

Association for Information Systems AIS Electronic Library (AISeL)

ACIS 2007 Proceedings

Australasian (ACIS)

2007

Social Consequences of Cellular (Cell) Phones

Lakshmi Vaidyanathan

UNITEC New Zealand, ARCHANA7@xtra.co.nz

Savae Latu

UNITEC New Zealand, slatu@gw.unitec.ac.nz

Follow this and additional works at: <http://aisel.aisnet.org/acis2007>

Recommended Citation

Vaidyanathan, Lakshmi and Latu, Savae, "Social Consequences of Cellular (Cell) Phones" (2007). *ACIS 2007 Proceedings*. 61.
<http://aisel.aisnet.org/acis2007/61>

This material is brought to you by the Australasian (ACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ACIS 2007 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Social Consequences of Cellular (Cell) Phones

Lakshmi Vaidyanathan (alias Shanti), Savae Latu
School of Computing and Information Technology
UNITEC New Zealand
Mt Albert, New Zealand
Email: ARCHANA7@xtra.co.nz, slatu@gw.unitec.ac.nz

Abstract

The impacts of cell phone usage on shaping the future of our children have been studied using a the mixed method research approach in which the numbers obtained through quantitative data collection method is verified and complemented by the narratives and stories recorded during the qualitative data collection session. This paper focuses on the social consequences of misusing cell phones especially the gradual but imperceptible deterioration of inter-family ties and the intensification of the bond between children and their friends. The paper argues that the breaking down of family relationship could result in teen-agers relying on the advice of their peers instead of seeking guidance from their parents. The paper reviews the existing literature in order to analyse the ways in which this piece of technology is used and the impact it has on teen-agers and their families. The study shows that children are not only using cell phones as intended, by the parents, but they also use it more to communicate with their friends to the detriment of family relationship. Further the study shows that youth have absolutely lost the skills of communication. They are more fluent in 'texting' back rather than speaking back. Absolutely no language skills, no eye to eye contact, no good posture and more than anything keep texting even while speaking which parents consider as a huge disrespect and disregard.

Keywords

Cell phone, teen-agers, cell phones usage

Introduction

Mobile telephony is a very rapidly evolving technology which has made a strong impact on teen-agers. The main device for this technology is usually referred to as a cell phone in the United States of America (USA). However, this powerful miniature is normally called a mobile phone in other places especially the eastern world. Powerful because we still call it phone as if we only use it to communicate with others over distance at anytime from almost anywhere but the device can be used to do far more than just making a phone call. Its ability increases as compared to its size. It can be used as a computer, a calculator, a television, a watch, a camera, a video and much more in the future. This clearly shows that this small device has become a globally accepted symbol of an advanced information society or culture, representing the characteristic features of mobility, connectivity through several functions. Kavoori & Arceneaux (2006) claim that cell phones are no longer tools to communicate with but their features and functionalities have shaped one's profile, personal style and even beliefs. It is amazing to see the ways and pace at which teen-agers and their younger brothers and sisters learn how to use, actually use and adore cell phones. A study was made, involving parents and their children from diverse ethnic groups in Auckland, New Zealand, in an attempt to scrutinize the use and impact of cell phone culture on the social life of teen-agers.

This paper reviews the existing literature and examines the nature and extent of cell phone usage by teen-agers and the perception of the parents. Most people, especially the older generation, understand that a cell phone is for communication just like how we use a telephone that helps to narrow down the physical distance and bridges communication gap. The authors think that it is just an extension of a traditional phone - the main difference between them being one is static and the other is mobile. This is supported by Ling (2004a) in his book "*The mobile connection-The cell phone's impact on society*". Ling states that mobile phone is more personal, gives a direct access to the individual regardless of the location. In this paper the terms cell phone and mobile phone will be used interchangeably.

Mobile Phones and the Teen-agers

The two Cs for Communication and Co-ordination are the main activities that trigger, connect and bond a society. A nuclear family can be considered as a model of society hence the bonding begins at home. Parents and children are tied together only when there is a presence of the two Cs. While face to face interaction is still the main ingredient for better understanding and a healthier relationship there are times and situations where

communication at a distance, whether wired or wireless, is the only and the most appropriate way to alert or inform others. Furthermore, face to face interaction plays a very vital role in the molding of children who are none others than the future citizens. As such, parents need to decide what legacy to they need to leave for their grand children who will eventually become parents in the future. With the cell phones boom this paper fears that this technology acculturates and shape the way we communicate in the future. As such it is now timely for parents to assess the pros and cons of exposing their children to new and emerging technologies.

Ling states that "*Adolescence is period during which individuals develop their identity and self-esteem*" (Ling, 2004). This is one of the triggers for teen-agers to have a mobile phone. There is also a strong bond and integration via the use of this device (Ling, 2004). The possibility to maintain intense and informal social networks through mobile phones is the main force for teen-agers to get hooked up with this devise. This is the characteristic feature of adolescent phase of life say Smoreda and Thomas quoted by Ling. The mobile phone serves as an emblem for teens. "*It not only provides social interaction but also provides the individual with a sense of self*" (Ling, 2004).

Ling argues that the intensity and weight of interaction welds the social group together. It is used as planning devise as we have fair update of where our friends or family are and what they are up to. Locations as well as well-being of near and dear are roofed that leads to empathy and bonding with the group. Some of the reasons why teenagers love to use a mobile phone that were picked up from various books, websites and discussions are to:

- Be in contact with parents/ guardian
- Keep in constant touch with their peers (mainly texting).
- Feel good of possessing one.
- To keep pace with the technology
- Play games (mainly to over come boredom)
- Use as a safety tool
- Use as an alarm clock
- Calculators
- Have fun with ring tones and screen savers
- Cast vote (like NZ idol TV shows)
- Take still and video pictures
- Listen to music
- Browse on the net

The Study

The study presented in this paper makes use of the mixed-method research approach as detailed in Johnson and Onwuegbuzie (2004). The mixed-method approach involves both a quantitative phase as well as a qualitative phase in the overall study. The rationale for employing a mixed-method approach is such that statistical facts and numbers collected through surveys are complemented and verified by the information collected during the qualitative phase hence the strengths of one research method can be used to support the other. The data gathered during the quantitative phase were made through a survey by questionnaire to gauge the social impacts, positive or otherwise, of phones on teen-agers. Twenty-five questionnaires were sent out to potential participants and twenty-two questionnaires were received from the participants including ten parents and twelve teen-ager students, representing a response rate of 88%. The questions asked were mainly open-ended with few close-ended type questions.

The primary reason for allowing children or buying a cell phone for their children differed among the participants. Seventy percent of the parent participants claim that they bought their children cell phones for the simple reason of tracking the whereabouts of their children and communication. In contrast, thirty percent said that their children insisted that they should have one for various reasons such as it is nice to have one, their friends have cell phones, so that they can keep in touch with their friends and so on. Economically, it appears that the parents are doing the purchase and the children are using the phones. Moreover, fifty-eight percent of the teen-agers respondents state that their parents are paying the monthly phone bills ranging from \$10.00/month at the lower end to \$40.00/month at the other extreme.

Technically, the study found that text messaging is the most popular feature of a cell phone among the teen-agers. The other features such as games, camera, video and the Internet were used occasionally. However, some of the respondents have stated that using cell phones to access the Internet is not needed because they could just use a computer to that effect. Similarly, the camera and the video features of a cell phone are good to have but not necessities.

Socially, while acknowledging that cell phones are very suitable tools to check where their children are, eighty percent of the parent respondents complain that using cell phones reduces communication within nuclear family groups. One respondent fears that teen-agers are now using this appropriate piece of technology in an inappropriate fashion. The respondent says that the only reason for buying and continuously paying for the monthly phone bill (credits) for the children's cell phone is simply to get in touch with each other at any time. However, it appears that cell phones strengthened the bond between their children and their friends while, at the same time, weakening inter-family ties.

Interviews with parents in May 2007, to understand the impact of mobile phones on her children, opened up to some facts that are alarming. One interviewee expressed her concern that youth have absolutely lost the skills of communication. They are good at texting back rather than speaking back. Absolutely no language skills, no eye to eye contact, no good posture and more than anything keep text messaging even while speaking which she considers as a huge disrespect and disregard. One interviewee adds that it is a painful experience to see today's youth in turmoil.

Moreover, mobile phones are designed for using it as voice communication device. It is not appropriate to type text messages because of the location of the characters like the number 9 used to key in w, x, y, z and hash. Studies say that the thumb movements cause epilepsy. Hence there is a strong urge to redesign the keypad of the mobile phone so that it can be adapted to the usage of several functions without any setbacks.

It hurts to see the children and young adults getting caught in the whirl pool of society, technology and adolescence. It is usually young people who are attacked by several social impediments. After analyzing we feel that it boils down to the influence of the peer group, family upbringing and ultimately the habits, attitudes, and will power. To help them cross over hurdles posed by adolescence and technology, parents, teachers, families, whanau and communities should shoulder a sense of responsibility, love and care to educate the vulnerable. The important factor that rolls everything and moulds into a healthy person is the conscious that makes the person worthy in thought, word and deed. Solutions for problems are tailor made. They change from time to time, individual to individual, situation to situation and also from culture to culture.

It is time for us to respond and ponder on the findings of these issues critically. With the increase in the world population, there will be a substantial increase in the production of mobile phones. Especially when mobile phones like 3G and 4G spreading so fast and are available at an affordable price, people are sure to make use of the opportunity to grab one irrespective of their needs or necessities. It might be really useful, or just be a status symbol, or a social fad or it might even be a communal pressure to acquire one. The answer is not very clear at this stage. But one thing is for certain that there will be an increase in the number of telephone masts to meet the demand of the raise in the number of mobile phones. With this swell, not very far, we are going to live in a polluted world filled with harmful radiations.

Views on the Beneficial Uses of Mobile Phones

In the recent past mobile phones are seen as small tools that can do big things. It improves productivity hence increases the profit margin for public and commercial enterprises. Accordingly, cell phone technology may be characterised as an appropriate technology when we look at it as an enabler of communication while on the run. However, we should also look at it from a pessimist stance since users can use this appropriate technology in an inappropriate fashion.

Voice Phones

Prensky (2005) states that "*basic voice only phone works as a best tool, to share poetry, public speaking, story telling*". In the United Kingdom the Cambridge Training and Development Ltd (CTAD) has created voice-only mobile phone learning for those who have been excluded from the joys and rewards of learning, for whatever reason. Tribal CTAD has been working to extend education's reach for over 25 years with a strong feeling that 'Education has the power to change lives' (CTAD, 2007).

Games such as cross words and word puzzles are another way to encourage and persuade learning languages. Cell phones are basically radios. It is linked through voice and hence widely used in talks over radios like BBC and other TV stations. The concept of voice link has made mobile phones to enable lectures with multi-way discussions and in particular for the blind and visually-impaired (Prensky, 2005).

Short Message Service (SMS)

Short Message Service is a feature that spread like a wildfire since 1991. It was since then SMS has been introduced as a standard part of the GSM mobile system (Giussani, 2001). In New Zealand the service was introduced when the first text-capable mobile phone, the Nokia 2110, became available in December, 1994

(Keown, 2006). Technically SMS works like an e-mail. The message sent by a mobile phone is first received by a 'Message Centre', which is a computer and later sent to the recipient's mobile number (Giussani, 2001). The Switzerland Federal Railways have developed an electronic ticket based on this technology (Giussani, 2001). In NZ SMS is much cheaper when compared to making a phone call. Messages can be written faster with the additional feature of predictive texting which again opens up to enormous learning opportunities.

The good point of SMS is that the sender doesn't need to draw immediate attention of the receiver. The receiver can access it at his/her convenience. Also the sender has the opportunity to compose or edit before sending. It gives time to think for the sender as well as the receiver unlike live conversations where the thoughts are spontaneous (Ling, 2004b). SMS is being used for voting on TV shows like the 'American Idol', 'New Zealand Idol' and so on. It is also used to take part in quizzes related to various subjects and current events. Ling (2004b) further states that it is a regular practice in Germany, Netherlands, UK, Japan and Norway to prefer SMS to call. From the user's perspective SMS is the most preferred option as it is relatively less expensive, convenient and can be sent quietly (lessening noise pollution) as against speaking over a mobile phone. It is sometimes difficult to monitor and price the length of chat while speaking over mobile phone and thus SMS plays a cost-effective role.

Ling compares "text messages" to short, "telegraphic texts" sent in bits and pieces. He relates the mobile phone to an umbilical cord between parent and child. This discrete link gives freedom for the child as well as an ability for the parent to keep an eye on the child (Ling, 2004b). Another very important aspect of SMS is its ability to be accessed by the hearing-impaired. It enables the deaf to rely on the special telephones and translation services for coordinating their activities.

Computers and Internet

Cell phones have made possible for 'Any Time Net' in addition to their main feature of 'Any Time Talk'. Mobile phones have laid a platform for new forms of media culture from SMS to computers and televisions. The cyber space is the everyday source of information. While Internet opens the doors to access information through computers that are restricted to place (home/office), mobile Internet made it portable by releasing the clutches of location restriction. The key enabler is the Wide Access Protocol (WAP) as demonstrates in Goggin (2006). Mobile phones have become the learning tools and this learning process is referred to as M-learning (CTAD, 2007) which is understood as M-learning is nothing but E-learning as it takes place over the Internet but the device used is a mobile phone.

According to Prensky (2005) some of the schools in China are using mobile phones to learn English, in Japan to study mathematics and short English lessons, in the Philippines for health and in Germany to learn spellings. The M-learning has opened up the "world mind" of both educators and students that has taken it in a million constructive and unforeseen directions. This breakthrough is mainly due to the merging of Internet and the cell phone technologies as Goggin (2006) expresses it as "The attractive direction for commercial development was clearly the cross over of the cell phone and the Internet".

Online Gaming

Prensky (2005) argues that entertainment is a foremost pass time of all especially young generation and computer and videogames that are converging into mobile phones are potentially the most engaging pass time and appears to be the combination of the following twelve elements:

1. *Games are a form of fun. That gives us enjoyment and pleasure.*
2. *Games are form of play. That gives us intense and passionate involvement.*
3. *Games have rules. That gives us structure.*
4. *Games have goals. That gives us motivation.*
5. *Games are interactive. That gives us doing.*
6. *Games are adaptive. That gives us flow.*
7. *Games have outcomes and feedback. That gives us learning.*
8. *Games have win states. That gives us ego gratification.*
9. *Games have conflict/competition/challenge/opposition. That gives us adrenaline.*
10. *Games have problem solving. That sparks our creativity.*
11. *Games have interaction. That gives us social groups.*
12. *Games have representation and story. That gives us emotion".*

Negative Impacts of Cell Phones on Teen-agers

An Auckland university digital commerce senior lecturer was reported in NZHerald saying that, "The English language has been chopped up, shortened and squeezed to fit into the mobile phone, and grammar, spelling and

punctuation have been made largely redundant in the texting world. But does that matter?" He adds, "I think that is why some people break up using text messaging. It is a hidden way to deal with an issue that should be dealt with face to face. Text messaging is also a great way to flirt without exposing oneself"(Keown, 2006).

Even more interesting is the report that in NZ the School Exam Board has approved usage of "text language" by students in their written exams. *"NZQA deputy chief executive of qualifications Bali Haque said credit would be given in this year's NCEA exams if the answer "clearly shows the required understanding", even if text abbreviations were used"* (Smith & NZPA, 2006)

Camera Phones and Privacy

Camera phones and video phones have broken the boundary of privacy of a number of individuals and continue to have the potential to do so, especially, violating the privacy of celebrities. Hence Telecom NZ's wish for a new law making it a criminal offence to film intimate situations involving nudity, partial nakedness, sexual or other intimacies where people would have a reasonable expectation of privacy and confidentiality. There will be serious penalties imposed that includes imprisonment (TelecomNZ, 2007).

Gambling

As we all know, teens under the age of 18 are not allowed in the casinos. This restriction leads to the curiosity to know what it is. Gambling between people from this end of the world to the other end is highly made possible in the cyber space. It can happen either through computers or mobile devices wherever there is an Internet facility. According to Netsafe

- *"Children and teenagers accessing the gambling sites use their own or their parents' money.*
- *Ease of access to Internet gambling sites acts as a catalyst for the existing gambling problem.*
- *It certainly leads to 'Addiction'.*
- *A significant international concern is the potential for Internet gambling sites to be used for money laundering by organized crime.*
- *Unscrupulous gambling sites can also install 'malware', or 'spyware', onto user's machine while gambling. It can happen to any device as long as there is an access to Internet."* (NetSafe, 2007a)

Grooming and Pornography for Sexual Exploitation of Young People

A person trying to 'set up' and 'get ready' another person to be the victim of sexual abuse is grooming. The possibility of someone to get caught into this illegal practice is through materials that are sent over mobile phones by the groomers. It includes anything from pornographic images, videos, drawings and animations, text messages, emails, stories, sound bites and music. Online grooming is, by and large, a confidential interaction between the groomer and their victims. SMS and images make this affair secretive, guarded and unseen by other people. The location of the groomer or the victim doesn't matter. They actually will be in two different countries leaving no trace of what actually took place. Due to the lack of face to face interaction between the perpetrator and the prey it is hard for the victim to gauge the motive and intentions of the groomer (NetSafe, 2007a).

The Internet enables easy viewing of an incredible amount of pornography, and a more extreme range of this material than ever before. Hence mobile phones with Internet capability can offer the same access. There has never (before the invention of Internet) been such an easy access to pornography. According to NetSafe, *"The advent of 3G networks, with clearer images and quicker transmission, means a much greater volume of adult content will soon follow."*

The unrestricted nature of the Internet an adolescent youngster accesses easily without the knowledge of others which can't happen at the shop. The type and amount of material available over the net is far more than that of the corner shop. If we may add to this, it is cheaper than buying such material in shops where young people are not allowed to enter and for them Net pornography can be hidden from their parents or other care-givers. It is shocking to know that in New Zealand, over 20% of those that are caught trading these images are school-age males as young as fourteen. The statistics are given by the Department of Internal Affairs in NetSafe.

Cyber bullying

The other dreadful/frightful issue that is bothering the children, teens, families and society is bullying. Constant texting can be used to annoy and bully someone. There was a news of a young girl committing suicide on account of this bullying over the mobile.

According to NetSafe, *"22.5% of the respondents of the 'Girls on the Net' survey had felt unsafe or threatened on the Net and for many that came from harassment."* (NetSafe, 2007a) According to Telecom NZ, *"Any type of*

message that makes you feel uncomfortable or threatened - a TXT, video message, photo message or phone call or any message which is sent repeatedly to harass you - is mobile bullying".(TelecomNZ, 2007)

Is it the weak minds of the youngsters or the technology that is giving an access to be the root cause for this bullying to spread like a wildfire? The authors feel that bullying would have still been around but not this prevalent. *"Bullying in schools is a serious problem and this research demonstrates that technology is supplying new ways of tormenting victims. Bullying has been around for time immemorial. Before it was possible to go home and close the bedroom door and escape, but in an online environment it is 24/7."* (Brown, 2007)

Recent news says that Auckland prison officers feel that prisoners normally break rules, strictly construed, but overlooked at times, as when a bottle of shampoo or a chocolate bar is smuggled to the prisoners, but when they started bringing in cell phones and money it is considered more than trivial breaking rules. It is a sign of corruption that has been significantly increased over the years. The possibility of taking a cell phone inside the prison has increased with the decrease in the size of the phone. The metal content is far much less and the shape is quite handy to hide it conveniently. With the ease of use and ease of access cell phones are brought into the prisons by visiting mothers who hide the SIM cards in the nappies of babies. Some of them are thrown over the prison walls into the prison (Fisher, 2007).

The authors believe that having access to cell phones enables

- Plan criminal activities and execute with those who are not in prison.
- Smuggling drugs.
- Threaten the officer/ guards outside their work hours
- Plan to attack their enemies especially the officers in charge of the prisoners.
- Lot more unsocial activities.

Health Issues

Although there is no significant proof that the use of mobile phones is harmful to health, Jeffreys (1998) states that researchers claim that there is every possibility of our health being at risk, for individuals who use phones for several hours every day. Mobile phones tend to heat up and may affect the nearby brain tissue due to electro-magnetic field generated by the phone and *"the more the phone is used in the car the greater the risk of an accident"*. The important factor that contributes for the increase in number of accidents due to the use of mobile phones while driving is it is considered as a distraction even if it is a hands free set. In addition, Jeffreys believes that cell phones will increase the number of overweight people, because they are walk saving devices. Like remote controls they can rob exercise time (Jeffreys, 1998). There is no scientific evidence that the radiation from the base stations trigger cancer in people who are at a close proximity to the base stations. But the reports in The Sunday times dated 22nd April 2007 are alarming.

"Margaret Hines-Randle is fighting cancer, but she is not alone in her struggle. We are all in a line, it is quite extraordinary," said the 64-year-old, who was first diagnosed with breast cancer eight years ago. "It is a very dramatic cluster of cancer. The people in the house behind us and the one at the side have it. Both the people in the first and second bungalows in the road had cancer and died. Now the person who moved in to one of them has breast cancer too (Foggo & Chittenden, 2007). Studies found that pupils in a primary school experience nose bleeds very often and 30 strong staff have developed tumors of which two have died. Many believe and attribute these trivial health issues to mobile phone masts that are very close in proximity for nearly 15 years (Foggo & Chittenden, 2007)

"The Ecolog study, drawn up in 2000 and updated three years later, has only been published in Germany and was unknown to British campaigners until it was recently leaked to the Human Ecological Social Economic project (HESE), which examines the effect of electro-magnetic fields on health. Ecolog's report, which analysed dozens of peer-reviewed studies, stated: "Given the results of the present epidemiological studies, it can be concluded that electro-magnetic fields with frequencies in the mobile telecommunications range do play a role in the development of cancer. This is particularly notable for tumours of the central nervous system."(Foggo, 2007)

Environmental Issues

According to The Sunday Times small birds such as sparrows may be disappearing very soon in the UK on account of the radiation from mobile masts. The population of sparrows has gone down to more than half as that of in 1970s (Foggo & Elliott, 2007). The electro-magnetic energy may also be disrupting the natural navigational systems of the birds with the increase in number of the masts. Ingrid Dickenson, a researcher into electro-magnetic pollution, said the *"Birds' sense of navigation is affected by this kind of radiation as they carry magnetised crystals in their brains,"* (Foggo & Elliott, 2007). This will have an impact on the birds' behaviors due to electrical charges on their feathers created by pulses. The report published in Electro-magnetic Biology

Medicine supports the negative affects with respect to the behaviors as well as number of sparrows. According to the research carried out by Joris Everaert and Dirk Bauwens at the Research Institute for Nature and Forest in Belgium, the stronger the signal from base stations, the fewer were the sparrows found in that area. The impact is also on bee colonies in America where it is suspected that the collapse is due to radiation from mobile masts. In Britain alone there are 47,000 phone masts (Foggo & Elliott, 2007).

The other environmental issue is the soil pollution. There are an estimated 10 million mobile phones just lying around without being used in the homes and offices in Australia. On top of this, nearly 4 million new mobile phones are procured by Australians in a year. *“That a hell a lot of ring tones. Even worse, if these phones are dumped in land fill, poisonous substances contained in the phones can seep into the ground water, contaminate the soil and enter the food chain”* (Trust, 2006). The trust recommends to recycle the mobile phones which is possible at most of the retailers. *“The least irritating thing about your mobile should be what use it can put to after death”*.

Safety and Security Issues

The death of two teens Jane Ada Young and Hannah Rossiter Perkins, both 16, at a party in Christchurch on the night of 3rd May 2007 made people physically still and emotionally moved. The pathetic incident raised several questions to parents for which they do not have concrete answers

- What is the role of text messages in the current society?
- Is it the technology or the society to be blamed that is driving the teens crazy?
- Is technology playing a vital role in shaping the younger generation? If so how?

OneNews & NewstalkZB (2007) reported that *“Jane Young and Hannah Rossiter were killed when a car ploughed into a crowd of youths that gathered outside a Christchurch party. It is believed up to 500 people had gathered at the Edgeware Road party, with word being spread by text message and a sign on the fence outside the house in the week leading up to it”*. In similar contexts, Mr. Archer said, *“rumours of memorial gatherings and parties this weekend were circulating throughout Christchurch, especially through text messaging.”* (NZPA, 2007).

Conclusion

“Be the change you want to see in the world” - Mahatma Gandhi

The growth of technology is to benefit the society and meet the needs and demands of the community. The uses and benefits of Cell phones are providing opportunities to sustain and meet the demands of children and young adults who are caught in the whirlpool of society, technology and adolescence. After analyzing the literature and research work the authors say that it boils down to the influence of the peer group, family upbringing and ultimately the habits, attitudes, and will power rather than the technology alone. The important factor that rolls everything into a healthy person is the conscious that makes the person worthy in thought, word and deed. I strongly feel that simple disciplines would mould a person healthy mentally and physically. It is up to an individual to realize these uncomplicated facts and make use of the technology that radiates positive energy in multiple forms such as ease of use/access, tremendous knowledge and a strong social bonding through this miniature that carries giant features. We all know that mobile phones are now telephones, computers, cameras, watches and televisions all rolled into one and are not mere communicating devices that they once were. Technology has now made this integration possible. These phones are omnipresent and are making society converge as well as diverge. It has become the main tool to coordinate activities in everybody's life irrespective of age. Mobile phones have erased the need and role of a middle man in every day's life.

The literature review found that text and email bullying, found mobile phones to be a potent weapon. Bullying prevails only in the environment of terror, horror, fear and threats. Mobile phones sustain such environments and act as a catalyst to aggravate those situations. Our species will no longer be part human and part machine. They are more machine and less human. Is it what we expected from technology?

Cell phones have/ had given an all-round achievement to today's youth whether it is education - through global learning, or networking - through wider connection or security through - personalized access. The scale balances both the powers of vices and virtues. The tug-of-war between these two forces slants to the side the youth inclines to be in. Technology made this possible acting as a door opener to both the sides and thus leads to a discussion that the advantageous and disadvantages of cell phones are tailor made. Ling (2004) refers Adults to Digital Migrants and Youth to Digital Natives and compares the level of acceptance of mobile phones from both angles. The authors here would like to state that if the technology is not embraced properly the Digital Natives will turn either 'Digital Addictives' or 'Digital Refugees' which results in an imbalance in the society.

Every one of us has a right to live in a safe and unpolluted world and all of us would love to live in a healthy family environment. Hearing the affects of text messaging on language, communication skills and other social addictions and also hearing the affects of radio waves, microwaves causing cancers, masts bringing ecological imbalance, birds getting extinct and adverse affects on health of people due to base stations, is leaving the authors to **THINK**.

References

- Brown, J 2007, 'Cyber-bullying goes high-tech'. Viewed May 15 2007 <http://www.nzherald.co.nz/section/2/story.cfm?c_id=2&objectid=10430504>
- CTAD 2007, 'Everyone's included'. Viewed 14 April, 2007, <<http://www.ctad.co.uk/products>>
- Fisher, D 2007, 'Corrections in slammer'. Viewed 11 May <http://www.nzherald.co.nz/topic/story.cfm?c_id=240&objectid=10438079>
- Foggo, D, & Chittenden, M 200 'Cancer victims ask: "Is it the phone mast's fault"'. Viewed May 5, 2007 <<http://www.timesonline.co.uk/tol/news/uk/article1687357.ece>>
- Giussani, B 2001 *Making sense of the wireless Internet*, Random House, London.
- Goggin, G 2006 *Cell phone Culture. Mobile technology in everyday life*, Routledge, New York.
- Jeffreys, D T 1998, *Your health at risk. What doctors and the governmnets aren't telling you*, Howling At The Moon, Auckland.
- Johnson, RB & Onwuegbuzie, AJ 2004, 'Mixed methods research: A research paradigm whose time has come', *Educational Researcher*, 33 (7),14-26.
- Kavoori, A & Arceneau Lin, R 2004a, ACM, 5(28). Viewed 19 April, 2007 <http://www.acm.org/ubiquity/book_reviews/pf/v5i28_stuckey-ling.pdf>
- Keown, J 2006 *Txting not gr8 4 teens use of Ingwij*, Viewed 10 April, 2007 <<http://www.nzherald.co.nz/search/story.cfm?storyid=00071F55-6E61-14A3-A56483027AF10017>>
- Ling, R 2004a, *Social consequences of mobile telephony*, Viewed 17 April 2007, <http://www.richardling.com/papers/2004_social_consiquences_of_mobile_telephony.pdf>
- Ling, R 2004b, *The mobile connection. The cell phone's impact on society*, Morgan Kaufmann, San Francisco
- Netsafe, 2005. *The text generation. Mobile Phones and New Zealand youth - A report of results from the Internet Safety Group's survey of teenage mobile phone use*. Viewed 16 April, 2007 <http://www.netsafe.theoutfitgroup.co.nz/Doc_Library/publications/text_generation_v2.pdf>
- NetSafe, 2007a, *Gambling*, Viewed 18 April, 2007, <http://www.netsafe.org.nz/gambling/gambling_default.aspx>
- NZPA, 2007, *Police urge calm ahead of weekend vigils for party victims*. Viewed 15 May 2007, <http://www.nzherald.co.nz/section/1/story.cfm?c_id=1&objectid=10438962>
- OneNews & NewstalkZB 2007 *No quick fix for unruly parties*, Viewed 8 May, 2007, <<http://tvnz.co.nz/view/page/423466/1106265>>
- Prensky, M 2005. *What can you learn from a cell phone? Almost Anything!* Retrieved 19 April, 2007, <<http://www.innovateonline.info/index.php?view=article&id=83>>
- Trust, C 2006, *Change the world for ten bucks*, Victoria Hardic Grant Publishing, Prahan.

Copyright

Lakshmi Vaidyanathan and Savae Latu © 2007. The authors assign to ACIS and educational and non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ACIS to publish this document in full in the Conference Proceedings. Those documents may be published on the World Wide Web, CD-ROM, in printed form, and on mirror sites on the World Wide Web. Any other usage is prohibited without the express permission of the authors.