

Impact and Implications of New Information Technology on Middle Eastern Youth

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Abstract

This paper presents and reflects upon Middle Eastern youth's use of new information technology (IT) and the implications of that use. Several key problems and great prospects related to that use will be identified. Middle Eastern youth were found to be fond of their IT use mostly because of their ability to access all sorts of information and communicate with the outside world, including friends and family members abroad. To those youth, while IT is building bridges between them and distant others, it is also building ever stronger walls between them and close individuals, including family members, relatives, and neighbors at the same time. Those youth admit that they surround themselves with IT tools while paying little attention to some of their own needs as well as the needs of others around them. In addition, they are fully aware that misuse of IT tools and addiction are leading to destructive behaviors affecting them in major ways. The purpose of this paper is to address the impact and implications of new IT on Middle Eastern youth, namely the way they are using these technologies and the consequences of that use. The instruments used were short essays and questionnaires which took into account Middle Eastern sensitive sub-cultural differences among the target population. While subjects were given ample time to write and submit their essays, the questionnaires were scheduled and administered on time by professionals. Reasons for the stated problems and recommendations to prevent them or deal with them are provided in the course of this paper. In addition, the paper indicates the need for a comparative and coherent body of research across cultures pertaining to the impact and implications of new IT on our youth.

Impact and Implications of New Information Technology on Middle Eastern Youth

Introduction

New information Technology (IT) is almost everywhere and has dramatically altered the way we live. As a result, the role of IT in our daily living is growing rapidly to the degree that many of us, especially youngsters, have become dependent on, if not addicted to, our mobile phones and personal computers (PCs), which now constitute the principal tools for our interaction, research, and learning. As is the case anywhere in the world, both of these tools have become valued elements of life in the Middle Eastern region merely because they opened many doors to youth and allowed them to interact freely and markedly unlike at any other time in history. Although these tools and the related programs they provide have had a rather late start in that region, nevertheless most, if not all, Middle Eastern States allow public access to them these days. Hence, cyber communication has become as normal and fashionable as any other human activity. This has become so due to IT tools which allow their users to discover the never-ending and most up-to-date information available about almost anyone or anything worldwide. As Amrohvi (2008, p. 11) noted when she talked about the digital world and computers, “what started out as a computing tool used by scientists and in business is now a must have tool for all.” The same thing can be said about mobile phones, they are “must haves” for almost everyone these days.

Like tsunami waves, college and university campuses have been hit by new generations of youth coming from high schools with quite a decent knowledge about IT and how to use its tools, especially cellular phones and computers. These youth have been referred to as the Echo Boomers, Millennial, the Net Generation, etc. The expectations, attitudes, and fluency with new IT of this generation have been beyond belief. Hence, dealing with these youth has been a challenge for educators, parents, and governments alike, especially in a region similar to the Middle East wherein public mingling between the genders is generally discouraged, many schools are segregated, and certain unclean behaviors or foul language are mostly edited out of the mass media. (Galal, 2002; Tubaishat et al, 2006; Wheeler, 2003)

The Middle East is well known as a region for some of the most autocratic and least democratic political systems existing worldwide. As such, Middle Eastern youth have to find creative ways to deal with or bypass their parents’ control as well as their governments’ cyber patrol concerning their media use or activities. While any technology can be put to good or bad use, depending on the user, many parents have bought their kids cellular phones and PCs so they may use them appropriately and effectively, mainly for learning purposes as well as knowing where they are at any time and come to their help if they need it. However, kids are not just using these IT tools for calling or learning only but for other purposes too. As some of the youth have stated, “whenever they close doors, we find windows to get in and do what we want.” Therefore, despite incessant efforts by parents and governments, many Middle Eastern youth have been capable of using their cellular phones and computers for multiple purposes in an effort to search out materials they need or are interested in without major challenges.

Purpose

The purpose of this paper is to address the impact and implications of new IT on Middle Eastern youth, namely the way they are using these technologies and the consequences of that use.

Literature review

For the past several decades, the Middle Eastern youth population has been increasing explosively, particularly in the Arabian Gulf region, due to complicated reasons such as religious beliefs, traditions, ineffective birth control methods, etc. This is visible in urban or heavily populated areas and is creating social, economic, and cultural problems which are affecting young people studies, job opportunities, training, health, life-styles, and well-being (Gleeson & Sipe, 2006). This confirms what Robertson (1995) stated more than a decade ago with regard to positive and negative global and technological developments and their clear influences upon generations everywhere. While several Middle Eastern societies have been benefiting from technological advancements and so are their youth, many others have been suffering due to youth unemployment and lack of economic prosperity. These important factors and others have led many youngsters to migrate whenever possible, become underemployed, or get involved in awkward behaviors such as committing crimes, drinking excessively, and becoming addicted to bizarre substances, which eventually result in unavoidable practices of violence (United Nations, 2005a & b; Yigitcanlar & Baum, 2006).

The rapid growth and dissemination of new IT have helped in analyzing and understanding the great opportunities as well as the challenges Middle Eastern youth are experiencing. While IT offers new opportunities to Middle Eastern youth for learning, job training, and skill development; it also creates many challenges that deserve close attention by adults around them. One of the major challenges facing Middle Eastern youth is the possibility of accessing IT tools and knowing how to use them. In other words, it is the gap between the “haves” and “have-nots.” Unlike the case in developed nations, many Middle Eastern developing countries lack in acquiring broad access to new IT tools and, as a result, cannot provide these tools to their youth, become vulnerable to global market changes, and, then, youth’s unemployment or migration gets into high gear. In fact, IT access and usage differ mainly because of social status, and not due to personal preferences, and because many crucial social and economic benefits can accrue from greater access and usage of IT. Such IT disparities represent a serious divide, not just between developed and developing nations, but also between various segments within each Middle Eastern society. Therefore, impartial access to information, knowledge, and education has become sine-qua-non to the emerging global knowledge economy. IT tools have also become necessary to narrow the knowledge gaps between developed and developing countries as well as among the “haves” and “have-nots” within every society. This requires edging in the areas of information exchange, intellectual freedom, and online education. IT tools are potent in making that edging toward contributing to development and prosperity. In addition, the production and continuous use of IT have actually become the driving forces behind transforming modern societies. As such, they have radically restructured the labor market and the criteria for employability have become much higher and requiring more advanced skills, a fact which youth of developing nations cannot keep-up with (Haddon, 2001; Walsh et al., 2001; Kozma et al., 2004).

Research findings suggest that many of those developing nations which undergo those high levels of unemployment and migration are in the Middle East and North Africa (MENA; 25.6%). Hence, youth in these countries have to face many challenges in education and training which are supposed to assure them some of the mostly needed and highly requested skills by the labor market. As a result, the move from high school to work has never been easy for most youths who end up either unemployed or underemployed (United Nations, 2005a & b; Yigitcanlar & Baum, 2006).

With colossal social intricacy, IT, especially the Internet, has not only had universal positive impact on contemporary societies, but also has caused various societal concerns about privacy, security, pornography, digital divide, Cyber crime, virtual community, intellectual property right, etc. As Katz and Rice (2002) mentioned, IT seems another double-edge weapon that has intense positive and negative social consequences. It unites huge technical and social complexities and this distinctive blend makes youth's understanding of IT both significant and challenging.

There are four major uses of IT namely, seeking information for the purpose of teaching and learning; communication; entertainment; and shopping (e-commerce). The first line of inquiry pointed out to the existence of a relationship between IT use and academic performance, even though causal relationships have been hard to ascertain (Blanton et al., 1997; Cole, 1996; Roschelle et al., 2000; & Subrahmanyam et al., 2001). However, the fact remains that IT, especially the Internet, has become crucial source of research and educational tool in almost all institutions around the globe. Its benefits seem to outweigh its negatives. For instance, a special section of *Developmental Psychology* (Greenfield & Yan, 2006), which was published by the American Psychological Association (APA), included six empirical articles showcasing various aspects of child and adolescent development in this virtual world while living in the real world. These articles discussed three major themes (communication on the Internet; cognitive development, academic achievement, and the Internet; and adolescents in a globalized Internet world). They mostly affirmed that Internet use involves both "pros and cons for children and adolescents." Some of their findings suggest that online interactions supply vital support for lonely adolescents. However, these online panels may lead to lethal actions such as self-injurious practices by the same adolescents. In addition, some of these articles asserted that the Internet can also be a good educational tool for far-away populations. Students who used the Internet more had higher test scores in reading and higher grade point averages (GPAs) than those who used the Internet less. For instance, Borzekowski, Fobil, and Asante (2006) looked at "Ghanaian teens' use of the Internet for health information." They found that "youth reported great interest, high levels of efficacy, and positive perceptions of online health information." (p. 450)

Smith & Winking-Diaz (2004) looked at increasing students' activity in an on-line course, due to advances in networking technologies, the World Wide Web, and the Internet which have had a great influence on teaching and learning in higher education. Students and teachers, especially at the college or university level, have been functioning in a high-tech and high-touch mediated learning environment. Hence, they have been using a wide range of

IT tools to interact, work cooperatively, and share a variety of resources; these tools have been providing them with whatever they need at anytime and anywhere. Galabov (2001) studied the Internet and the Arab culture, which, presumably, “has been reaping all the benefits the Internet has to offer.” (p. 1) He argues that the Internet has become an important component of life in the Middle East, for it allows people of the region, particularly women, to communicate freely, access information quickly and inexpensively. Adopting the new IT has been aiming at raising the quality of lifestyle and “to help women become more competitive, well-educated, and professional partners in society.” (p. 2)

Tubaishat et al. (2006) investigated ICT experiences in two different Middle Eastern universities. Their survey results show that adoption of new technology has improved students’ motivation, level of confidence, communication and technical skills, collaboration, and sense of independence. They specifically stated that “these improvements would not have been possible without technology in a gender-segregated society.” (p. 667). Other researchers identified primary use of IT for school work or projects and secondary use for communication with family members, friends, and acquaintances through e-mail, instant messaging, and chat rooms (Turow, 1999; Turow & Nir, 2000; Valkenburg & Soeters, 2001; Gross, 2004). This second use leads us to the next section of discussion.

The second major line of research consists of using IT for communication. Researchers and practitioners admit that the use of IT for interacting with others is not very recent but goes back decades in time when it was developed and used for military purposes (Hardey, 2002). In fact, for the past 10-15 years, researchers have looked at the effect of IT, especially the Internet, over social life, cultural norms, studying or learning, dating, and a host of other issues. For instance, Gross (2004) found that communication was the number one use of the Internet for the upper-middle-class adolescents. The degree to which the Internet was used for communication relied on the number of acquaintances, family members, and friends online. Other researchers emphasized that certain people used the Internet to find particular information before initiating an interaction of some kind. For instance, Hardey (2002) examined the embodiment and identity through the Internet. He pointed out how dating websites hold profiles, personal, and demographic information concerning those looking for partners, just like newspapers’ personal columns. This way, members of the opposite sex may surf throughout those profiles and initiate an on-line contact with whoever is deemed appropriate and have a good potential to build a relationship with.

Some researchers compared cyber communication to face-to-face interactions; looked at causes and consequences of social interaction on the Internet; discussed cyber relationship formation, and considered certain observations and implications for Internet sex addictions. Their findings revealed that the primary use of home PCs was for social interaction rather than for anything else, on-line communication was the easiest or most accessible, and, due to secrecy or anonymity, both sexes were encouraged to share some aspects of their personality that they may not reveal otherwise and, particularly, off-line. In addition, they found some similarities between these two types of communication, especially concerning electronic mail, chat rooms, face-book, and instant messaging. While face-to-face communication consumes a lot of time to build trust and intimacy, on-line interaction provides anonymity and permits communicators to self-disclose and become intimate much sooner than in the

other type. Therefore, it was considered the most trouble-free, most unique, and most accessible way to meet potential partners. (McKenna et al., 2002; Griffiths, 2001)

In a similar vein, Galal (2002) studied on-line dating in Egypt. She found that more than half of the respondents from both sexes reported being involved in on-line dating; although for different reasons. She stated that males' main reason for resorting to cyber-relationships was lack of self-confidence stemming from their inability to initiate off-line romantic relationships, peer pressure, and gender expectations. However, females were found to get involved in on-line relationships mainly because they are pressured by social norms which do not permit the formation of relationships with the opposite sex for females. Therefore, they resort to on-line relationships in an effort not to risk social sanctions because on-line relationships are supposedly anonymous.

Many researchers looked at how excessive use of the Internet can lead to addiction and some of its potential positive and negative effects. Hence, findings revealed that socializing through the Internet is convenient, provides some escape and anonymity. It may also improve users' mental well-being; reduce or alleviate their anxiety, loneliness, and depression. In addition, it can boost their social support, self-esteem, and cultivate their empathy, zest, empowerment, and trust in others (Griffiths, 2001; McKenna, 2002; Silverman, 2001; Weiser, 2001; Shaw, 2002; Peled, 2000; Sanders, 2000; Grohol, 2005; Shier, 2005; Young, 2001). For instance, Wheeler (2001 & 2003) studied the Internet and public culture as well as youth subculture in Kuwait. She found that more females than males reported using the Internet for leisure and meeting the opposite sex and, as a result, a large number of on-line couples end up meeting in person as potential partners for long-term relationships. Since Kuwait is a traditional and conservative small country which does not encourage the mixing of the two genders, the Internet was found to provide Kuwaiti youth with a way to twist the rules with minimal danger of publicity.

Some researchers focused on the negative side of Internet addiction. Thus, while the Internet offers youth the opportunity to instantaneously seek information using a variety of search engines; interact with others and, virtually, meet with members of the opposite sex through a variety of chat programs (ICR, ICQ, MSN, My-Space, Sitcom, Face-book, etc.); the addiction to it through spending prolonged periods of time over its IT programs leads to wasting much valuable time, building shallow and harmful relationships, and, eventually, causing rather than alleviating, users' depression, loneliness, social isolation, and withdrawal among other things, particularly to our youth (Peled, 2000; Griffiths, 2001; & Sanders, 2000).

Lynch (2007) looked at using the Internet for communicating with others about a variety of topics, including political issues. Hence, he was one of those who introduced the phenomenon of blogging to the Arab public. He stated that using the Internet and blogging (an alternative way of telling the news) are growing fast among youth in certain Arab countries. Blogs are found to allow youth to get engaged in politics and escape the red lines imposed by most Middle Eastern governments. As such, blogs seem to chip away at the sheltered Arab structures in an effort to bring in new voices and build new and warm relationships among otherwise distant Arab youth; or perhaps build such relationships across

the Arab-Western divide. He also assumed that blogs are breaking off the encrusted structures of the Arab authorities, bringing in new voices that had no outlet in the past, and testing the norms or expectations prevailing over the Arab public political discourse. Arab political blogs have the potential to hold the prospect of a new Arab public field that may reform the quality of politics. This wave of Arab blogging has been dominated early on by young bloggers who are technologically oriented, politically unengaged, and literally using English as a medium for their blogs. However, this is moving slowly to more politically engaged bloggers who dare to write in Arabic. The main purpose of this new type of media use (blogging) is to free arrested political activists through running campaigns, linking exchanges online, showing high resolution photos or embedded videos of protests, and the like.

The remaining two types of IT use, shopping and entertainment, did not receive as much attention by researchers as the first two (communication and searching for information). Many high school and university students have been downloading music through their use of the Internet and copying whatever they like on CDs. Some of those students made good money of selling certain CDs while others have been using their laptops to substitute for all other media namely, radios, televisions, videos, newspapers, magazines, periodicals, and even books. This fact led the music industry, particularly, Napster Music Services to file law suits against whoever does this and asked that some regulation is put into place. The parameters of music in the USA have been increasing significantly with the advancements of such companies like Napster and the technology to burn or copy CDs. In addition, bands such as Metallica have been leading the fight to eliminate the piracy of copyrighted music as well. However, no matter what kind of regulations or parameters are imposed, youth continue to illegally copy CDs and listen to whatever kind of music available for downloading.

As noted by this review of literature, the spiraling advance in IT has led to major changes in telecommunication practices amongst Middle Eastern people, especially their youth. Those practices have presented new political, cultural, and moral predicaments and prospects which have never had such a pattern in the history of that region. In such rapidly changing environment, communication plays a much more important role today than ever before in the Middle East. Hence, Middle Easterners, especially their youngsters, are actively using IT resources for multiple purposes. In addition, their IT resources have become an essential part of their lifestyle and social assets. Thus, developing interpersonal, business, and relational skills become very critical for their productivity and advancement in the information age. As such, the use of IT to facilitate their communication, e-commerce, learning, and relationship building becomes of utmost importance in the Middle Eastern region.

In sum, most of the reviewed studies found that new IT, the Internet and mobile phones in particular, have more positive than negative effects on Middle Eastern youth. In fact, they have been amazing phenomena since their introduction to the Middle Eastern societies wherein both genders do not have many opportunities to meet face-to-face without being chaperoned by someone in many of those societies. They are thought to have provided more benefits than vices to youth in that region. Although some argue that Internet and mobile-based communications are similar to face-to-face interactions with only minor differences pertaining to accessibility, anonymity, decreasing depression or loneliness, and fear of

rejection (Griffiths, 2001; McKenna, 2002; Shaw, 2002; Silverman, 2001); the author of this paper still argues that face-to-face interaction remains the most reliable and efficient channel of communication, due to many more nonverbal cues and immediate feedback. The argument is that Internet and mobile-based communications may become more efficient and reliable after the initial face-to-face interaction or meeting takes place. Hence, they become an integral part of or complementary component to face-to-face initial contact. How does this apply to Middle Eastern youth who are mostly afraid to meet face-to-face, due to cultural restrictions and how did they benefit from their IT? Do they use IT to communicate more than to search for information, shop, or get entertained?

This IT use by Middle Eastern youth was guided by the theoretical framework of Uses and Gratification for the purpose of helping us analyze and understand that particular use. Uses and Gratification Theory presumes that people are in control, active, and goal-directed, in contrast to passively receiving media messages. Hence, people take the initiative to link gratification needs with their media choices and uses, from among available alternative media sources (Blumler & Katz, 1974; Papacharissi & Rubin, 2000; Ruggiero, 2000). New IT offers easy accessibility, anonymity, asynchronicity, demassification, interactivity, and positivity or non-retaliatory features (Borzekowski & Rickert, 2001a; Ruggiero, 2000; Suzuki & Calzo, 2004; Williams, Rice, & Rogers, 1988). Therefore, Uses and Gratification Theory seems pertinent to studying youth's use of IT for a variety of timely needs gratification as it offers a good framework for examining why Middle Eastern youth turn to these new media types to communicate, disseminate, and obtain specific kinds of information as well as to shop and be entertained. Based on existing research with regard to using IT and the nature of most Middle Eastern societies, the following hypotheses were formulated:

Hypothesis 1: Middle Eastern youth will use IT tools more for communication than for anything else.

Hypothesis 2: Greater IT use will negatively affect Middle Eastern youth's personal communication (face-to-face) or socialization.

Hypothesis 3: Middle Eastern young females will use IT more than young males for shopping purposes.

Methodology

Participants

Participating in this study were 225 students of a midsize private university in the Middle Eastern region. The population of that university comes from about 80 different nations, mostly Middle Eastern countries, which may be considered a somewhat good representation of the Middle East. 75 participants were males (33%) and 150 were females (67%). Their age varied "between" 18-24. After participants' assents were attained, a 15-minute anonymous survey was administered during the academic year 2007-2008. In addition, 45 participants out of the same sample, agreed to write a short essay (self-report) concerning their use of IT.

Thus, the 225 youth anonymously responded to a 24 question survey and 45 of them agreed to confidentially self-report on their use of IT, namely cellular phones and Internet.

Measures

Mobile Phone Use: Mobile use variable was based on participants' responses to a 4-point Likert scale to certain survey questions pertaining to the number of Cellular Phones; duration of use per day; and specificity of that use.

Internet Use: Internet use variable was based on participants' responses to a 4-point Likert scale to a survey questions pertaining to longevity of Internet use at home, at school, and Internet cafés; number of e-mail addresses they have; duration of use per day; specificity of use; etc. Overall, multiple choice questions were asked so participants could easily designate their responses.

Results and discussion

For this study, 225 Middle Eastern youth participated in the survey and 45 students of the 225 agreed to confidentially write a short essay (self-report) concerning their IT use. Sample characteristics and descriptive statistics for mobile and Internet use consist of the percentages which are presented in Tables 1, 2, 3 respectively. Table 1 lists percentages concerning sample demographics. As shown in Table 1, 33% of the sample were males and 67% were females. Ages of participants varied between 18 and 24 and a large majority were sophomore and junior.

Hypothesis 1 states that Middle Eastern youth will use IT tools more for communication than for anything else. This hypothesis was not confirmed, for the results indicate that Middle Eastern youth use their IT tools to equally communicate, seek information, and be entertained, as can be seen in Tables 2 and 3 respectively. Hence, Middle Eastern youth's use of IT appears to be almost equally proportioned among the three activities: communication, entertainment, and searching for information (personal and/or class assignments). Their IT use for shopping purposes lagged behind the above mentioned three activities.

As can be seen from Table 2, mobiles were almost equally used for communication and entertainment (listening to music and playing games). However, females used their mobiles more for calling family and friends than for entertainment, while males used theirs more for entertainment than for calling. As to time of use per day, Table 2 shows that the large majority of males and females use their mobiles between 60-300 minutes (1-5 hours per day). This is a lot of time spent using the phone on a daily basis. There is one interesting finding which concerns the number of owned mobiles. While all males claimed to have only one

Table 1: Demographics
Sample Characteristics

Characteristics	Total (N = 225)	Male (N = 75)	Female (N = 150)
<u>Gender</u>			
Male	(33%)	(33%)	(67%)
Female	(67%)		
<u>Age</u>			
19 or Under	(27%)	(33%)	(26%)
20-24	(73%)	(67%)	(74%)
25-29	(0%)		
30-34	(0%)		
<u>Educational Level</u>			
Freshman	(0%)	(0%)	(0%)
Sophomore	(50%)	(52%)	(33%)
Junior	(31%)	(30%)	(33%)
Senior	(19%)	(17%)	(33%)

Table 2: Mobile Use

Descriptive Stats	Total (N = 225)	Male N = 75 (33%)	Female N = 150 (67%)
<u>Number of mobiles</u>			
1 phone only		(100%)	(54%)
2 phones only		(0%)	(34%)
3 phones only		(0%)	(0%)
4 + phones		(0%)	(12%)
<u>Time of use per day</u>			
0-60 minutes (m)		(30%)	(22%)
60-120 m		(34%)	(26%)
120-300 m		(35%)	(43%)
300 m +		(1%)	(9%)
<u>Specific use</u>			
Calling family & friends		(40%)	(60%)
Entertainment		(56%)	(40%)
Business		(4%)	(0%)
Other (specify)		(0%)	(0%)

mobile (100%), 54 percent of females stated that they own only one, 34 percent declared that they own two, and 12 percent affirmed that they own more than four mobiles. This may be due to the fact that females, unlike males, use different mobiles for different activities in the Middle East (one mobile to interact with family members, a second mobile to communicate with friends, a third one for romance, etc.).

Table 3, describes youths' Internet use. 25 percent of males declared that they have only one e-mail address and 75 percent have two. When it comes to females, none of them has only one e-mail address, 96 percent have either two or three (48% & 48%), and only four percent claimed to have four e-mail addresses. This does not seem a coincidence that females have more mobiles and more e-mail addresses than males. Middle Eastern female youth appear to have different and more varied uses for IT than males, may be because they have more secrets and want to hide certain things from people around them.

As to Internet access at home and in school, all sample males and females (100%) claimed to have access at both, home and school. Both males and females claimed that IT distracts them from studying (67% - 70%), causes them to sleep less (33% - 44%), and leads them to rely more on chatting than on calling. Only 13 percent of female youth affirmed to have used the Internet more responsibly and, hence, the Internet did not negatively affect them. When asked to elaborate on Internet effects on them, many of both males and females claimed to have "less studying time, less face-to-face interaction with family members and friends, more chatting with people of same interest or age groups, less sleeping time because of addiction and losing track of time using the Internet for chatting and watching movies."

As to the frequency of Internet use, 67 percent of males and 75 percent of females admitted to being addicted to the Internet because of their high use of that medium (4-7 hours a day); 33 percent of males and 44 percent of females claimed to be moderate users of this medium (1-3 hours a day); and only four percent of females asserted to be regular users (1-2 hours a day).

With regard to the question of overall importance of the Internet for them, 100 percent of males and 74 percent of females stressed that the Internet is very important to them; and only 26 percent of females emphasized that the Internet is just important to them. Concerning the question of overall self-rating of their IT use, only four percent of females claimed to be beginners; 67 percent of males and 44 percent of females asserted to be intermediate; and 33 percent of males and 52 percent of females confirmed to be advanced IT users.

Hypothesis 2 states that IT use will negatively affect Middle Eastern youth's personal communication (face-to-face) and socialization. This hypothesis was confirmed. Almost all 45 participants who self-reported on their IT use as well as a large percentage of respondents (males and females) who participated in the survey, when asked to elaborate on IT effect, have indicated that their IT use have affected their studying, sleeping, and socialization or face-to-face communication. While several participants claimed to have been positively affected due to their wise and responsible use of their IT tools, a large percentage of them pointed out to the negative effects their IT use has had on them.

Table 3: Internet Use

Total	Male	Female	
Descriptive Stats	(N = 225)	N = 75 (33%)	N = 150 (67%)
<hr/>			
NO of e-mail addresses			
Only one		(25%)	(0%)
Two		(75%)	(48%)
Three		(0%)	(48%)
Four or more		(0%)	(4%)
Internet Access			
Home		(100%)	(100%)
School		(100%)	(100%)
Types of Internet Use			
E-mailing		(100%)	(100%)
Searching for information		(100%)	(100%)
Chatting		(67%)	(87%)
Face-book		(100%)	(78%)
Entertainment (Music & Games)		(100%)	(95%)
Shopping		(67%)	(20%)
Affected Activities			
Distraction from studying		(67%)	(70%)
Sleeping much less		(33%)	(44%)
Chatting more & calling less		(67%)	(48%)
Responsible use/no effect		(0%)	(13%)
Frequency of Internet Use			
Addiction/High (4-7 hours a day)		(67%)	(75%)
Moderate (1-3 hours a day)		(33%)	(44%)
Regular (1-2 hours a day)		(0%)	(4%)
Infrequent use (few times a week)		(0%)	(0%)
Overall Importance of Internet			
Very important		(100%)	(74%)
Important		(0%)	(26%)
Somewhat important		(0%)	(0%)
Not important		(0%)	(0%)
Overall Self-Rate of IT Use			
Beginner		(0%)	(4%)
Intermediate		(67%)	(44%)
Advanced		(33%)	(52%)
Very advanced		(0%)	(0%)

Some of the typical positive and negative statements concerning participants' IT use are as follows:

Positive statements

“Sharing thoughts and helping spread a good word online such as, the blood drive to save others' lives...; the Internet is very useful when it comes to academic work; I use it

moderately; things like Facebook and chatting are a waste of time...; although I use the Internet often, but I use it wisely without it becoming a distraction. I usually have a purpose for using it and I don't just access it for no reason in mind; I can reach all information I want/need; I interact with people from all over the world using the Internet; the Internet helps me in my research work for the university; I find it easier to chat rather than calling; I cannot spend a day without using my mobile and checking all my Internet accounts; both of these tools have become like bread and butter for me;" etc.

Negative statements

" Due to my IT use, I have much less face-to-face interactions and socialization with family and friends, instead I have more chatting with people of the same interests or age group; chatting a lot with someone prevents me from seeing others face-to-face or talking to them when I see them; there is no need to meet people face-to-face, which is bad; I have no social life and I am dependent on Net friends; I don't have time for my social life as I am spending too much time in front of my laptop or mobile; when working on the Internet, I don't feel that time is passing so I end up sleeping very late; I lose track on the Net and therefore sleep much later than I should; because of the Internet or mobile, I concentrate less on studying, become less and less social, and feel tired all the time; Internet and mobile take-up the time I should spend studying; I spend much less time communicating face-to-face with others especially with family; I go on Facebook, download music, or browse the Net instead of giving my full attention to my studies or communicating face-to-face with others; I stay up chatting to my friends instead of sleeping; the Internet has made me socialize less; I choose to interact more through chatting rather than talking in person or face-to-face; using the Internet at home pulls me away from interacting with my family members;" etc.

Concluding remarks

As the results indicate, this survey and self-reporting research helped in discovering Middle Eastern Youth's descriptions of how they feel about the new information technology, themselves and their behaviors concerning the use of that technology as well as their understanding of the results of that use. While they appreciate this technology and admit that they cannot live without it anymore because it became necessary and very beneficial to them, they can also perceive and feel its danger, especially what has been called "mobile and/or Internet addiction disorder." However, this addiction does not seem very different from any other one people may have with regard to watching too much TV, reading too many stories and articles, working too many hours, or drinking excessively. Addiction to anything seems a way of escaping reality or busying ourselves with things that may help us forget certain real problems and fill certain void in our lives. Therefore, the new information technology is here to stay and we better get used to it. It should not be seen as a foe just because many of us grow to be dependent on it. It provides numerous essential benefits. It is prompt, economical, expedient, and educational. The only thing we need to be alert to is to wisely use it with some kind of self-control so it does not disrupt our daily schedules, cause us to neglect our duties towards important relationships or responsibilities, or make our lives miserable. Finally, there appears to be a pressing need for more comparative and coherent body of research across cultures pertaining to the impact and implications of new IT on our youth everywhere so they and we may be enlightened about and guided by the use of that technology.

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