

THE IMPACT OF THE INTERNET AND TV SATELLITE ON CHILDREN IN THE MENA REGION

ROYAL SCIENTIFIC SOCIETY (RSS) *

Introduction

In the Arab World, the Internet and its use and satellite TV broadcasting is growing rapidly after a very slow start. Despite the similarities, and commonalities that the Arab World share (language, culture, religion, and geography) there are significant differences and diversities in terms of their social, political, and economic structure. However, the most important common feature of Arab culture is the conservative nature of its value system especially when it comes to children and gender relations. When the Internet satellites were introduced to the region in the mid 1990's, (satellite TV was introduced earlier) they were met with strong resistance from the largely socially and politically conservative governments of the Arab World and the conservative political and social groups alike. The main reasons behind the opposition to the Internet and the satellite TV and the attempt to control them were both political and social.

Politically, the largely autocratic regimes were afraid of their citizens having access to information about their own behavior and the potential for exposure to new ideas that contacts with the outside world will bring about. Before the advent of the Internet and satellite, governments were able to control and censor such access. The social conservative group's fears were not less important. They did not want individuals (especially females and the youth) to be exposed to new western values, attitudes, and behaviors, which are viewed to be immoral and corrupt. Before the Internet and to a lesser extent satellite, women and youth have little independent access to the outside world and their behavior was subject to the control of the family and the state. But despite the political and social resistance to the introduction and use of the Internet and satellite, it became obvious that it was impossible to prevent or even entirely control these revolutionary communication medium.

Today, there are few Arab countries that do not allow these mediums to be freely used. However, the majority of the Arab countries allow relatively free access for both. Both the Internet and satellite have the potential to impact the political process, the social structure and value system of the Arab society. They open new

frontiers of knowledge, provide new sources of information, new methods of entertainment, and possibly alter the patterns of interaction and communication between individuals and groups. Most importantly, these new communication technologies have the potential to change the gender order in the region and to empower young Arab women and provide them with new public space that has not been possible till now. In this paper I will explore the possible impact of both the Internet and satellite on children in the region. The advent of the Internet and other new communication media is rather recent in the region and studies examining the impact of these mediums are rare. Therefore, the conclusions reached in this presentation should be viewed as tentative and need further empirical verification.

1. Satellite TV

Satellite television, with its multi-channel environment, is a main source of information and entertainment for many Arab families. It has begun to play an increasing and largely effective role in transmitting news and information on political, economic, and cultural issues both of general and specific nature. The number of satellite and cable channels now covering the region is increasing dramatically. Today, there are over 100 channels using at least 20 satellites (Darouny, 2001).

TV Satellite stations are strongly competing with the traditional national TV stations and other traditional forms of media. Because of their "unconventional" style in terms of the issues covered and their specialization (news and entertainment) they are rendering traditional TV stations ineffective and transforming them into local stations. Also, satellite TV stations are mainly private stations with huge financial resources and are not under the control of the state (however this does not mean that they are totally free because many TV stations are linked directly or indirectly to certain states). This is significant because it implies that they could be more daring in their programs and more diverse in their coverage.

In the 22 Arab countries, 140 million are TV viewers and 51 million have cable and satellite dishes (Darouny, 2001). Finally, TV satellite is a very suitable medium for Arab culture that is family oriented and tends to

*Dr. Musa Shteivi, Department of Sociology – University of Jordan. Amman, Jordan

concentrate much of its social activity and entertainment at home (Amin, 2001). There are some studies that indicate that the average time spent watching T.V in Arab Countries is among the highest in the world (Shteivi, 2002).

2. Internet Penetration

The Arab countries are the most underrepresented area of the world in terms of per capita Internet connectivity. There is little doubt that the main reason for the slowdown of Internet growth is the governments fear that Internet access will undermine state control over information. As table one and two show, there is only around 5% of the Arab population that is Internet connected. The women share of this is very small and not exceeding 10% of all users. However, these statistics might not be accurate and it's safe to argue that the number of users is much higher than these figures.

The main reason for this conclusion is that it accounts only for subscribers to the net and excludes the non-subscribers users. Staffs of organizations, Internet café's users, and family members who can benefit from one subscription are not accounted for in this type of

statistics. For instance, in the case of Jordan, the above figures indicate that only 2.16% of the population in Jordan is Internet connected. However, national survey data (adults 18+) indicate that 16% are Internet users with women constituting 25.9% of all users. The Internet is a unique electronic communication technology. Ithiel da Sola Pool (1990) identifies five characteristics that exemplify the uniqueness of the Internet.

These are: the end of distance as a barrier to communication, convergence of speech, text and pictures in a command digital stream, convergence of computing and communications, absorption of work and leisure in communication activities, and reversal of the mass media revolution. The Arab region ranks low compared to other regions in the world and it has less than half of the world average. These figures suggest that there is considerable room for improvement. Even though Internet penetration in the region is relatively low, it is growing rapidly. The number of users has been doubling in the last few years and at the end of 2001 the Arab Internet market was estimated to have over two million users. However, because of the late introduction of the Internet to the region, good growth is not enough and increased efforts are needed to catch up.

Table 1. Internet Users in the Arab World, 2001

State	No. of Internet Users (Thousand)	Percentage of Users from Population
Jordan	210	5
United Arab Emirates	735	31
Bahrain	105	11
Tunisia	280	3
Algeria	50	0.16
Comoros Islands	1.5	0.26
Djibouti	1	0.2
Saudi Arabia	570	2.5
Syria	32	0.19
Sudan	28	0.08
Somalia	200	-
Iraq	12.5	0.05
Oman	90	3.55
Palestine	60	-
Qatar	75	9.75
Kuwait	165	8.08
Lebanon	300	8.38
Libya	20	0.24
Egypt	56	0.81
Morocco	20	0.72
Mauritania	2	0.07
Yemen	14	0.08
Total	3227	

Source: [http:// www.nua.ie/surveys/howmanyonline](http://www.nua.ie/surveys/howmanyonline).

Table 2. ICT Indicators for Arab Countries, 2001

MENA Country	Telephones per 100 Inhabitants	Personal Computers (PCs) per 100 Inhabitants	Internet Users per 10,000 Inhabitants
Algeria	6.36	0.71	19.27
Bahrain	67.15	14.18	1,988.65
Egypt	14.63	1.55	92.95
Iran	18.70	6.97	62.29
Iraq	Na	Na	Na
Israel	128.46	24.59	2,304.86
Jordan	27.12	3.28	409.11
Kuwait	48.79	13.19	1,014.71
Lebanon	40.74	5.62	858.00
Libya	11.83	Na	35.84
Morocco	19.60	1.31	131.49
Oman	21.34	3.24	457.49
Palestine	16.82	Na	181.21
Qatar	56.76	16.39	655.74
Saudi Arabia	25.81	6.27	134.40
Syria	12.09	1.63	36.12
Tunisia	14.90	2.37	412.37
United Arab Emirates	111.66	15.83	3,392.39
Yemen	3.01	0.19	8.89
United Averages	110.87	62.25	4,995.10
World Averages	32.77	8.42	823.24

Note: na= not available

Source: The Information Revolution in the Middle East and North Africa, and Corporation, 2001.

Today, almost all Arab countries allow the public access to Internet use to varying degree and the use of Internet is growing rapidly and becoming popular especially among the youth. In some countries, like Jordan, Internet is being introduced in schools, universities, and in the government institutions. Internet cafes are spreading very rapidly and provide a suitable solution to the high cost of having a personal computer and Internet link. Internet has the potential of being a modernizing force in the Arab world.

It can do many great things, from leveraging scarce educational resources, providing models of entertainment, and serving as a tool to communicate with people far away and separated by geography, culture, politics, and gender. Additionally, Internet has the potential to empower Arab women and children in the exercise of their rights, to seek and receive information, and ideas, and to provide them with a new public space. What is unique about the Internet use and potentially influencing as a communication medium is the individual aspect of its use. Unlike most modern communication methods that are family oriented, the Internet is individually oriented. This is especially more important particularly for youth and females in Arab society. Children and female behavior and social interaction in a conservative Arab culture are largely under the scrutiny

and control of the family, the tribe, and the larger society. The Internet allows these categories to render traditional social control mechanism of their behavior useless or ineffective. They can use the medium on their own and away from their family control and they can be anonymous and that is what contributes to individualized and free interaction.

Internet in the Arab world can still be considered as a new form of media, which is not available for everybody. This might explain why little research that focuses on this area exists. Still, the largest portion of Internet usage exists in the Gulf area (oil-producing countries), where the service is more provided, people can afford buying computers, or at least use the Internet services. For example, the percentage of Internet users (per 100 persons) in 2001 in the United Arab Emirates reached 31.5% (Human Development Report, UNDP 2003). Using technology is forcing itself into the Arab world and is becoming inevitable. Both youth and children are using computers nowadays, be it educational use or recreational. Now with the introduction of new educational systems (systems that mimic the ones in the developed countries) to some Arab countries, children and youth are being educated to use different computer applications. The effects of acquiring such knowledge have started to emerge. And although the literature

availability on this subject is scarce, we'll try to shed some light on the most major topics of concern about the effect and use of the Internet on the Arab children and youth. Arab youth are no different from youth around the world, and the worries associated with the use of Internet and computers are shared all over the world, as the Internet is a window wide opened to the globe.

3. Social Development Issues

Most research findings in this field are mixed. Controversy and fluctuation between the positive and the negative remains the main characteristic in most research. The influence of using computer or digital media on youth and children depends largely on 3 different aspects (Subrahmanyam, 2000):

- The content of the media displayed
- Time spent on the certain media
- Type of activity the child is engaged in

The most important concern that is still voiced in the region is related to the content and the material that could be accessed by children in the Internet. The conviction was that children will be exposed both to: 1) new values and morals that are alien to the cultural and moral standards of the people in the region. This is true for both the internet and the satellite T.V programs. Such exposure is also thought to negatively impact the psychological and cultural development of the child due to potential conflict with messages children receive from their parents. This problem is aggravated when children watch T.V or use the Internet without parental guiding or control. As a matter of fact, studies indicate that most children engage in these activities while parents are doing something else (Shteiwi, 2000). 2) The T.V satellite and the Internet might contain sexually explicit materials that are in conflict with the prevalent cultural standards and the age and sex of the children. This is thought and believed to have negative implications for the development of children.

In the Arab world, however, most research indicates that long Internet usage affects social relations for youth, who might prefer to have friends over the net (Ruhi, 2000; Abu Jedi, 2004). In a study that covered University of Jordan Internet labs students, Abu Jedi found that the average number of hours used on the Internet is 2 hours/week, and the average number of net-friends is 13 (for Internet addicts). Another study that covered 51.9% of Amman's Internet cafes, and 48% of Irbid's Internet cafes, (360 male & female users, aged 16-30) found that males are more likely to form net-friendships over the Internet using chatting rooms, especially with European friends (Ruhi, 2000). On the other hand, it was found that

Lebanese youth prefer to contact other Arab youth due to similarities in traditions and beliefs (Sano, 1999), which reveals different patterns from country to country.

Seeking friendships through the net could be the result of the safe environment the Internet provides. Online communications lack many of the characteristics of traditional relationships, such as geographic proximity and physical appearance, cues about group membership and the broader social context. The very absence of some of these qualities in online communication may have great advantages, especially for children and teens as the emphasis is on shared interests rather than social or physical characteristics. The negative result of this flexibility might be clearly reflected on youth who lack social skills, or have social anxiety, as they might derive their social satisfaction through the Internet, thus augmenting their social withdrawal. It might as well minimize their contact with the real world as they are getting the inducement they need through Internet without having to go through the social protocols and judgments. This will only foster their loneliness and withdrawal (Abu Jedi, 2004).

As indicated by a research, females still feel that they are under social supervision even though they know that they are using a secure media as the Internet. Females reported that they don't experience their privacy as they should on the net so they can't reveal their social identities to unknown people unless they sense their honesty first (Abu Jedi, 2004). Males, unlike females, are reported to have more tendencies to practice their self-perception/disclosure on the Internet and feel free to reveal their identities, talk about their interests and needs (Abu Jedi, 2004). On the other hand, the Internet could be an empowerment tool for youth in general and female youth in particular. Females are normally under a tight control by their parents in their ability and freedom to interact with the outside world. The Internet helps to break the family monopoly and female youth can have access to information and interact with others without the monitoring of their parents. Therefore, the internet is potentially liberating for youth in general and female youth in particular.

4. On the Internet

Children and youth worldwide use the computers and the Internet for various purposes; to support schoolwork, search for information, play games, and communication, but the most preferred activity seems to be chatting, e-mails, and instant messages. (Livingston, 2002). This seems to be true also for children and youth in the region as well.

In a study that focused on youth attitudes towards using the Internet in education, 31.4% from the sample (350 university students) use the Internet for information, whereas 46.7% use it for entertainment purposes. The results also indicate a gender difference in using the Internet in favor for males. This could be attributed to the freedom males have in consuming Internet inside and outside their houses at any time. Females' time outside the house is restricted on the other hand (Arekat, 2003). This finding was also supported by another study, which found that females use Internet cafes during morning and afternoon hours more than males, who are frequent users during the evening and night hours (Ruhi, 2000). It was also found that females view entertainment websites more than males. Still, free hours and personal interests play a more decisive role in determining the use of Internet, as found by the same study (Ruhi, 2000). Many students reported that lacking activities at universities leaves them with free hours, which they spend in computer labs and Internet cafes (Abu Jedi, 2004).

On the other hand, most studies agree that the most negative effect of the Internet could be withdrawal and isolation from the real social life (Ruhi, 2000; Abu Jedi, 2004; Hamilton, 2002). Some studies have indicated that home Internet use may result in increased loneliness and depression especially if the computer was placed in an isolated or private room (Wartella and Jennings 2000), but the research in this area is ambiguous. It can contribute to a child's self-perception and affect a child's socialization in a variety of ways (Arekat, 2003). The use of digital media is in most cases interactive. In settings such as an Internet café or a school, children and youth get the chance to exchange ideas, games, software, and build both external and internal relationships. This indicates how important the computer-setting environment is. Interactive environments, particularly networked technologies, can have a positive influence on social behaviors, connecting people with similar interests together (Wartella, O'Keefe, & Scantlin).

5. The Concern with Exposure to Inappropriate Content

There are serious concerns in the region regarding the content of the new media. The exposure to inappropriate content - advertisings and violence - are concerns that have been raised for the last 15 years by different groups in Arab society especially in relation to the internet and Satellite T.V (regular T.V stations are not an issue here because they are heavily censored and under state control). What aggravates the situation from this point of view is that both mediums contain material that is culturally alien to the Arab culture (especially sexual material). The concern here goes beyond the moral

aspect of it to the values that children and youth might learn and act upon.

6. Addiction

In a 1999 survey in the US, parents reported that children with computer access spent an average of 4 hours 48 minutes per day in front of a TV screen or a computer monitor (Subrahmanyam, 2000). Also, in America, an average child racks up almost 6 hours a day consuming various electronic media, while heavy users log 16-10 hours or more (Hamilton, 2002). In the Arab region, taking into consideration the digital divide, addiction is also a problem that wasn't explored by research, as it should. Still, the rate of addiction and heavy Internet use could be within the same range as in developed world, due to the newness of Internet services in the region with an average of 1.13 hosts per 1,000 persons (Human Development Report, UNDP 2002). This low percentage makes the Internet a newly unexplored frontier for many children and youth. Thus, they have the desire to spend more and more time to consume this new technology. In studying the social and demographic characteristics of Internet addicts on a group of students in Amman, several results appeared:

- the majority of Internet addicts are males 12.5%, and 7.7% females;
- reading on the Internet was the least practiced activity on the Internet; Prensky, 2001
- the average consumption of Internet hours was 10.50 hours per week using university computers;
- the average number of net-friends is 13;
- the percentage of Internet addiction was 20% (Abu Jedi, 2004).

Studies also emphasized that Internet addicts try to consume more and more hours to satisfy their needs, even if they don't have the time for it (Abu Jedi, 2004; Ruhi, 2000). Seeking social communication is the main reason behind the considerably large number of net-friends for Internet addicts who almost rely on the Internet for a social life (Abu Jedi, 2004). Another finding for the same study was that the rate of social anxiety and lack of self-perception are very low with addicts who find cyber space a suitable environment for them (Abu Jedi, 2004).

7. Family and the Internet

Family environment plays a crucial role in how children experience the digital media. Recent studies have found that students' perception of their parents' desire for them to learn about and use computers was a significant

predictor of heavy computer use. Other related variables depend on the degree to which parents 1) are available to their children and involved in their children's learning activities, 2) are attracted to and use the computer themselves, and 3) are knowledgeable about the value and quality of academic software (Wartella, O'Keefe, & Scantlin).

It was also found that there is a strong relation between one or both parents' not using computers and their objection to their children use of the Internet or to their going to Internet cafes (Ruhi, 2000). Furthermore, a frequent reversal of the traditional parent-child relationship is being reported, with children taking on the role of teacher to the parent (Subrahmanyam, 2000). The new media is emerging as a competing socialization agency to the traditional family. As mentioned earlier, the high percentage of illiteracy and computer illiteracy in particular, tend to isolate the parents from their children in this process. Conversely, peers, brothers and sisters might assume a greater role in this interactive socialization.

8. Cognitive Development

Cognitive skills are the skills associated with the thinking and knowing, the skills required for children to understand language and numbers, to reason problems solving and to learn and remember (Subrahmanyam, 2000). Computer applications of many kinds, especially computer games, are designed in a way that emphasizes visual rather than verbal information process (Subrahmanyam, 2000). In addition, this new media involves much greater potential for interactivity compared with earlier media. It also holds more promise for enriched learning experience (Wartella and Jennings 2000). Some researchs suggest that even the new interactive computer generation has a different new way of thinking (Subrahmanyam, 2000). It was also found, for example, that skills developed as a result of playing video games go far beyond the hand-eye coordination skills most often cited. Some newly developed skills are (Prensky, 2001):

- Reading visual images as representations of three-dimensional space (representational competence)
- Spatial skills
- The skills of "rule discovery"
- Comprehension of scientific simulations
- Skills of "divided attention" tasks

Thus children are drawn to computer technology that enables, even requires, more active engagement. Participatory animated forms of software that are oriented towards problem solving and control, are

generally more preferred (Wartella and Jennings 2000). Moreover, studies indicate that children who play computer games can improve their visual intelligence skills; concentration, visual attention, spatial skills, as well as a selective increase in other non-verbal intelligence (Subrahmanyam, 2000).

9. Health and Physical Effects

The negative physical effects of children and youth computer use were not proved by solid research yet. Still, many studies suggest that children's extended computer use may be linked to increased risk of obesity, seizures, and hand injuries (Subrahmanyam, 2000). As playing games has become the predominant computer activity for children and youth, long exposure to computer activities and games, exposes them to a number of physical risks such as epileptic seizures in certain users, due to quickly flashing images in patients with photosensitive epilepsy (Subrahmanyam, 2000). Excessive computer game playing has been also associated with a form of tendonitis, called Nintenditis, which is a sports injury characterized by severe pain in the extensor tendon of the right thumb as a result of the repeated pressing of buttons during game play (Subrahmanyam, 2000). There are also effects on children's eyes, backs, and wrists. To reduce the possibilities of such injuries, children should be given instructions, as adults do, regarding safe computer use (Subrahmanyam, 2000). There are no studies as of yet on these issues in the region, but as the use of the Internet and increase in hours of T.V watching, these symptoms are likely to appear in the future.

10. Conclusion

The Arab world today is in the middle of a new revolution in both technology and culture; a revolution in which children are in the forefront. They are the first generation in the region that will grow up digital. Although, the interactive media is not new in the region, the digital content industry has experienced substantial growth in size and sophistication and is expected to continue to grow at even faster rate in the near future. The affordability of home computers and the widespread use of satellite are helping to make the interactive media a dominant activity of contemporary childhood in the region. In the future, it is expected that the digital media will have an even more essential role in the educational and social experiences of the children in the region. As of now, little has been done in terms of research about the positive and negative implications of this new media on children of the region. Furthermore, these issues have not attracted policy makers so far, but I think it will be a central policy issue in the future as well.

References

- Abu Jedi, Amjad** (2004). The Effect of Social Anxiety, Loneliness self-Disclosure on Internet Addiction. Unpublished MA Dissertation, University of Jordan. [in Arabic].
- Arekat, Faten** (2003). Students Attitudes Towards Internet Use in Education. Unpublished MA Dissertation, University of Jordan. [in Arabic].
- Darouny, Kamal**, The Revolution of Arab Satellite TV stations Versus the Local Broadcast Media in the Arab Countries, paper printed at the 9th International Advertising Association World Education Conference, Transnational Broadcasting Studies, American University of Cairo, Egypt.
- Prensky, Marc** (2001). "The Games Generations: How Learners Have Changed". Digital Game-Based Learning. McGraw Hill.
- Hamilton, Joan** (2002). "Spoiling Our Kids", Stanford Magazine.
- Wartella, Ellen. Jennings, Nancy** (2000). "Children and Computers: New Technologies Old Concerns". The Future of Children and Computer Technology. 10 (2), 31-40.
- Ithiel da Sola Pool**. Technologies without Boundaries, Cambridge, MA:Harvard University Press,1990.
- Livingstone, Sonia** (2002) Children's Use of the Internet: A Review of The Research Literature. The National Children's Bureau.
- Subrahmanyam, Kaveri. Kruat, Robert. Greenfield, Patricia. Gross, Elisheva** (2000). "The Impact of Home Computer Use on Children's Activities and Development". The Future of Children and Computer Technology. 10 (2), 124-144.
- Wartella, Ellen. O'Keefe, Barbara. Scantlin, Ronda** Growing Up With the Media: What we Know and What We Don't About the Impact of New Media on Children. Merkle Foundation.
- Ruhi, Randa** (2000). Utilizing Internet by Youth: A Sociological Analytical Study. Unpublished MA Dissertation, University of Jordan. [in Arabic]
- Shteivi, Musa**, Patterns of Cartoon Watching among Jordanian Children, The General Union of Arab Radios, Tunisia, 2000.