

The Influence of Information and Communication Technologies (ICTS) on Parents/ Adolescents Relationship

Ahiauзу, Levi Uche
Odili, Samuel Otunuya

Department of Accounting Education
Federal College of Education (Technical), Omoku- Nigeria

Doi:10.5901/mjss.2012.v3n13p127

Abstract

The purpose of this study is to examine the influence of ICTs on parents/Adolescents relationships among staff families of Federal College of Education Technical Omoku. The objective of this study include to find out ways in which ICTs influence parents/adolescents relationships among academic staff families of Federal College of Education Technical Omoku, to explore into the nature of social interactions that exist between the parents and adolescent In the context of ICTs use, and also to examine the ways the parents relates with their children in respect of ICTs use. This study adopted survey design and selected a sample population of 30 participants from the staff families of Federal College of Education Technical Omoku using purposive sampling technique. The data obtained were analyzed with weighted mean, the results show that the adolescents' use of ICTs do not foster social pathology among them or hamper good parents/adolescents relationships, though the parents are to be concerned with their children's ICTs based activities. The influence of ICTs on parents/adolescents relationship is a function of the level of the knowledge and use of technologies by both them, Adolescents ICTs use does not necessarily cause relational difficulties with parents nor lead to social pathology, nevertheless the parents should emphasize the need for new media literacy among the adolescents in this ever changing new media environment that characterize the knowledge-based economy.

Keywords: Parents, Adolescents, Society, Staff, Relationship

Introduction

It is expected that people will experience changes in society during their lifetime, some of these might be rival, others subtle and difficult to grasp, whilst some changes are very dramatic in nature, very often these changes originate in technological development that get introduced into society. At present, society at large is amid an explosion of information and communication technologies that are neither rival nor subtle. This development has introduced what seems to be an almost unlimited way or new ways in which to communicate together and disseminate information, and to use these technologies for entertainment.

This "digital revolution", according to Walsh (2000, p-69) began with the introduction of the computer, and eventually led to a situation where all satellite and telecommunications and digitization processes are controlled by the computer. Initially, the concept new information and communication technologies' was used to encompass all these technologies. Since then a more simplistic concept, Information and Communication Technologies (ICTs) was introduced. It can be speculated that this was necessitated by the convergence of media technologies (Montgomery, 2000).

In a related sense Young (2002, P.I) states that the "convergence of microelectronics, communication and computing technologies has given rise to new information systems, which have the ability to manipulate information rapidly in a number of ways and deliver it with an incredible speed at very low cost". This manipulative attribute of the new information systems has not only given rise to new categories of communications services but also made it possible for information to travel at nearly the speed of light. We are, therefore in a global market of information where the flow of information no longer respects national boundaries (Ukonu, 2006: P. 96).

The attended changes in the sphere of information and communications process occasioned by rapidly evolving new technologies are by no means peripheral to the daily lives of people (Klein rock, 2004: P.193). The common use of terminology such as GSM, e-mail, Internet cafe's surfing the net, cyberspace and global village are indicative of how entrenched ICTs have become in today's society. Ifeagwali (2005: P. 222) notes that "the new communication technologies continue to advance rapidly and are impacting on lives and situations of the people across the globe in an increasingly meaningful way". This development patterns lifestyles of people significantly across all social strata; more importantly, family interactions and relationships have come under the enormous influence of the new media environment.

Leiand and colleagues (1999) argue that the digital technologies of today are isolating parents more deeply from their children than even before. ICTs have no traces behind for parents to know what their children are engaging with, and thereby lessen the opportunity for reality checks from parents. Some families have obtained some of these technologies for personal and have access to Internet facilities both at home and in workplaces. In some families there are rules about when and for how long some of the available ICTs like computer, video game, Internet can be used, though some do not. In some cases. Internet surfing or computer use is an individual activity, in other forms; the computer is placed in the living room or in some other central spot, so that it becomes part of the general family activities.

In Nigeria, many of the higher institutions of learning have adopted Computing and Internet technologies, which are accessible to all in the campus. Some of the new technologies like (Computers and Internet facilities) are provided by the institutions and/or by commercial providers. Even some tie staff have these technologies at home for private use because the pervasive penetration and diffusion of the technologies in society. Unavoidably, some parents have become connected to the Internet because of its importance; particularly as they realized that the information and communication services available through the facility can allow them to be in constant contact with their children and grand children who do not live in the immediate vicinity. On the other hand, there are also tales of families being severally disrupted by the Internet addiction of one of the parents or children.

The question remains: What happens when ICTs are introduced into the home? Do they bolster or impede interactions among family members? Do they help in keeping families together or tire them apart? Does the influence of ICTs depend on the user and the use? To this extent, this paper examined the impact of ICTs on parents/ adolescents relations among staff families of Federal College of Education Technical Omoku, in the school, there are Internet and Computing facilities available for use by the staff and the students through subscription. Also there are commercial cyber centers in and around the campus and in the town, which have increased the availability and accessibility of the technologies to people in the school.

The Problem

The family traditionally has been the primary socializes of children, with its role amplified and extended by the school, the church, mosque or temple, and the larger community. These days, there is another powerful player on the socialization science-new information and communications technologies.

In today's world, children spend an average of three hours daily in front of the screen, that is, at least 50% of their time is spent more with the new media than with any other out-of-school activity including: Homework, being with family or friends, and/or reading (Moscovitch, 2007). Through these media interactions, children are exposed to a staggering amount entertainment and being familiar about how to achieve success in life, about who has power or not, about violence Internet relations and what constitutes the good life. The new media provides children with the satisfaction of being in the know, of going behind the scenes and of learning about the world and about people.

An example that illustrates this very clearly is a study carried out by Davie, et al., (2004) on adolescents' use of cell phones in which he found that teenagers' use the technology (cell phone) to establish and maintain relationships outside of their parents' control parents may limit their children's use of cell phones with the amount of airtime they are willing to try but the children can interact with whom they want and where they want, without parents over hearing their conversations. Establishing relationships outside parental control, however, is not a unique phenomenon that applies only to the youth, of today, what is unique about the "net generation, according to weight, (2001, P. 37) is that ICTs increase the opportunities for children to socialize without parental knowledge.

Additionally, there is the possibility that the ease and enthusiasm with which children engage with ICTs may surpass their parents' enthusiasm and capacity to adapt to this new environment (Bersonard & Berson, 2003) when children become the more techno-literate members in a household it may disrupt the guiding role of the parents (Stahl and Fritz, 2002). Although Roe (2000) was more cautious in his assessment of the impact of ICTs on the family structure, he agreed that the family dynamics in a home may change due to the introduction of new technologies. The possibility that children's use of ICTs impacts on their relationships with their parents' commands research on this issue. Researchers claim that few studies have explored what these technologies mean for children (Hinn, Leader and Bruce, 2001; Robberts, 200q; Sulranta, 2003). Besides, Prezza et al. (2004) claim that few studies have been done on psycho-social consequences of cell phone use among children in today's world. Therefore, the problem this study seeks to unravel is the various ways in which ICTs impact parents-children relationship among staff families of Federal College of Education Technical Omoku.

Purpose of the Study

This study explored the impact of ICTs on parents/adolescents relationships of staff families of Federal College of Education Technical Omoku Obtaining information from the adolescents on the nature of their parents' actions and reactions with them when they engage with any ICTs can provide insight on how ICTs influence parents/adolescents relationships. The specific objectives include:

1. To find out ways in which ICTs influence parents/adolescents relationships among academic staff families of Federal College of education Technical Omoku.

2. To explore into the nature of social interactions that exist between the parents and their adolescent children in the context of ICTs use;
3. To examine the ways the parents relate with their children in respect of ICTs use.
4. To make some useful recommendations that will foster healthy relationships between parents and their children in the context of ICTs use.

Scope of the study

This study focused essentially on these ICTs: Cable TV, Internet, Computer and Cell phones. Studies on the social impacts of ICTs in the family were reviewed; this study is delimited to adolescent children of the academic staff families of Federal College of Education Technical Omoku.

Research Questions

Based on the problem stated, the following questions are formulated to guide the study.

1. In What ways does ICT influence parents/adolescents relationships among academic staff families of Federal College of education, Technical Omoku?
2. What is the nature of social interactions that exist between the parents and their adolescent children in the context of ICTs use?
3. How do parents relate with their children in respect of ICTs use?

Review of Related Literature

Much of the research in this field focuses on whether these technologies are beneficial or harmful to the well being of its users, resulting in a binary determinism amongst researchers (Casas, 2001 p. 24). There are three discernable proponents in this debate; those who have doom and gloom perspective, those who are accentuating the positives of these technologies, and a middle ground claiming no easy judgment can be passed on the impact of ICTs. What follows is an overview of the arguments posed by the "Utopias" and "dystopias" (Suoranta, 2003, p.4) as well as by those who are more cautious in their conclusions on the influence of ICTs.

The 'Dystopias'

A contracting effect of ICTs is that whilst offering instant and multiple ways to interact with others, the very same technology can also deny the basic need for face to face contact and human touch. People can set up their offices at home and conduct their business online without having to interact with others in person. It is also possible to do shopping and banking via the Internet, thereby lessening the opportunities to socialize with others in a more conventional way.

In a dramatic analogy Cole and Cole (1998) compare this scenario with the solitary confinement of a prisoner. They argue that it is a basic need for human beings to have regular face to face contact with others, and that ICTs are preventing people from satisfying this need. Their analogy may be an overstatement but the fact remains that the facilities offered by ICTs have supplemented, and at times substituted, conventional ways of relating in-person with others. Those who have a negative view of ICTs argue that people are being isolated from one another despite the abundance of ways to interact through ICTs, and that this is detrimental to their psychological well being (Kraut, et al, 1998).

There is also a concern that "N-geners", TapscoH's description of the youth that are growing up in a digital world of computerized technology (Aphek, 2003, p. 4), will substitute in-person socialization with their peers with online activities, related to people increasing interacting with others in the absence of physical proximity, are the findings of a study in Japan where cell-phone communication between parents and children was explored. For the participants, the meaning of 'being available' was equated with 'being at home, leading the researchers of conclude that the parent-child relationship is rendered placeless through the use of cell phones (Minoura in Suoranta, 2003). In a social commentary on adolescents of today. Bean and Moni (2003) see the fluid space created by the Internet as disrupting a fixed sense of place for children that can spill over to their inner world. The strongest argument posed by the dystopia is that exposure to indecent material, such as excessive violence, hate speech and explicit sex, correlate positively with anti-social behavior. This also pertains to children's use of cell phones. The host of filtering services that are available to safeguard children on the Internet is further proof of this concern. Postman in Aphek (2003, p. 2) argues this to the extent where he concludes that the traditional lines between childhood and adulthood are being blurred by children's easy access to the 'secrets of the adult world'. It has been indicated earlier that parents do not meet children's enthusiasm for ICTs as entertainment and socializing tools (Berson and Berson, 2003; Casas et al, 2001; September and Savahl, 2002). This may lead to a situation where the socialization of children is increasingly facilitated by new technologies without parental guidance. In a study conducted by Stahl and Fritz (2002) only 100/0 of seven to twelfth graders reported that their parents supervise their visit to chat room or Websites. This view is confirmed by the previously mentioned South African study in which the researchers concluded met parents influences over children's interaction with ICTs is "negligle" (Savahl and September, 2004 Considering the possible negative aspects of these technologies and parent's reluctance to act as agents that will guide children in this digital environment, it is no surprise that some researchers will have a 'doom and gloom' attitude towards ICTs.

The 'Utopias

These researchers revel in the opportunities that ICTs offer to children. According to the Utopias, computerized technologies satisfy children's natural curiosity and also stimulate their creativity (Backgham in Suoranta, 2003). They accentuate that ICTs are opening up new horizons of information for children and are a 'library of libraries' (8iocca, 2000, p. 24). Other researchers have seen the Internet as a "mega publishing house" (Aphek, 2003, p. 5) because of the opportunities that children have to voice their opinions through the many websites on the Internet. The sense of empowerment and autonomy offered by the ICTs to children can be explained by examining what the different technologies have to offer to the youth. Owing a cell phone permits children to acquire adult status (Prezza et al; 2004) because teenagers are less dependent on their parents to interact with their peers.

With computers and the Internet technologies, the sense of autonomy that adolescents experiences, results from having access to information that is often not regulated by parents, and from acquiring computer related skills (Kline and Botterili, 2001, Izenberg and Lieberman, 1998). This is evident in a study on young Canadians in a wired world (Environics, 2001), which found that 47% of these tens claim that they have learned to use the internet by experimenting on their own. Thus, mastering information and communication technologies can be conducive to adolescent's sense of achievement and autonomy.

Tyler (2002) contends that Internet use does not foster pathology but is merely a new way of doing the same activities in which children used to engage. It is argued that online relationships can help people to overcome their initial anxieties to engage in face to face meeting (Tyler, 2002) and may offer social support for teens with problematic relationship (Wolak, Mitchell & Finkenhor, 2003). Addressing the concern that online communications can lead to sensory and social deprivation (Cole and Cole, 1998), some researchers found that it would be unusual for relationships, which were established online, to remain electronic in nature (Tyler, 2002). This implies that people still engage in face to face interaction with one another, and online communication is used to strengthen offline relationships and ICTs are merely offering additional ways to maintain these relationships (Gross et al, 2002 & Krout et al, 2002).

Those who are optimistic about the benefits of ICTs argue that moral panics about the effects of these technologies are merely blocking the enhancement of the benefits offered by technology (Walton and Jansen, 2003).

The 'Middle ground'

A middle ground in these two opposing ends of the debate on the influence of ICTs points to a balanced approach towards these technologies that denies an 'either/or' judgment on the possible effects of ICTs on the user.'

Weinrock (2004) discusses the pros and cons of new technologies at great length. According to his analysis, the development that brought many benefit for its users, have at the same time opened the backdoor for the darker side to enter. Montgomery (2000) also claims that the digital culture of today holds both promises and perils for the youth. It is instructive to note that any discussion on the possible effects of these technologies should be accompanied by qualification of the context and modality of use as well as a description of the user's characteristics. The point of departure is the acknowledgment that technology in itself carries no meaning (De Ber, 1998) but that the user constructs the significance thereof. Research conducted by Wolak and Colleagues (2003) into adolescent's online relationship illustrate this clearly. They found that teens (both gender) who experienced serious conflict with their parents and had high levels of personal problems, such as peer victimization and delinquency, were prone to form close online relationships. In contradiction to the 19% of the teens who did not experience serious personal problems engaged in such relationship via ICTs. It was also reported that the less vulnerable participants had a sound social support network offline, and discussed their online relationships with those people rendering them less vulnerable for exploitation. In assessing whether adolescent's engagement with ICTs is harmful or beneficial in respect of, parent-child relationships, it is necessary that the social context and development stage of the user be taken into (Gross et al, 2002). Gross et al (2003) found that adolescent's online communications were to a large degree only an extension of their off-line relationships; the internet is but another tool in their communication.

The conclusion drawn from these two studies is that it cannot be assumed that everyone who engages in online relationships will automatically establish a close online relationship through digital communications (Gross et al, 2002; Wolak. et al, 2003). If close relationships develop, it may be harmful for the more vulnerable segment of users that for others it may have the opposite effect. The youth that engage in online relationships is extremely diverse and that makes it almost impossible to generalize research results (Wolak et al, 2003) Tyler (2002) supports this evaluation of digital technologies. According to his research findings, people change technology to satisfy their psychological needs rather than technologies shaping these needs, and that the social impact of these technologies depends on the social context in which they are utilized. This resonates with a

study Selnyn, Gorrada and Furong (2003) who found that adult's use of ICTs is patterned according to long term, pre-existing socio-economic factors. The conclusion is that those who are more affluent and explored to ICTs in their work will be more adaptive to the digital landscape in their personal lives. The difficulty that researchers have in unraveling the impact of ICTs is summarized in the two longitudinal studies by Kraut and colleagues in 1998 and 2002. If using the Internet for online communications was found to be associated with symptoms of depression and social withdrawal, it becomes difficult to explain why the research yielded contradictory results. From these studies and others that were found to report contradictory results of the possible impact of ICTs it can be conceded that there is no simple main effect that ICTs have on the average person (McKenna & Bargh in Tyler, 2002). This should caution researchers from a hasty generalization of their findings.

Turkle (1996) captured the ambiguous nature of the influence of ICTs when she describes the Internet as a Rorschach test where it is the user that determines the meaning of the technology. It has been indicated in the literature that with vulnerable youth, for example those who experience problematic relationships with their parents, the use of these technologies might be harmful. This means that it is not necessarily the technology in itself that can be problematic, but rather the social context that determines its impact. In exploring the impact of ICTs on parent-adolescent relationships the existing context of their relationship will be an important contributor. The impact will also be affected by the 'how' and 'what' of teenagers' engagement with ICTs.

Methodology

The research design adopted in this study was exploratory. Exploratory study is deemed appropriate when the research is conducted in a relatively unknown field. The literature review indicated that there is a paucity of information on this study in Nigeria, An exploratory research design does not aim to provide detailed and replicable data, but is a preliminary investigation of the topic at hand (Bobbie & Mouton, 2001) The population of this study consisted of all the adolescent children of the academic staff of the college that are living with their parents, whose age range is between the ages of 12 and 14 years with a mean age of 13 years. Out of the population, 30 adolescents from the staff families were selected using purposive sampling method. This is in line with established research practice where the researcher is looking for participants with particular characteristics, in this case the age group who share a common interest (Kelly, 1999) which is ICTs use. The meaning of the technology It has been indicated in the literature that with vulnerable youth, for example those who experience problematic relationships with their parents, the use of these technologies might be harmful. This means that it is not necessarily the technology in itself that can be problematic, but rather the social context that determines its impact. In exploring the impact of ICTs on parent-adolescent relationships the existing context of their relationship will be an important contributor. The impact will also be affected by the 'how' and 'what' of teenagers' engagement with ICTs. This study is located in the Federal College of Education, (Technical) Omoku,. Data for the study were obtained through structured questionnaire designed with four point Likert rating scale with a criterion mean of 2.5 together with interpersonal interviews and the outcomes were analyzed using frequency percentages and weighted mean.

Results

Table 1 Response to the impact of ICTs on parents-adolescents relationship

S/N	ITEM	SA	A	D	SD	TOTAL	MEANS
1	ICT use at home has facilitated the socialization parental guidance	8	15	20	13	56	1.88
2	Adolescents ICT broaden their spheres of social interactions and relationships both at home and outside	36	45	8	2	91	3.0
3	ICT use at home lessens your parents' opportunities to socialize with you in a more conventional way	4	9	36	8	57	1.89
4	Parent-adolescent relationship is rendered placeless through the use of cell phones.	8	6	14	19	47	1.05
5	Adolescent ICT use at home lessens the opportunities for reality-checks from parents	12	18	22	10	62	2.04
6	Parent's involvement in their children ICT use at home is unsatisfactory	8	12	30	9	50	1.9
7	Adolescents' use of ICTs should always be regulated by their parents	12	15	40	2	59	1.9
8	When adolescent's ICT use is unregulated by their parents, it could pose serious relational problems between them and their parents at home	4	3	34	11	52	1.7
9	When children become the more techno-literate members at home it disrupts the guiding role of the parents	16	15	42	-	73	2.2
10	Your ICT use at home offers opportunities for constructive interaction between parents and you	56	33	6	2	97	3.03
11	ICT use at home isolates you from your parents	12	6	28	11	57	1.89
12	If adolescent's ICT use is unregulated by their parents at home social pathology is inevitable	30	9	30	9	60	2.00

Source: Analysis of field survey

The Table results show that the adolescents' use of ICTs does not foster social pathology among them nor hamper good parents-children relationships, though the parents are to be concerned with their children's ICT s based activities. It may be true that children are adapting more easily to phenomenon of digital technologies than parents (Montgomery, 2000, Wright, 2001) but it is not that straight forward to conclude that children are prone to reject their parent's authority over them because of the parent's lack of techno-literacy.

Without repeating the debate amongst researchers on this, it seems as if the participants and their parents are in agreement, that ICTs pose no real harm to its user. Relating this to their relationship, than foster a mutually positive outside to one another. It can be speculated that when parents become convinced that real dangers lurk in ICTs; this will become a strain on the relationship, especially when the teenager is not convinced about these dangers.

Conclusion and Recommendations

It is abundantly clear that the new technologies are part of the warp and woof of our everyday lives. In some homes, TV goes on with the first cup of tea and for many; the flickering light of the screen is the last thing they see before they turn in for the night. Factor in computer. Video game systems, CD players and Tape recorders are part of the private domains of many homes. Many parents no doubt are becoming increasingly connected to the Internet as they realize that e-mail allows them to be in constant contact with their children and grandchildren who do not live in the immediate vicinity. On the other hand, there were cases in the area under study of families that were severely disrupted by the internet addiction of one of the parents or children. It was observed that many of the families have rules regarding ICTs use, especially at home, however, in some families, watching of TV or computer use is an individual activity.

Well on thing is certain: the media are so pervasive and so influential- in terms of how family time is used, in terms of their socializing power, which parents need to help their children become discriminating media users. Children may be very familiar with media contents; that does not necessarily imply any critical awareness of what the content means. Teaching one's children to be savvy media consumers is much a part of parenting these days as teaching them other basic skills.

While this may hold true for cable TV, matters become different when we enter the digital universe. Here, the youth are more at ease and knowledgeable than the majority of their parents, however, it does not mean that the parents should mind what their children do on-line. Exploring some of the riches of new media can also be shared activity between parents and children. Lest we forget, interactive equals interaction implies connection and connection is what keeps a family strong.

References

- Aphek, E. (2003). *Children of the Information Age: A Reversal of Roles*. (0); <http://www.acm.org/ubiquity/view/eaphek-2html>. Accessed on 14 April.
- BBCC News (2Q03). (0): <http://news.bbc.co.uk/1/hi/technology/3133192.stm> Accessed on 23 May 2004.
- Berk, L.E. (2000). *Child development*. (5th Ed). Boston: Allyn and Bacon.
- Berson, I.R. & Berson, M.J. (2003). Digital literacy for effective citizenship Social Education. 67(3), 164-175
- Biocca, F. (2000). New media technology and youth: Trends in the evolution of new media. *Journal of Adolescent Youth*, 27(2), 22-29.
- Casas, F., Alsinet, c., Perez, T., Figure, c., Conales, M. & Pasual, S. (2001). Information technologies and communications between parents and children. *Psychology in Spain*, 5(1), 33-46.
- Cole, L. and Cole, M. (1998). Sensory isolation while being a prisoner of the information age. *Communication World*, 15(4), 40-47.
- Davie, R., Panting, C. & Charlton, T. (2004). Mobile phone ownership and usage among pre-adolescent. *Telematics and Informatics*, 21, 359-373.
- De Beer, A.S. (1998). *Mas.7 media: Towards the millennium-the South African handbook of mass communication*. Pretoria: Van Schaick.

- Environics, (2001). Young Canadians in a wired world: The students' view. Report prepared by Environics Media Awareness Network, Retrieved on 3 May, 2008, from <http://www.media-wareness.ca/english/specialInitiatives/surveys/students-survev.cftn>.
- Gross, E.F., Juvonen, J. & Gable, S.L. (2002). Internet use and well being in adolescence. *Journal of Social Issues*, 58 (1), 75-98.
- Hinn, M.D., Leander, K. & Bruce, B. C. (2001). Case studies of a virtual school. *Journal of Adolescent and Adult Literacy*, 45 (2), 156-167
- Izenberg, N., & Nd Liberman, D.A. (1998). The web, communication trends, and children's health-part 4: How children use the web. *Clinical pediatrics* 37 (6), 335-340.
- Kleinrock, L. (2004). The Internet rules of engagement: Then and now. *Technology in Society*, 26 (2-3), 193-207.
- Kline, S. & Botterill, J. (2001). Media use audiforB.C teens: Key findings. Report Prepared For Distribution To B.C. Schools, Media Analysis Laboratory, Simon Fraser University. British Columbia, Retrieved on 3 May, 2008, from <http://www.sfu-ca/media-lab>.
- Kraut, R., Patterson, M, Landmark, V., Kiesler, S., Mukopadhyay, T. & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being. *American Psychologist* 53 (9), 1017-1031.
- Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V. and Crawford, A. (2002). Internet paradox revisited. *Journal of Social Issues*, 58(1), 49-75.
- Leiland, J., Gordon, D., Underwood, A., Weingarten, T. & Figuero, A. (1999). The secret life of teens. *Newsweek*, 133 (19), 4-50.
- Montgomery, K. (2000). Youth and digital media: A policy research agenda. *Journal of Adolescent Health*, 27 (2), 61-68.
- Prezza, M., Pacilli, M.G. & Dinelli, S. (2004). Loneliness and Ew technologies in a group of Roman adolescents. *Computers in Human Behavior*, 20 (5), 691- 702.
- Roberts, D.F. (2000). Media and youth: Access, exposure, and privatization. *Journal Of Adolescent Health*, 27 (2), S-14.
- Roe, K. (2000). Adolescents' media use: A European view. *Journal of Adolescent Health* 17(2), 15-21.
- Selwyn, S. And September, R. & Savahl, S. (2002). The influence of new information and communication technologies on children's Lives. The South African Study. *Child and Youth Research and Training Programme*. University of the Western Cape, Bellville. Unpunished Report.
- Stahl, C. & Fritz, N. (2002). Internet safety: Adolescents' self report *Journal of Adolescent Health*, 31(1,) 7-10.
- Suiranta, J. (2003). Youth and information and communication technologies. Retrieved on 3 May, 2008, from http://www.un.org/esajscdev/unyin/helsink/ch_12_ict.suiranta.doc
- Turkic, S. (1996). *Life on the screen: identity in the age of the Internet*. London: Weidenfield & Nicolson.
- Tyler, T. R. (2002). Is the Internet changing social life? It seems the more things change, the more they stay the same. *Journal of Social Issues*, 58(1), 71-85.
- Walton, M. & Jansen, C. (2003). *Drawing the line: Violence and other issues in children's use of video games and gaming*. Cape Town: HSRC Seminar. Unpublished Paper.
- Wolak, J., Mitchell, KJ. & Finkelhor, D. (2003). Escaping or connecting: characteristics of youth who form close online relationships. *Journal of Adolescence*, 26(1), 105-119.
- Wright, C. (2001). *Children and technology: Issues, challenges. And opportunities* . *Childhood Education*, 78(1), 37-49.
- YATJ, Y. Z. (2002) "Globalization, ICTs and the new Imperialism: Perspectives on Africa in the Global Electronic Village (GEV)", Retrieved on 27 May, 2007, from http://www.codesria.org/Archives/gaIO/papers_gal_012/1CTYau.htm
- Young, Jeffrey R. (2004, November 9) "Does Digital Divide Rhetoric Do more than good," *The Chronicle of Higher Education* 48: 1 - 5, Retrieved on 21 Nov. 2007, from <http://chronicle.com/free/v48/i1/1/1a05/01.htm>). "-