problem with these privacy settings is that Facebook has been known to alter what private information may be viewed without the prior consent of its users and, indeed, has been involved in litigation concerning alleged data protection violations (Barnett, 2014). The site also encourages users to provide detailed profiles, which include such revealing information as relationship status, favourite music/movies/books, and so on.

Facebook provides the tools for sharing not only views, opinions, and observations but also photographs, videos, quotes, geographic location, educational history, personal interests, and links. In 2014, with an average of 864 million daily active users (Facebook, 2014), there were an estimated 300 million photographs uploaded per day and an average of 4.5 billion likes and comments generated per day, and 4.75 billion pieces of content shared per day (Zephoria, 2014). In addition, the very act of liking or commenting on other people's statuses, which may range from innocent observations to commentary on controversial political and social issues, may provide revealing insights into an individual's true feelings on those topics.

Central to the level of self-disclosure in a relationship is the issue of trust, where greater trust leads to a greater propensity to self-disclose personal information (Dwyer, Hiltz, & Passerini, 2007). Higher levels of trust have also been found to be associated with more consciously intended self-disclosure, as well as a greater amount of disclosure (Wheless & Grotz, 1977). On SNSs, such trust would include both the trust in the site's members as well as trust of the actual site itself. In comparison to other SNSs, Facebook provides its members with more advanced privacy control features, which allow the user to decide what information is visible and to whom (Acquisti & Gross, 2006; Dwyer et al., 2007). However, it is worth noting that once a 'friend' likes or comments on any content or statuses on a member's site, that information may become public, depending on that 'friend's' privacy settings. Furthermore, it is possible for a 'friend' to share a member's status updates and content among their own 'friends'. This risk then elevates the importance placed on member trust in deciding on the level of self-disclosure to engage in on SNSs. Member trust revolves around trusting how SNS friends make use of the information a member discloses on the site (Shu & Chuang, 2011). This concept of trust includes a level of confidentiality as to whom the disclosed information is shared with, as well as an expectation of an appropriate interpretation and reaction to personal disclosures (Ignatius & Kokkonen, 2007). The consequence of misguided trust when making self-disclosures opens an individual up to negative and psychologically threatening feedback (Wheless & Grotz, 1977), a situation that this exasperated in the online world of SNSs. This situation may escalate into a form of cyber bullying and, even, sexual solicitation (Valkenburg, 2011). This, in turn, may give rise to psychological and behavioural consequences, including lowered self-esteem, stress, loneliness, and self-harm (Sleglova & Cerna, 2011).

In addition to the influence of site and member trust, an individual's privacy concerns will have an important influence on the extent of self-disclosure in both the offline and online environments. However, the consequences of disclosing private information in the offline environment tend to be less risky given that the audience is limited and most of such social interactions do not leave trace evidence (Dwyer et al., 2007). The findings of one study indicate that Generation Y

students are only mildly concerned as to who is able to access their private information (Acquisti & Gross, 2006), which suggests that privacy concerns are not a major issue to this cohort. In contrast, Bateman et al. (2011) found a significant negative relationship between access concerns and self-disclosure. Based on the literature, this study proposes that site trust, member trust, and access to private information concerns influence an individual's attitude towards self-disclosure on Facebook.

## **Purpose of the study**

The purpose of this study was to determine the influence of site trust, member trust, and access concerns on Generation Y students' propensity for self-disclosure on Facebook. As such, the objectives of this study were fourfold.

The first objective was to determine what Generation Y students use Facebook for and what personal information they disclose on their Facebook page. The second objective was to determine the relationship between site trust, member trust, access concerns, and propensity for self-disclosure on Facebook. The third objective was to test whether self-disclosure on Facebook is a four-factor measurement structure comprising site trust, self-disclosure, access concerns, and member trust. The fourth objective was to test whether site trust, member trust, and access concerns predict Generation Y students' levels of self-disclosure on Facebook.

## **Method**

### *Participants*

The target population for the study was specified as male and female full-time Generation Y students, aged between 18 and 24 years, registered at a public South African higher education institution (HEI) in 2013, with the extent limited to HEI campuses located within the Gauteng province. A non-probability judgement sample of two HEI campuses was selected for the sampling frame – one from a traditional university and one from a university of technology. Thereafter, 400 questionnaires were distributed to a non-probability convenience sample of students across the two campuses.

Of the 400 questionnaires distributed, 298 were returned. From these 298 questionnaires, eight were discarded because the participants fell outside of the defined target age population, two because the participants indicated not having a Facebook account, and a further four because the participants indicated that they never log onto their Facebook account. An additional three had to be discarded because the participants failed to indicate whether they had a Facebook account. This resulted in 281 usable questionnaires, which equates to a response rate of 70%. Of these 281 participants, 56% were from the university of technology and 44% from the traditional university. The sample comprised a higher percentage of females than males. Participants from each of South Africa's nine provinces, 11 language groups, and 4 race groups made up the sample. Table 1 provides a description of the sample.

### *Instrument*

The required data were collected using a survey self-administered questionnaire that comprised two sections. The first section contained questions requesting demographic information, together with questions designed to ascertain the existence of a Facebook account, frequency of logging onto Facebook, and time spent on Facebook. In addition, this section included two questions

**Table 1.** Sample description.

	Frequency	Percent (%)		Frequency	Percent (%)
Gender			Language		
Female	164	58.36	Afrikaans	18	6.41
Male	117	41.64	English	17	6.05
Age			Ndebele	4	1.42
18	12	4.27	Xhosa	32	11.39
19	48	17.08	Zulu	45	16.01
20	80	28.47	Northern Sotho	18	6.41
21	65	23.13	Southern Sotho	67	23.84
22	43	15.30	Tswana	37	13.17
23	27	9.61	Swati	9	3.20
24	6	2.14	Venda	17	6.05
Province			Tsonga	17	6.05
Eastern Cape	12	4.27	Race		
Free State	30	10.68	Black African	251	89.32
Gauteng	137	48.75	Coloured	8	2.85
Kwazulu-Natal	17	6.05	Indian/Asian	2	.71
Limpopo	34	12.10	White	20	7.12
Mpumalanga	18	6.41			
North-West	20	7.12			
Northern Cape	2	.71			
Western Cape	11	3.91			

pertaining to what participants use the site for and the type of information they have disclosed or are likely to disclose on Facebook. For these two questions, participants could respond to multiple items.

The second section included scaled items from published research studies that were adapted to reflect information disclosure in the Facebook environment. Site trust was measured using four items, namely 'I believe the information that I reveal is well protected on Facebook', 'I reveal my identity information on Facebook because of its security', 'I trust Facebook to protect my identity', and 'Facebook's security and privacy mechanisms encourage me to reveal personal information on the site' (Fogel & Nehmad, 2009; Shu & Chuang, 2011). Level of self-disclosure was measured using three items to reflect the three parameters of self-disclosure identified by Cozby (1973), namely frequency, depth, and amount. These included 'I often reveal intimate personal information about myself on Facebook', 'I intimately reveal who I really am, openly and fully in my conversations on Facebook', and 'I am comfortable revealing intimate information on Facebook' (Bateman et al., 2011). Access concerns were measured using four items. These included 'I am comfortable with strangers accessing my profile on Facebook', 'The information I reveal on Facebook is open for other users on Facebook to access', 'I have not set any barriers to prevent other Facebook users from accessing the information I reveal on Facebook', and 'I do not care who accesses my profile and the information that I reveal on Facebook' (Fogel & Nehmad, 2009; Stutzman, 2006). These four items were reverse scored. Member trust was measured using three items. The first item reflected the confidentiality element of trust, the second, trust in members not to misuse the information disclosed, and the third, trust in members' interpretation and reaction to such disclosures. These items were 'I trust the way other Facebook users make use of the information I reveal on Facebook', 'Other Facebook users will not use the information I reveal on Facebook in a way that

will impact me negatively', and 'I trust other Facebook users with the information that I reveal on Facebook' (Ignatius & Kokkonen, 2007; Shu & Chuang, 2011).

Scaled responses were measured using a six-point Likert-type scale ranging from *strongly disagree* (1) to *strongly agree* (6).

## Research design

The study followed a descriptive research design, using a single cross-sectional approach.

## Procedure

Fieldworkers, employing the mall-intercept survey technique, distributed self-administered questionnaires across the two campuses to students who agreed to participate in the study. The questionnaire's cover letter explained the purpose of the study and provided an assurance of the confidentiality of any information provided.

## Ethical considerations

Ethical approval for the study was obtained from the Research Office of the Faculty of Economic Sciences and Information Technology at the North-West University (Vaal Triangle Campus). Participation in the study was on a strictly voluntary basis and, in order to honour the assurance of confidentiality provided in the cover letter of the questionnaire, all responses were reported on in aggregate.

## Data analysis

The IBM Statistical Package for Social Sciences (SPSS) and Analysis of Moment Structures (AMOS) programmes, Version 22, were used to analyse the captured data. Data analysis included frequencies, descriptive statistics, reliability and validity measures, Pearson's product-moment correlation analysis, collinearity diagnostics, and structural equation modelling. The level of statistical significance was set at  $p \leq .01$ . Structural equation modelling, applying the maximum likelihood method, was used to test the measurement and structural models. Concerning model fit, while the chi-square statistic is reported on, because of its known sensitivity to sample size (Byrne, 2010), other fit indices were also considered, including the goodness-of-fit index (GFI), the incremental-fit-index (IFI), the comparative-fit-index (CFI), and the root mean square error of approximation (RMSEA). GFI, IFI, and CFI values between .90 and .99, and an RMSEA value below .08 are indicative of acceptable model fit (Van de Schoot, Lugtig, & Hox, 2012).

## Results

### Facebook activities and personal information shared

The study first sought to determine Generation Y students' main uses of Facebook, as well as what personal information they reveal on the SNS, as reported in Table 2.

As is evident from Table 2, the majority of the participants indicated that they mainly use Facebook to communicate with friends and family (76.9%), followed by finding and connecting with friends (35.2%), and as a platform for expressing views and opinions (31.3%). Only 7.8% of the participants indicated that they use Facebook as a dating mechanism and a mere 2.1% for

**Table 2.** Main Facebook activities and personal information shared.

Main Facebook activities	Percent (%)	Personal information shared on Facebook	Percent (%)
Finding and connecting with friends	35.2	Name	59.4
Communicating with friends and family	76.9	Email address	49.8
Dating	7.8	Phone number	37.7
Self-promotion	2.1	Birthday	72.2
Platform for expressing my views and opinions	31.3	Photos	81.1
Academic purposes	19.9	Relationship status	31.0
		Gender	72.6
		Interests	57.3
		Occupation	23.8
		Academic information	38.8
		Wall updates	48.4
		Home address	10.7
		Favourite music	59.1
		Favourite books	42.3
		Favourite movies	49.8

self-promotion. However, there are indications that tertiary students often under-report on using Facebook as a dating and/or self-promotion tool, given that there is a certain stigma attached to using the SNS for these purposes (Acquisti & Gross, 2006).

Concerning the kind of personal information Generation Y students reveal on their Facebook profile or are likely to reveal on their Facebook profile, Table 2 indicates that most of the participants reported that they upload photos (81.1%) and share their gender (72.6%) and birthday (72.2%) particulars. Over 50% of the participants indicated that they also share personal information such as name (59.4%), favourite music (59.1%), and their interests (57.3%). While only 10.7% indicated that they gave out their home address, 49.8% said that they gave out their email address, 37.7% their phone numbers, and 31.0% indicated their relationship status online and indicated updating their wall (48.4%). All of this information, coupled with favourite movies (49.8%), books (42.3%), academic information (38.8%), and occupation (23.8%) suggest that the sample participants do disclose sensitive information on Facebook, which leaves many of these participants vulnerable to such risks as identity theft and other criminal activities.

### *Descriptive statistics, reliability coefficients, and correlation coefficients*

The descriptive statistics, Cronbach's alphas and mean inter-item correlation values were computed for each of the constructs, followed by the construction of a correlation matrix of Pearson's product-moment correlation coefficients, as reported in Table 3.

The results in Table 3 show that Cronbach's alpha values above the recommended level of .70 (Hair, Black, Babin, & Anderson, 2010) were computed for three of the four constructs, thereby suggesting acceptable internal-consistency reliability. While a lower alpha of .69 was computed for the self-disclosure construct, this value is still acceptable ( $> .60$ ) (Malhotra, 2010). As an additional measure of internal-consistency reliability, the mean inter-item correlation coefficients were computed. The mean inter-item correlation coefficients for all four constructs were within the recommended range of between .15 and .50 for acceptable internal-consistency reliability (Clark & Watson, 1995).



**Table 3.** Descriptive statistics, reliability measures, and correlation coefficients.

Constructs	Means	Standard deviations	Cronbach's alphas	Mean inter-item correlations	Site trust	Member trust	Access concerns
Site trust	3.35	1.12	.80	.50			
Member trust	3.19	1.16	.69	.43	.428*		
Access concerns	4.18	1.16	.73	.40	-.274*	-.505*	
Self-disclosure	2.93	1.13	.72	.46	.381*	.410*	-.381*

\* $p \leq .01$  (2-tailed).

While a mean above 3.50 was recorded on access concerns, means below 3.50 were recorded on site trust, member trust, and level of self-disclosure, which, given the six-point Likert-type scale used, suggests that South African Generation Y students are concerned about who can access their information on Facebook and do not particularly trust Facebook as a site nor their fellow Facebook members to protect their privacy. Furthermore, they do not perceive themselves as indulging in excessive levels of self-disclosure on this site.

In terms of the relationships between the constructs, there were statistically significant ( $p \leq .01$ ) associations between each of the pairs of constructs. There was a statistically significant positive relationship between member trust and level of self-disclosure ( $r = .410$ ,  $p < .001$ ), as well as between site trust and member trust ( $r = .428$ ,  $p < .001$ ), and site trust and level of self-disclosure ( $r = .381$ ,  $p < .001$ ). There was a statistically significant negative relationship between access concerns and site trust ( $r = -.274$ ,  $p < .001$ ), access concerns and member trust ( $r = -.505$ ,  $p < .001$ ), and access concerns and level of self-disclosure ( $r = -.381$ ,  $p < .001$ ). The statistically significant relationships between each of the pairs of constructs in a direction that makes sense suggest the nomological validity of the measurement theory in this study. In addition, there was no obvious evidence of multicollinearity given that none of the correlation coefficients were .90 or higher (Hair et al., 2010). In order to check for more subtle forms of multicollinearity, collinearity diagnostics were carried out on the independent variables with the case number serving as the dummy dependent variable. There was no evidence of multicollinearity given that the tolerance values were all above the cut-off level of .10, ranging from .654 to .812 and the average variance inflation factor (VIF) of 1.37 was below the cut-off of 10 (Pallant, 2010). Once the nomological validity of the measurement theory, together with the unlikelihood of multicollinearity between the constructs were established, it was then possible to move on to structural equation modelling.

### Structural equation modelling

A four-factor measurement model was specified for confirmatory factor analysis that includes the four latent factors of site trust (four observed variables), self-disclosure (three observed variables), access concerns (four observed variables), and member trust (three observed variables).

For model identification purposes, the first loading on each of the latent factors was fixed at 1.0. As such, there were 105 distinct sample moments, and 34 parameters to be estimated, which resulted in 71 degrees of freedom (df) based on an over-identified model, and a chi-square value of 170.61 with a probability level equal to .000. The sample size of 281 was deemed adequate for conducting structural equation modelling, given that the measurement model comprised fewer than five constructs, each with three or more observed variables (Malhotra, 2010), a 20:1 ratio of cases to observed variables, a 8:1 ratio of cases to estimated parameters (Ullman, 2014), and 71 df (MacCallum, Browne, & Sugawara, 1996).

**Table 4.** Measurement model estimates.

Constructs	Standardised loading estimates	Error variance estimates	CR	AVE	$\sqrt{\text{AVE}}$
Site trust (F1)	.55 .78 .76 .74	.30 .60 .58 .55	.80	.50	.71
Self-disclosure (F2)	.66 .61 .68	.44 .38 .46	.75	.50	.71
Access concerns (F3)	.67 .61 .63 .63	.45 .38 .39 .40	.80	.50	.71
Member trust (F4)	.66 .61 .76	.44 .37 .55	.75	.51	.71
Correlations	F1 $\leftrightarrow$ F2: .55 F1 $\leftrightarrow$ F3: -.36	F1 $\leftrightarrow$ F4: .55 F3 $\leftrightarrow$ F2: -.54	F2 $\leftrightarrow$ F4: .59 F3 $\leftrightarrow$ F4: -.70		

The model was then assessed for any problematic estimates, such as negative error variances (Heywood cases) and standardised loading estimates above 1.0 or below  $-1.0$  (Hair et al., 2010). Construct reliability and validity were assessed by checking the standardised loading estimates, the composite reliability (CR), and the average variance extracted (AVE) scores, as presented in Table 4.

As is evident from Table 4, there were no problematic estimates in the measurement model and the results indicated statistically significant ( $p \leq .01$ ) relationships between each of the observed variables and their respective constructs. Furthermore, all CR values exceeded the recommended .70 level, thereby indicating the CR of the constructs. In addition to the CR values, all standardised loading estimates exceeded the .50 level and AVE values were commuted at .50 and higher, thereby suggesting convergent validity (Hair et al., 2010). There is also evidence of discriminant validity in that the square root of the AVE values is larger than any of the correlation coefficients (Malhotra, 2010). In terms of the fit indices, despite the significant chi-square statistic, the other indices indicated acceptable model fit with a GFI of .92, an IFI of .92, a CFI of .92, and an RMSEA of .07.

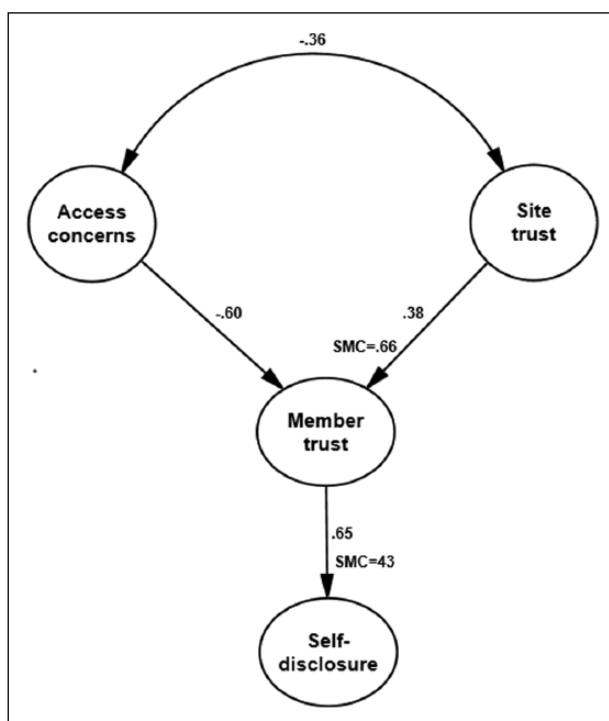
Based on this measurement model, a structural model was then tested. Table 5 presents the standardised regression coefficients estimated by AMOS for the structural model, and Figure 1 illustrates this structural model.

While the chi-square (182.21 (df=73),  $p < .001$ ) remained problematic, the results of the other indices indicated an acceptable fit of the data to the structural model, with a GFI of .92, an IFI of .91, a CFI of .91, and an RMSEA of .07. As is evident from Table 5, all paths tested were statistically significant ( $p \leq .01$ ). Member trust has a statistically significant positive influence on level of self-disclosure ( $\beta = .65$ ,  $p < .001$ ). Access concerns indirectly influences level of self-disclosure via its statistically significant negative influence on member trust ( $\beta = -.60$ ,  $p < .001$ ). Similarly, site trust indirectly influences level of self-disclosure via its statistically significant positive influence on member trust ( $\beta = .38$ ,  $p < .001$ ). The squared multiple correlation coefficients (SMCs) indicate that the model explains 66% of the variance in member trust and 43% of the variance in the level of self-disclosure.

**Table 5.** Standardised regression coefficients for the structural paths.

Path	$\beta$	Unstandardised $\beta$	SE	$p$	Result
Access concerns $\rightarrow$ Member trust	-.60	-.52	.082	.000	Significant
Site trust $\rightarrow$ Member trust	.38	.44	.094	.000	Significant
Member trust $\rightarrow$ Self-disclosure	.65	.61	.097	.000	Significant

$\beta$ : beta coefficient; SE: standard error;  $p$ : two-tailed statistical significance.



**Figure 1.** Structural model.  
SMC: squared multiple correlation.

## Discussion

This study sought to determine what South African Generation Y students use Facebook for, what personal information they disclose on Facebook, the relationship between their access concerns, site trust, member trust, self-disclosure, and the influence of access concerns and site trust and member trust on their propensity to engage in self-disclosure on Facebook.

The Acquisti and Gross (2006) study suggests that college students mostly use Facebook for finding friends and getting in touch and communicating with people but less so for self-promotion and dating. Corresponding results are reflected in this study, with finding, connecting, and communicating with friends being ranked high and, dating and self-promotion being ranked low. Similar to previous studies (Acquisti & Gross, 2006; Dwyer et al., 2007; Fogel & Nehmad, 2009), this study found that while Generation Y students are concerned about how much access people have to their personal information, they continue to disclose a great deal of information on their

Facebook page. A large percentage of the participants in this study indicated that they included their gender, real name, birthday, photos of themselves, email address, and phone number on their Facebook page, which is in line with a study undertaken by Dwyer et al. (2007). They provide important clues as to their true nature through placing photographs on Facebook and sharing personal information such as relationship status, interests, as well as favourite books, movies, and music. This information combined with dialogue with friends and family, and the expression of views and opinions may pose a risk to an individual if it falls into the wrong hands.

While Bateman et al. (2011) found a significant negative relationship between privacy concern and self-disclosure on SNSs, Acquisti and Gross (2006), De Souza and Dick (2009), and Dwyer et al. (2007) all report that privacy concerns only have a low correlation with SNS self-disclosure. Similar to Bateman et al. (2011), this study found a significant negative relationship between access concerns and level of self-disclosure, which suggests that individuals with higher privacy concerns are less likely to share personal information on SNSs. The findings of this study indicate a statistically significant positive relationship between site trust and level of self-disclosure, which is similar to the results of Dwyer et al. (2007). Self-disclosure studies in the offline environment suggest that the trustworthiness of the recipient of the disclosure is positively related to an individual's level of self-disclosure (Wheless & Grotz, 1977). This is supported by the findings of this study, where there was a significant positive association between member trust and level of self-disclosure, between site trust and member trust, and between access concerns and member trust.

Confirmatory factor analysis established that self-disclosure on Facebook is a four-factor structure, comprising access concerns, site trust, member trust, and self-disclosure. This measurement model exhibited composite reliability, construct validity, and acceptable model fit, thereby making it suitable for path analysis.

The results of the structural model indicate that access concerns and site trust indirectly influence Generation Y students' level of self-disclosure on Facebook via their influence on member trust. As such, Generation Y students with low access concerns who have a high level of trust in the Facebook site tend to trust the site's members more. This, in turn, results in them engaging in a greater degree of self-disclosure on the site.

## Implications and recommendations

The propensity to engage in self-disclosure on online SNSs such as Facebook has both positive and negative consequences. The benefits of self-disclosure on Facebook are that it aids in relationship development and management, thereby helping an individual accrue social capital. Failure to engage in self-disclosure on Facebook defeats the very purpose of being a member of the SNS. One of the most salient reasons for joining Facebook is to utilise its interactive vast network to create and maintain relationships. Relationships, by their very nature, require a certain level of self-disclosure to develop the trust required for them to evolve meaningfully.

In addition, self-disclosure on Facebook has been found to result in subjective well-being (Lee et al., 2008) in that it serves as a platform for social validation and self-expression (Bazarova & Choi, 2014). The social validation value stems from having members of the site 'liking' or making a positive comment about an individual's self-disclosures. This signals social acceptance from the friendship network and a general feeling of well-being from being liked by others. The self-expression value is rooted in the therapeutic value of being able to share a problem with others and/or vent a negative emotion. If the reaction to social validation disclosure and self-expression disclosure on Facebook is positive and supportive, this is likely to reinforce the interpersonal solidarity of the friendship network and leave the members feeling socially connected. This, in turn, may mitigate feelings of loneliness, isolation, stress, or low self-worth.

However, the question then becomes how much self-disclosure is enough and how much is too much. Privacy concerns are a subjective issue. However, SNSs do need to make privacy control settings available to their members so that they can control who can access their information and what information can be accessed. In this regard, Facebook is known to have powerful privacy settings (Acquisti & Gross, 2006), which is reflected in the perceptions of site trust expressed by the participants in this study. However, the site has faced accusations concerning privacy violations (Barnett, 2014). The study findings suggest that member trust has a significant direct influence on Generation Y students' level of self-disclosure on Facebook. Member trust is naturally an important component of any social network. The problem with the Facebook environment is that while an individual may trust their 'friends', as soon as one of those 'friends' clicks the like or share buttons on a status, that status is shared with others that may not necessarily have adequate privacy settings, thereby rendering private information public.

As such, Generation Y students need to remain mindful as to what they disclose online. Indulging in intimate, excessive, or frequent self-disclosure on online SNSs such as Facebook carries several risks, ranging from identity theft, privacy invasion and social disgrace to physical danger, psychological damage, and the risk of prejudicing current and/or future employment opportunities.

Anecdotal evidence from the media suggests a rise in the incidence of cyber bullying, cyber stalking, and cyber harassment, much of which occurs on SNSs like Facebook. In this age of mobile telephony, where many people carry their phone with them wherever they go and access their Facebook page on their smart phones, such cybercrimes may become unrelenting and leave a person feeling like a perpetual victim. Being a victim of such attacks may result in psychological and behavioural problems, including lowered self-esteem, stress, loneliness, and self-harm.

Facebook needs to stay up to date concerning the privacy setting tools it provides, as well as vigilant to potential security breaches. Facebook members should also be made aware that privacy settings are permeable. To this end, high schools, universities, and the media should endeavour to make people, particularly members of the Generation Y cohort, aware of the potential risks of self-disclosure on SNSs.

Organisations such as government agencies, schools, universities, and employers also face an ethical dilemma when it comes to Facebook. While the site may prove invaluable in screening potential candidates and monitoring existing members, doing so constitutes an invasion of the person's privacy. This suggests that such organisations draw up clear guidelines governing the ethical use of Facebook for screening and monitoring purposes.

## **Limitations**

In terms of the limitations of the study, even though several demographic questions were included in an effort to ascertain how representative the sample was of the target population, a non-probability sampling method was used, which means that caution should be exercised in interpreting the results. In addition, the research design followed was cross-sectional in nature, offering only a snapshot in time.

## **Conclusion**

The findings of this study indicate that Generation Y students are more likely to indulge in self-disclosure on Facebook if they trust the members of their site's friendship list, and that this member trust is negatively influenced by access concerns and positively influenced by site trust. Given that self-disclosure on Facebook offers both advantages and disadvantages, it is important that people be made aware of how best they can protect themselves from the threat of cybercrimes in order to

take advantage of interpersonal relationship benefits of having the wide friendship network afforded by SNSs.

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### References

- Acquisti, A., & Gross, R. (2006). Imagined communities: Awareness, information sharing, and privacy on the Facebook. *Privacy Enhancing Technologies*, 4258, 36–58.
- Barak, A., & Gluck-Ofri, O. (2007). Degree and reciprocity of self-disclosure in online forums. *Cyber Psychology and Behavior*, 10, 407–417.
- Barnett, E. (2014, November 23). Fear dives Facebook to invade workplace. *Business Times Sunday Times*, p. 11.
- Bateman, P. J., Pike, J. C., & Butler, B. S. (2011). To disclose or not: Publicness in social networking sites. *Information Technology and People*, 24, 78–100.
- Bazarova, N. N., & Choi, Y. H. (2014). Self-disclosure in social media: Extending the functional approach to disclosure motivations and characteristics on social network sites. *Journal of Communication*, 64, 635–657.
- Byrne, B.M. (2010). *Structural equation modelling with AMOS: Basic concepts, applications, and programming*. New York, NY: Routledge.
- Carminati, B., & Ferrari, E. (2008). Access control and privacy in web-based social networks. *International Journal of Web Information Systems*, 4, 395–415.
- Chakraborty, R., Vishik, C., & Rao, H. R. (2013). Privacy preserving actions of older adults on social media: Exploring the behavior of opting out of information sharing. *Decision Support Systems*, 55, 948–956.
- Clark, L. A., & Watson, D. (1995). Construct validity: Basic issues in objective scale development. *Psychological Assessment*, 7, 309–319.
- Cozby, P. C. (1973). Self-disclosure: A literature review. *Psychological Bulletin*, 79, 73–90.
- De Souza, Z., & Dick, G. N. (2009). Disclosure of information by children in social networking: Not just a case of you show me yours and I'll show you mine. *International Journal of Information Management*, 29, 255–261.
- Doyle, A. (2013). *Posting information online can get you fired*. Retrieved from <http://jobsearch.about.com/od/jobsearchprivacy/a/postingonline.htm>
- Duggan, M., & Brenner, J. (2013). *The demographics of social media users in 2012*. Retrieved from <http://pewinternet.org/Reports/2013/Social-media-users.aspx>
- Dwyer, C., Hiltz, S. R., & Passerini, K. (2007). Trust and privacy concern within social networking sites: A comparison of Facebook and MySpace. In *Reaching new heights: 13th Americas Conference on Information Systems organised by the Association for Information Systems, Keystone, Colorado* (pp. 1725–1735). Red Hook, NY: Association for Information Systems.
- 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.
- Facebook. (2014). *Newsroom*. Retrieved from <http://newsroom.fb.com/company-info/>
- Flynn, N. (2012). *The social media handbook policies and best practices*. San Francisco, CA: Pfeiffer.
- Fogel, J., & Nehmad, E. (2009). Internet social network communities: Risk taking, trust, and privacy concerns. *Computers in Human Behavior*, 25, 153–160.

- Gross, R., & Acquisti, A. (2005). Information revelation and privacy in online social networking. In S. De Capitani di Vimercati & R. Dingledine (Eds.), *Privacy issues in practice: 2005 ACM Workshop on Privacy in the Electronic Society, Alexandria, Virginia* (pp. 71–80). New York, NY: ACM Press.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. Upper Saddle River, NJ: Pearson.
- Ignatius, E., & Kokkonen, M. (2007). Factors contributing to verbal self-disclosure. *Nordic Psychology*, 59, 362–391.
- Jourard, S. M., & Lasakow, P. (1958). Some factors in self-disclosure. *Journal of Abnormal and Social Psychology*, 56, 91–98.
- Lee, D. H., Im, S., & Taylor, C. R. (2008). Voluntary self-disclosure on the Internet: A multimethod study of motivations and consequences of disclosing information on blogs. *Psychology and Marketing*, 25, 692–710.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1, 130–149.
- Malhotra, N. K. (2010). *Marketing research: An applied orientation*. Upper Saddle River, NJ: Pearson.
- Markert, J. (2004). Demographics of age: Generational and cohort confusion. *Journal of Current Issues and Research in Advertising*, 26, 11–25.
- Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior, and Social Networking*, 13, 357–364.
- Nair, N. (2013, May 28). Facebook IDs cloned, profiles are duplicated to fleece friends. *The Times*, p. 1.
- Nguyen, M., Bin, Y. S., & Cambell, A. (2012). Comparing online and offline self-disclosure: A systematic review. *Cyberpsychology, Behavior, and Social Networking*, 15, 103–111.
- Nosko, A. (2011). *To tell or not to tell: Predictors of disclosure and privacy settings usage in an online social networking site (Facebook)* (Doctoral dissertation). Retrieved from <http://scholars.wlu.ca/etd/1116>
- Nosko, A., Wood, E., & Molema, S. (2010). All about me: Disclosure in online social networking profiles: The case of Facebook. *Computers in Human Behavior*, 26, 406–418.
- Pallant, J. (2010). *SPSS survival manual*. New York, NY: McGraw-Hill.
- Pillay, T. (2013, July 21). Pupils undone by social networks. *Sunday Times*, p. 6.
- Reicher, S. D., Spears, R., & Postmes, T. (1995). A social identity model of deindividuation phenomena. *European Review of Social Psychology*, 6, 161–198.
- Schiffman, L. G., & Kanuk, L. L. (2007). *Consumer behavior*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Sheldon, P. (2009). I'll poke you. You'll poke me! Self-disclosure, social attraction, predictability and trust as important predictors of Facebook relationships. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 3, 67–75.
- Shu, W., & Chuang, Y. (2011). The perceived benefits of six-degree-separation social networks. *Internet Research*, 21, 26–45.
- Sleglova, V., & Cerna, A. (2011). Cyberbullying in adolescent victims: Perception and coping. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 5, Article 4.
- Special, W. P., & Li-Barber, K. T. (2012). Self-disclosure and student satisfaction with Facebook. *Computers in Human Behavior*, 28, 624–630.
- Statista. (2014). *Number of active Facebook users worldwide from 3rd quarter 2008 to 3rd quarter 2014 (in millions)*. Retrieved from <http://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>
- Statista. (2015). *Number of monthly active Facebook users worldwide as of 1st quarter 2015 (in millions)*. Retrieved from <http://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>
- Stutzman, F. (2006). An evaluation of identity-sharing behavior in social network communities. *Journal of International Digital Media and Arts Association*, 3, 10–18.
- Tidwell, L. C., & Walther, J. B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research*, 28, 317–348.

- Ullman, J. B. (2014). Structural equation modeling. In B.G. Tabachnick & L.S. Fidell (Eds.), *Using multivariate statistics* (pp. 731–836). Essex, UK: Pearson.
- Valkenburg, P. M. (2011). Online communication among adolescents: An integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health, 48*, 121–127.
- Van de Schoot, R., Lugtig, P., & Hox, J. (2012). A checklist for testing measurement invariance. *European Journal of Developmental Psychology, 9*, 486–492.
- Vitak, J. (2012). The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcast and Electronic Media, 56*, 451–470.
- Wheless, L. R. (1976). Self-disclosure and interpersonal solidarity: Measurement, validation, and relationships. *Human Communication Research, 3*, 47–67.
- Wheless, L. R., & Grotz, G. (1977). The measurement of trust and its relationship to self-disclosure. *Human Communication Research, 3*, 250–257.
- Wilson, C. (2013). *Facebook knocks Mxit from its perch*. Retrieved from <http://www.techcentral.co.za/facebook-knocks-mxit-from-its-perch/43551/>
- Zephoria. (2014). *The top valuable Facebook statistics* (updated October 2014). Retrieved from <http://zephoria.com/social-media/top-15-facebook-statistics/>