Techno Generation: Social Networking amongst Youth in South Africa

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Abstract. Internet and cell phones can be considered as new media compared to traditional media types and have become a fundamental part of the lives of many young people across the globe. The exploratory research study investigated the diffusion and adoption of new media innovations among adolescents. It was found that new media have diffused at a high rate among South African adolescents who are not only the innovators in this area, but also changing their life styles to adapt to the new media. Social networking grew to prominence in South Africa especially among the youth. The protection of children from potential harmful exposure and other risks remain a concern and adequate measures need to be initiated and implemented for children to enjoy social networks and other forms of new media. The exploratory research study provided worthwhile and interesting insights into the role of the new media, in the lives of adolescents in South Africa.

Keywords: New media, social networks, child protection.

1   Introduction

One of the most dramatic changes in the world during the past decade has been the arrival of the Internet and cellphones. These media types are regarded as *new media* especially when compared to traditional electronic/broadcast (television and radio) and print (newspapers and magazines) and out-of-home (outdoor and cinema) media. Both the Internet and cellphones have become part of society and are nowadays part of the lives of many adolescents and adults. In fact, Internet and cellphone access has not only changed the communication dynamics, behaviour and habits of adolescents, but has also had an immense impact on many dimensions of business, culture, politics, sport and society. These media types are also increasingly impacting on the way in which interpersonal relationships between people are formed.

The immense change in the media environment, specifically in South Africa over the past few decades, is evident from the following major evolutions in the communication industry of South Africa:

- The first radio broadcast in South Africa took place in 1923, with the South African Railways broadcasting from Johannesburg [1].

- Just after the Second World War, the South African Broadcasting Corporation (SABC) introduced commercial radio stations.
- In 1960, an FM radio network in most of the indigenous languages was launched.
- In 1976 television (analogue broadcasting) was introduced.
- In the early 1990s two new mass communication media, namely the Internet and cellphones, were introduced into South Africa, changing interpersonal communication for life.
- In the years to follow the digitalization of personal and mass communication has already changed, and will continue to change interaction between people irrevocably.

These communication changes outlined above clearly reflect the emergence of digital, computerized or networked information and communication technologies, especially during the latter part of the 20th century.

The collective term encompassing these technologies is *new media,* of which the Internet and cellphones (each with its own constantly new and increasingly popular features) are regarded as the 'new' major innovations which have diffused rapidly and have been adopted by the young and the old. The rate of adoption or diffusion has stimulated the need for research, especially among the adolescent population of South Africa.

The Internet, as communication medium, has shown tremendous growth [2]. Currently, the Internet is used by approximately 20 % of the total world population, with North America the continent with the largest penetration (71.1 %) and Europe the second largest (43.4 %). Africa has the lowest usage with only a 4.4 % penetration rate. Clearly, the gap between Africa and the rest of the world, or the low diffusion rate, with regard to Internet connectivity, is huge. However, Africa is the continent showing the greatest potential to further increase Internet connectivity and adoption of this *new media*. This is already clear from the fact that Africa has recorded the highest growth of 1 100 % in Internet access from 2000 to 2008 [3]. Leading the way in this regard is South Africa, which accounts for almost 90 % of all African Internet users [4]. According to the leading South African technology research organisation World Wide Worx [5], Internet users in South Africa at year-end 2008 were estimated at 4.6 million (an approximate 10 % diffusion rate). For year-end 2007, the number of Internet users in South Africa was 4.1 million, for year-end 2006 the number was 3.8 million, and for year-end 2005 Internet users amounted to 3.6 million.

Adolescents are progressively showing increased levels of engagement with this *new media*. Factors contributing to the perceived high rates of diffusion of the Internet among adolescents include the roll-out of Internet access services not only to households, businesses (with specific reference to Internet shopping, Internet Cafes and Wi-Fi hot spots) and communities (e.g. digital villages), but also to schools across South Africa. Undoubtedly, Internet access has changed the communication lifestyle of many adolescents, who nowadays are adept at applying the main features of the Internet.

Not only has the Web developed over time as an information source, but over time various social networks diffused on the Web. The most popular diffusions in this regard include Facebook and MySpace with an estimated 90 plus million active users and 240 million profiles recorded internationally [6] and [7] for each respective network.

The social networking innovation first caught on with South Africans in the form of MySpace.com, but local Internet users seem to be following the worldwide trend of belonging to more than one social network at a time. In South Africa, Facebook has emerged as the major competitor of MySpace. This massive social networking service grew to prominence due to its attractive features and highly appealing tools. In fact, the Web Information company, Alexa, has indicated that Facebook was the highest accessed Website in South Africa in 2007 [8] displacing Google, which for long has been the most accessed Website in South Africa since the new millennium.

To gain some idea of the magnitude of users or diffusion rate, international figures reveal increased interest among users of this communication medium and show that users of the social networking site Facebook have increased from 40 million users in 2005 [9] to over 200 million users in 2007 [10], and is still growing rapidly [11]. South Africans, in particular, have embraced the Internet social networking revolution, with over 50 000 new users signing on to the local Facebook network in 2007.

The Facebook 'South Africa' network ranges between 87 000 to 120 000 members [12] and [6]. Most recent figures show that Facebook boasts over 25 million members worldwide [12].

Facebook has also evoked high levels of interest and is a very popular communication medium among South African adolescents. However, the exact magnitude, popularity levels and diffusion rates of Facebook, MySpace and even new innovative cellphone social networks among local adolescents in particular, are rather uncertain or sparse at this stage. There is also very limited public demographic information on South Africa's youth using social networks.

These shortcomings motivated the research study to measure the lifestyle changes of adolescents using social network sites to communicate. How, when, how frequently and for what purposes these networks sites are utilised and how these innovations are adopted and impact on the behaviour of adolescents in particular, were cited, among others, as the main research focus of this study rather than only quantifying the number of adolescents who use Internet features such as email or any of the WWW (FaceBook and MySpace) or cellphone (MXit) social networks.

Internationally, the most recent opinion on adolescents and the new media is that they are the defining users of the Internet. This is particularly evident in the USA where adolescents not only chat and spend more time online than adults, but also use online technologies, such as instant messaging, more often than adults [13]. Worldwide, the Internet and cellphones are also currently used predominantly for interpersonal communication as opposed to their initial primary use for entertainment and information. Most research studies on new communication media have been conducted mainly in the developed part of the world. A good example of early research in this regard was by researchers at the London School of Economics and Political Science in the last years of the previous century [14]. This study was undertaken at the start of the diffusion cycle of cellphones, and the Internet was not as widely used as currently.

Some of the findings of this multi-country (Britain, Israel and 10 countries in Europe) study are also relevant to the current situation in South Africa, especially with regard to the use of and access to computers and the Internet. Findings from the latter study included the following:

- In every one of the 12 countries involved, results showed that children and young people preferred outdoor/social activities to the media. Children and young people preferred being with friends above all else.
- In some countries (Britain, for example) parents and teachers regarded screen media as a threat to the reading of printed material, whilst in some other countries (e.g. Denmark) television viewing was not seen as a threat to the reading of books.
- Major differences were found between countries with regard to the availability of the most recent technological developments. Whereas in Finland a limited number of affluent and rural children had Internet access a decade ago, only tiny minorities had Internet access in Britain and Italy. Social class differences were also prevalent regarding availability and access.
- Across Europe 10 years ago, there was evidence of fragmentation of the television audience and an increasing tendency for family members to watch television alone was evident.

Within the context of dramatic social, economic and developmental changes faced by South Africa, research on adolescents and the new media should take account of the developments emerging from the European examples highlighted above [15].

The need for research on the *new media* (Internet and cellphone and their corresponding features) targeted specifically at the adolescent population of South Africa is imperative. Consequently, the University of South Africa (BMR, Youth Research Unit) in partnership with the Film and Publication Board (FPB), decided to undertake a research study on the incidence and usage of *new media* among adolescents. More specifically, the research study investigates the rate of diffusion of new media in the adolescent market and the extent to which new media innovations have been adopted among adolescents. The study has also been developed to identify the factors that impact on and direct the new media communication behaviour of adolescents.

2 Research Methodology

To facilitate the process of designing a research model for the study, it was decided to first conduct an exploratory research study on new media to gauge the usage and frequency levels of new media among secondary school children in the City of Tshwane (Pretoria).

A non-probability judgmental sampling approach was used in selecting five schools in the City of Tshwane (Pretoria). After permission was granted by the Gauteng Department of Education, the headmasters of the five judgementally selected high schools were approached for participation in the research study. With the assistance of the educators, the questionnaires were distributed to adolescent learners enrolled for grades 8 and 10 to 12 at the respective schools. One class in each grade (grades 8, 10 and 12) was included. The questionnaires were completed during class time under supervision of an educator. Learners were requested to self-complete the questionnaire and return it to the educators, who subsequently returned it to the researchers.

More specifically, the questionnaire addressed the following contemporary research topics:

- access to and adoption, ownership and usage of the Internet and cellphones as major new communication media types
- adoption and usage of new media features such as social networking facilities (e.g. MySpace, FaceBook and MXit) and gaming
- access to and adoption and usage levels of other media such as iPods, MP3 players as well as traditional media, including broadcasting (television and radio) and print media (magazines and newspapers) as well as cinema
- adoption of and participation in communication networks
- advantages experienced due to the diffusion of new media
- factors impacting on adoption or rejection of new media communication practices
- the extent to which the use of new media is consistent with adolescents' expectations, values, norms, image or status profiles

During the initial planning stages the questionnaire was pre - tested as part of the interviewing procedure at the first selected school and rolled-out to the other four schools. The questionnaire consisted of 60 questions and took about 20 minutes to complete. A total of 490 learners completed and returned the questionnaires. Once the questionnaires were completed and retrieved from the five schools, the questionnaires were edited to ensure that they met the desired sampling requirements. Following the editing process, the data on the questionnaires was edge – coded with the help of a carefully designed coding manual. Finally, the data was captured in electronic format and stored for the purpose of analysis.

3   Research Findings

In this research article, some interesting results of the exploratory research study will be presented with specific focus on social networks, MXit and blogs via Internet and cell phones.

3.1   The Internet

In the light of the relatively low access to the Internet in South Africa (10.7 %) amongst adults 16 years and older [16], it is important to gain an idea of the nature and extent of Internet usage amongst adolescents.

  In contrast to the reported limited Internet access of adults, more than 85 % of the participating adolescents of the survey reported that they had access to the Internet during the month preceding the survey. Participants were presented with a list of activities on the Internet to indicate the extent to which they participate in these activities. These results are reflected in figure 1.

  It is clear from Figure 1 that the Internet is generally used as a tool to access information (68.7 %). The Internet is also used as a source of information for school assignments (39.8 %) and for accessing 'personal information for myself' (28.8 %). In addition, the Internet is also used by approximately half the participating adolescents to download content (50.2 %) and for playing games (37.3 %).
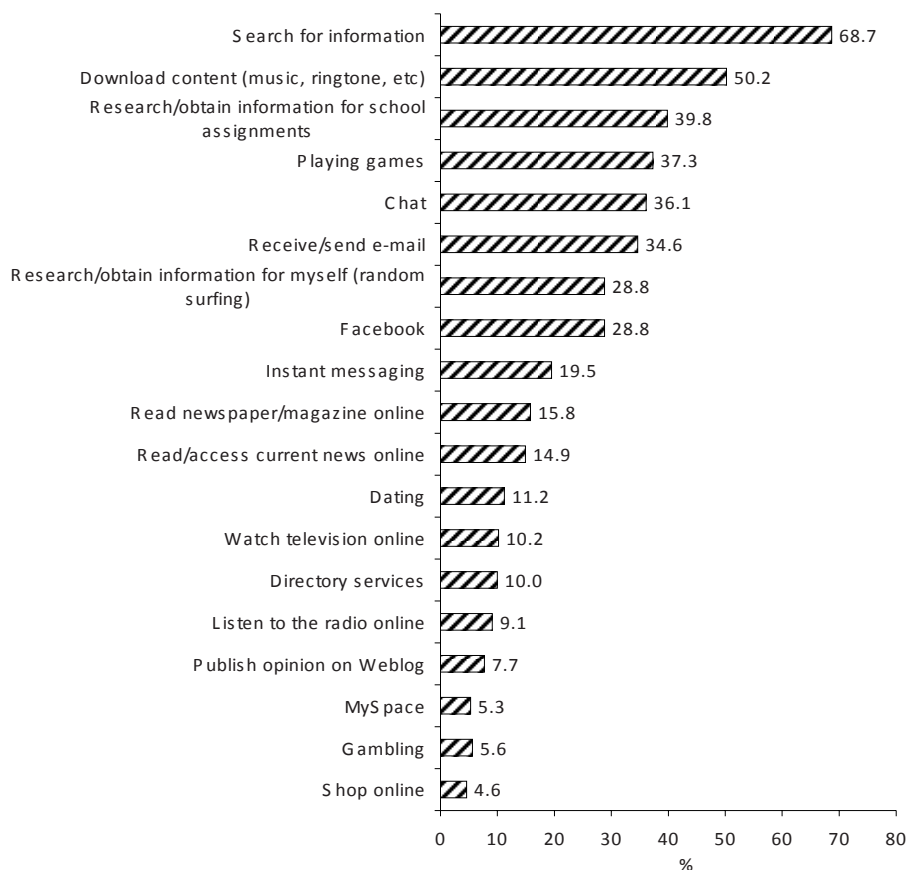
Fig. 1. Activities used on the Internet.

It is noteworthy from Figure 1 that receiving and sending e-mails (34.6 %), 'chatting' (31.1 %) and using Facebook (28.8 %) were mentioned as Internet activities of adolescents.

3.2 Social Networking Sites

The exploratory research study focused on adolescents' use of social networking sites such as Facebook, MySpace and YouTube, each with a series of activities. The research findings are presented in Table 1. It was found that the most preferred social network site for all activities measured was indeed Facebook. On average, approximately 25% of the participating adolescents used Facebook for a number of activities as reflected in Table 1. Facebook is mostly used to chat with friends to learn more about people and to exchange general messages. MySpace was the second most preferred site followed by YouTube.

Overall, uploading photos (55.8%), storing photos (53.1%) and chatting with group friends (51.5%) are more regular activities in which adolescents engage through social networks such as Facebook, MySpace and YouTube.

Table 1. Use of social networking sites

Activities	Facebook	MySpace	YouTube	Other	Total
Upload photos	29.0	12.0	7.7	7.1	55.8
Post opinion	21.8	11.4	4.8	4.6	42.5
Obtain latest social news (fashion, current, etc)	22.2	9.5	6.4	5.6	43.8
Post videos	16.0	10.0	13.5	5.8	45.2
Join groups & chat with group friends	34.0	8.3	2.5	6.6	51.5
Download (ringtones, wallpaper, software, etc)	10.8	11.6	12.2	12.0	46.7
Learn more about people met	30.7	9.1	2.7	4.6	47.1
Exchange general messages	30.1	8.7	2.9	5.2	46.9
Exchange private messages	28.4	9.1	1.9	6.0	45.4
Store photos	27.4	14.5	4.4	6.8	53.1

The continuous development of information and communication technologies and rapid diffusion within the adolescent market create a number of challenges with regard to the protection of children. Besides sharing personal photos via social networks; 36.3% of the participating adolescents confirmed that they have met a 'cyber friend' with whom they communicate regularly.

Nearly half (42.2%) confirmed that they have been approached by somebody for 'something upsetting'. These results confirm substantial exposure of adolescents to potential dangers through their engagement in social networking sites. Research conducted by the Film and Publication Board [17], identified that in most cases upsetting content mostly involves sexual content or nudity and causes great discomfort and distress amongst children.

It has been found that sexual perpetrators are likely to focus on social networking sites, which have become very popular amongst the youth. On social networking sites, children may be approached and groomed, and a slight slip of the mouse or keyboard may give a potential perpetrator all they need to know about a specific child. The explosion of Facebook in South Africa therefore has the potential for opening up a new access point to South African children for sexual perpetrators. A relatively small percentage of participating adolescents (15.4%) in the exploratory research study indicated that they share personal information on the Internet.

Mobile social networks have also attracted much attention in South Africa. The mobile social network MXit, which was developed in South Africa, is allegedly increasingly

becoming even more popular than other computer – based social networks such as Facebook and MySpace. Responses received from adolescents participating in the exploratory research study to MXit were extremely positive, with 90.2% affirming awareness and 81.4% affirming usage of MXit. The average time (minutes) spent on MXit per day is reported in Figure 2.

The majority of adolescents (27.1%) spend, on average, between 30 minutes to an hour on MXit per day. It is noteworthy that 22.3% of the participants indicated that they spend between one and two hours per day on MXit. An additional 16.9% of adolescents indicated that they spend more than 121 minutes per day on this new communication medium.
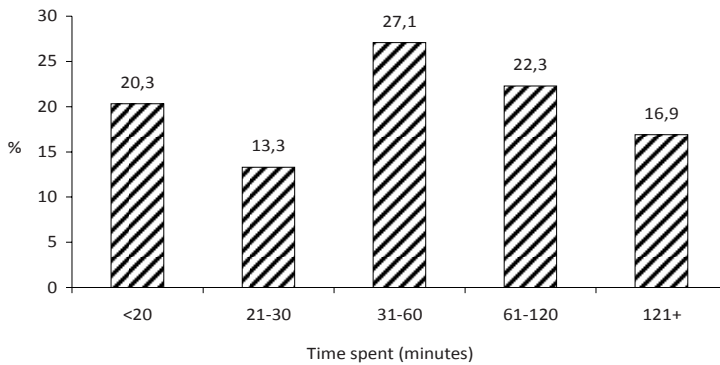

Fig. 2. Average daily time spent (in minutes) on MXit by time category

The exploratory research study explored with whom adolescents spend this communication time. For the study four pre-determined categories of people were identified. These included family, friends, boyfriend/girlfriend not met through cellphone/Internet, and boyfriend/girlfriend met through cellphone/Internet. Participants were able to mention an average of almost 50 friends as MXit contacts. On average, just under 10 contacts were listed for both boyfriend/girlfriend met or *not met* through cellphone contact and the Internet.

It is clear from Figure 3 that communicating with friends takes the bulk of time spent (almost an average of 68 minutes) on MXit per day. Compared to this, participants spend an average of 17 minutes per day communicating with family members (mom, dad and siblings) via MXit. It is noteworthy that nearly 49 minutes per day are spent on communicating with a boyfriend/girlfriend met via the cellphone or Internet; this emphasises the importance of networking among adolescents.

Based on the research results, it is clear that adolescents contact a large number of people via MXit, but also that interpersonal communication on a daily basis via this new medium has become a standard feature of their lives. This method of text communication is not only used for interpersonal communication, but also for entertainment, making appointments/dates and obtaining help with homework. To make appointments/dates is by far the most important additional use of this new medium. MXit is seen as an instant messaging service used widely by adolescents and it is regarded as a major player in the communication bouquet of the youth.
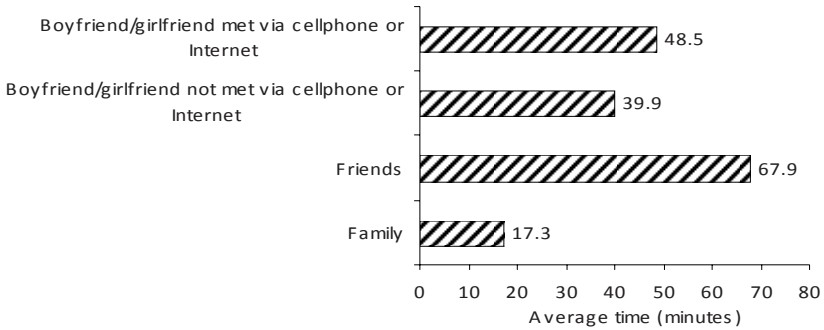
Fig. 3. Average time (in minutes) spent with different individuals

Similar to web-social networking sites, MXit clearly open ways for exploitation. The South African media often report on young people who have suffered abuse through participation on MXit.

3.3 Weblogs

The exploratory research study, in brief, explored the access of adolescents to blogs. Since all blogs are on the Internet by definition, they may be seen as interconnected and socially networked. Almost one in five adolescents (17.1%) who participated in the exploratory research study has their own weblog where they provide commentary or news on a particular subject. Many indicated that they are not familiar with setting up a Weblog or simply do not have the time to provide commentary or share news on a Weblog.

4   Concluding Insights

The exploratory research study investigated the rate of diffusion of *new media* among adolescents and the extent to which new media innovations have been adopted among South African adolescents. In contextualizing the research findings of the exploratory research study in relation to identified international research findings, the following is noteworthy:

- New media have certainly diffused at a high rate among South African adolescents in particular who are anticipated to continue to adopt new innovative media developments at a faster pace than adults. Increasing access to and enthusiastic usage of the new media by adolescents proves that not only are they the innovators in this area, but they are also changing their life styles to adapt to the new media and to use them to their own benefit.
- Socio-economic factors need to be considered when investigating new media trends among the youth.
- The exploratory research study revealed that new media also have psychological/emotional dimensions and are not merely communication media.

Against the backdrop of the relatively low penetration of the Internet in South African society, the finding in this exploratory research study that more than 85 % of the respondents had access to the Internet during the period under investigation is significant. Also significant in this regard is the fact that approximately half the participating adolescents accessed the Internet via their cellphones. Interpersonal communication via the Internet is, as with cellphones, a very important mode of communication to inform and educate the youth in general.

The Internet is used to make new friends, to join 'chat groups', to exchange private messages - all activities that are part of adolescent development. In addition to using the Internet to obtain information, interpersonal communication seems to be the main objective in using the system. This coincides with the trends identified by [14] and [18], which point to a shift from using the new media mainly as a source of information for study and research at school, to using it as an interpersonal communication tool.

As mentioned, MXit is a South African developed instant messaging system using cellphones and the Internet, largely used by adolescents. In the exploratory research study, most respondents had access to MXit. The fact that almost 40 % of adolescents spend more than an hour per day on this low cost text messaging system, emphasises the importance of the system in helping adolescents psychologically through an emotionally challenging phase in their development.

This exploratory research study that included five secondary schools is limited in nature but provided worthwhile and interesting insights into *new media*, in the lives of adolescents. The importance of the *new media* is beyond contention. These media will have an escalating impact on the lives of adolescents in South Africa, as well as on the information and communication industry. The most concerning aspect, however, is the adequate protection of children who are able to access the Internet and social networking sites. The more adolescents have access, the more young people will be at risk of receiving inappropriate material, as well as exposure to sexual exploitation. Increased awareness and adequate measures need to be initiated for children to enjoy social networks and to be protected from potentially harmful exposure and experiences.

5   Future Research

The research study will be broadened across South Africa with the specific aim of investigating new media usage and the digital divide between different socio-economic settings. An in-depth qualitative study will be conducted in June 2009 further exploring some of the issues raised during the exploratory phase.

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