Socializing on the Internet: Case Study of Internet Use among University Students in the United Arab Emirates

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## Abstract

This paper analyzes socializing on the Internet and attitudes towards the Internet as a medium of social interaction among university students in the United Arab Emirates (UAE). It stems from a larger research project conducted at seven different institutions of higher education in the Abu Dhabi Emirate between 2007-2009 through anonymous questionnaires. A total of 571 students (353 female, 183 male) participated in the survey. In this paper we present only a small portion of the data and focus on (1) the intensity and frequency of Internet use; (2) identity and gender hiding in the virtual environment; (3) meeting internet acquaintances in real life; and (4) attitudes towards the Internet as a medium for social interaction. Responses were cross-analyzed in light of the participants' gender, age, and subjectively-perceived social status. Essentially, we argue that Emirati students dedicate a substantial amount of time and turn frequently to activities related to socializing on the Internet. Yet we have found significant differences in Internet usage and attitudes towards socializing on the Internet along the lines of gender, age, and social status. Generally, respondents tend to hide their identity more than their gender in the virtual environment; yet, women tend to hide both their identity and gender significantly more than men. More than half of the respondents think that the Internet is a medium through which they can communicate without being subjected to prejudice; yet men tend to be more positive than women about being treated differently on the Internet when people do know their gender. Finally, respondents who perceive themselves as having a higher social status tend to hide their identity less and are less distrustful of relationships formed via the Internet than are their counterparts, who perceive themselves as having middle class social status. Overall, the findings presented in this paper suggest that although the Internet can largely act as a vehicle for resisting social exclusion and gender segregation, it can also simultaneously serve as a mechanism for reinforcing pre-existing norms within newly-networked traditional communities. On a more general level, this paper aims to contribute to our understanding of global patterns of Internet usage and the complex interplay between technology, culture and identity.

Keywords: socializing, social networks, United Arab Emirates, Abu Dhabi, internet usage, virtual identity, gender aspects, computer-mediated communication

## Introduction

This paper analyzes socializing via the Internet and attitudes towards the Internet as a medium for social interaction among university students in the United Arab Emirates (UAE). It stems from a larger research project conducted at seven different institutions of higher education in the Abu Dhabi Emirate between 2007-2009. In this paper, we present only a

small portion of the data and focus on (1) the intensity and frequency of Internet use; (2) identity and gender hiding in the virtual environment; (3) meeting internet acquaintances in real life; and (4) attitudes towards the Internet as a medium for social interaction. By doing so, we cross-analyze how Internet usage and attitudes towards the Internet change according to a respondent's age, gender, and subjectively-perceived social status. Essentially the findings presented in this paper suggest that although the Internet can largely act as a vehicle for resisting social exclusion and gender segregation, it can also simultaneously serve as a mechanism for reinforcing pre-existing norms within newly-networked traditional communities.

In the 1990s Internet penetration started to spread throughout the Arab world. Although the region generally suffered from "being on the low end of the digital divide" (Abdulla, 2007, p. 35), facing many challenges, including a lack of human and economic IT resources, funds for IT research and development, and solid telecommunications infrastructure, this situation is rapidly changing, since many Arab countries are currently striving hard to increase Internet penetration rates. These vary greatly in different Arab states, yet the region as a whole has witnessed an unprecedented rise in Internet penetration levels over the last few years (Abdulla, 2007, p. 45; Warf & Vincent, 2007; Internet World Stats, 2009), with the UAE having one of the most advanced ICT sectors in the region.

Internet use is increasingly more prevalent among younger age groups within the Arab world, especially the 20 to 30 year old age group (Abdulla, 2007, p. 50). There is a shortage in reliable data on the income levels and educational backgrounds of Internet users in the Arab world, but it is safe to say that Internet use is highest among urban, middle and upper class groups, as suggested in studies covering Morocco (Baune, 2005), Kuwait (Wheeler, 2006), Egypt (Abdulla, 2007), and Saudi Arabia (Sait et al., 2007). Similar to western societies, the Internet usage is a way of life for young, educated Arabs (Khalid, 2007). In the Arab world, the Internet is used for many reasons besides having access to news and gaining information. Instrumental sites such as search engines, social contacts through e-mail, blogs, and Facebook, as well as the discussion of taboo topics are just some of the uses; along with entertainment, sports, and search for moral guidance and religious advice through religious websites (Bunt, 2009; Hofheinz, 2005; Abdulla, 2007).

The emergence and rapid proliferation of the Internet in the Arab world raised various expectations about its impact on traditional Arab society. On the one hand, several authors argue that the Internet can possibly contribute to the empowerment of traditionally marginalized actors, especially in the social, political and religious domain. For example, Bunt (2000) and Poole (2002, p. 54) suggest that the openness of the Internet allows disenfranchised and marginalized groups to circumvent mainstream media and to subvert hegemonic discourses along the lines of gender, sexuality, and age. Similarly, Mernissi (2006, p. 121) argues that the introduction of the Internet in the Arab world has "destroyed the frontier that divided the universe into a sheltered private arena, where women and children were supposed to be protected, and a public one where adult males exercised their presumed problem-solving authority." More specifically, Wheeler (2008), in her study of the role of cybercafés in the lives of Egyptian women, shows that the Internet is said by users to increase information access/professional development, expand or maintain social networks and social capital, and transform social and political awareness.

On the other hand, some authors, like Castells (1996, p. 363), argue that the effect of the spread of Internet technologies is likely to be "the reinforcement of the culturally dominant social networks, as well as the increase of their cosmopolitanism and globalization." By the same token, Anderson (2008) discusses how the excitement over the revolutionary potential of new media and information technologies in the Middle East focused on them as alternatives. As such, he continues, new technologies and alternative channels suggested a

transformation of the public sphere, by empowering new voices and new people. Yet, as Anderson demonstrates, time and experience have outrun this paradigm and many new actors turned out to have roots in old establishments. Therefore, he argues that alternative models are insufficient "because they isolate actors as individuals from the larger story of how micro-processes of networked communication are working through today's macro-processes of globalization" (p. 1). Instead he suggests thinking of new information and communication technologies in the Arab world as a complex of "informational and technological mobility, of shifting reflexivities that intensify and remix cultural and other practices, and of highly unstable assemblages and contingent effects" (p. 1). It is precisely the complex interplay between technology, society, and culture that remixes and reinforces existing practices of social interaction in virtual environments: an issue we analyze in our paper.

Building on empirical research this paper aims to shed light on the heterogeneous role the Internet, and various media outlets it enables, play in social interactions in newly-networked societies. By doing so, it situates the gathered data in the broader political, economic and linguistic context of the United Arab Emirates. After providing an introduction to the development of the UAE and its information society, this paper details the respondents' demographics and characteristics. Its main section then presents key findings from questionnaires related to socializing via the Internet and discusses them in light of the respondents' age, gender, and perceived social status.

On a more general level this paper aims to contribute to our understanding of global patterns of Internet usage and the complex interplay between technology, culture and identity.

## The United Arab Emirates and its Information Society

The United Arab Emirates (UAE) was established as an independent state in December 1971 upon the British withdrawal from the Persian Gulf. The United Arab Emirates function as a federation with specified powers delegated to the UAE federal government and other powers reserved for member emirates.

The UAE's population is estimated at 4 621 000 and it has one of the highest growth rates in the world. At the same time it also has one of the most unusual population distributions in the world. It has a very high percentage of expatriates, a high male-to-female ratio and the population is young by world standards (UAE at a Glance 2009, 2009). The Emiratis create less than 20% of the country's population. The largest ethnic group is made up of Southern Asians, who account for more than 50% of the population. The rest of the population includes other Arabs and Iranians (23%) and other expatriates: Westerners and East Asians (8%). The vast majority of the population is Muslim (96%), mainly Sunni Muslims with only 16% being Shia Muslims. The remaining 4% of population subscribe mainly to Hinduism and Christianity (Central Intelligence Agency, 2009).

The UAE has become one of the richest countries in the Middle East during the past three decades. It has an open economy with a sizeable annual trade surplus and the UAE's estimated GDP per capita is $44,600 (Central Intelligence Agency, 2009). The prosperity of the UAE and its rapid economic development and transformation has been possible thanks to its oil revenues. The United Arab Emirates has been experiencing enormous development in every possible sector. This has subsequently brought critical changes to every aspect of UAE society. Rapid economic growth prompted the no less rapid diffusion of information and communication infrastructure and technologies, which has resulted in the emergence of a new information society in the country.

The Internet was introduced in the UAE in 1995. The UAE's principal motive for promoting Internet development has been to enhance its strong position as the business and technology hub of the Middle East and North Africa. The UAE has been steadily

consolidating this position. Nowadays it has one of the most advanced IT sectors in the region, benefiting from a relatively liberal business environment and good telecommunications and information technology infrastructure.

The telecommunications infrastructure in the UAE operated as a monopoly under national telecommunications provider, Etisalat, until 2006 when Du, a new competitor, entered the market. A majority stake, 60%, of Etisalat is owned by the UAE, and the remaining 40% of the company is owned by individual UAE nationals. At the end of 2009 Etisalat introduced the fastest home internet in the UAE announcing two new fixed broadband packages – up to 30 Mbps. Based on the Fibre to the Home (FTTH) technology, the new packages significantly boost the current Internet speed and encourage new avenues for internet surfing like online gaming, audio and video streaming. Etisalat has already connected 300,000 homes in the UAE to FTTH and aims to connect all UAE households through FTTH network by 2011. This will be yet another milestone in its own right (MENA Report, 2009).

UAE fixed line, mobile and Internet penetration stands well above the world average. Fixed line subscriptions reached 1.56 million subscribers and mobile subscriptions hit 10.7 million subscribers with 91 % being prepaid in November 2009. Internet subscription in the UAE grew by 32% from 2006 to reach 1.38 million subscribers in November 2009. Internet penetration thus reached 60% of the population with 2.5 estimated users per Internet subscription (Telecommunications Regulatory Authority - TRA, 2009). Broadband subscriptions, which are dominated by residential users, are growing far faster than dial-up. In 2006 broadband represented only 35% of Internet subscription while today it stands at 48% (TRA, 2009). The number of broadband subscribers is projected to reach 933,000 in 2012 (Business Monitor International, 2008, p. 28).
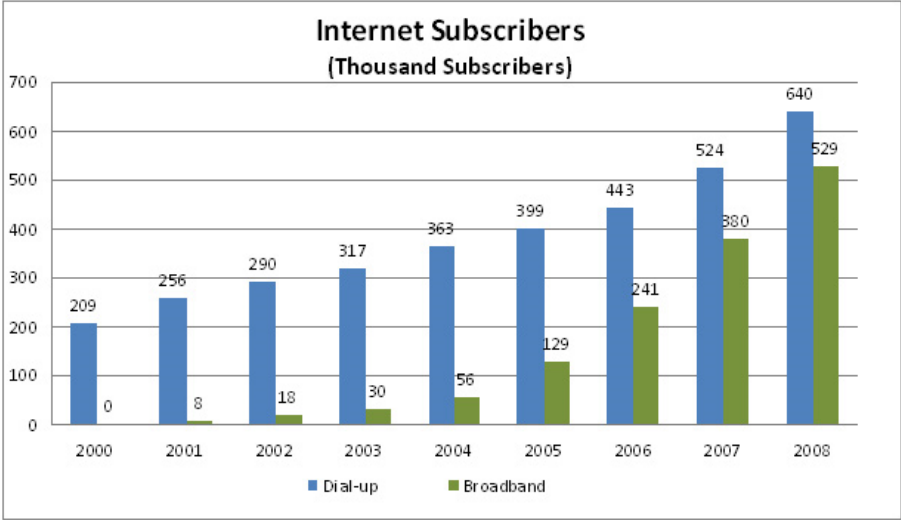


**Figure 1. The growth of Internet subscribers, dial up and broadband, in the UAE between 2000 and 2008. Source: TRA, 2009.**
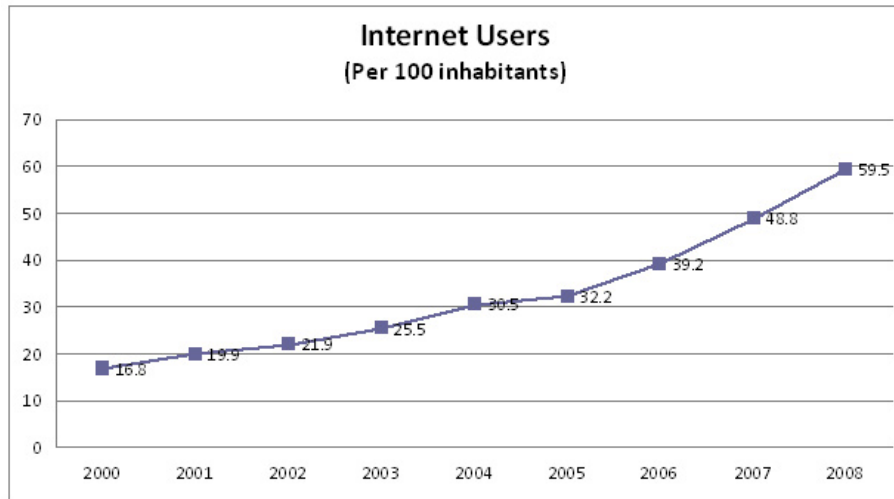
**Figure 2. The growth of Internet penetration in the UAE between 2000 and 2008. Chart based on the ITU method of calculating penetration rates, which assumes there are 2.5 users per Internet subscription. Source: TRA, 2009.**

One area of IT connectivity that is practically missing in the UAE is community centers. Developing these centers could provide a great service; especially to marginalized segments of the population. In terms of the digital divide within the UAE there exist discrepancies between populations living in cities and those living in rural areas. Local governments, mainly the governments of Dubai, Abu Dhabi and Sharjha, are enacting training and development programs to narrow this gap (Economic and Social Commission for Western Asia (ESCWA), 2007, p. 3).

In contrast to many Arab countries on the low end of the digital divide (Abdulla, 2007, p. 35), the UAE is rising rapidly higher on the opposite end of it. It has the highest percentage of population connectivity in the Arab world. The UAE is ranked first in the Arab World on the Networked Readiness Index (NRI), according to the Global Information Technology Report produced by the World Economic Forum. This index measures the propensity of countries to leverage the opportunities offered by ICT for development and increased competitiveness. The UAE was also ranked the highest on the Arab Innovation Index (ESCWA, 2007, p. 2) and it consistently ranks very highly when measured by the criteria provided in documents such as the World Summit on Information Society (WSIS) plan of action or the United Nations Development Programme (UNDP) human development report. The UAE has been involved in international projects related to the development of and to research on information society such as World Internet Project or World Summit on Information Society. The UAE was ranked highest among all ECSWA countries in e-Government readiness by the United Nations. The UAE government maintains its online presence and most of the government ministries have interactive websites: some only in Arabic and some both in Arabic and English. Cyber legislation in the UAE belongs to the most developed in the region. While most countries in the region have not yet enacted laws on preventing or combating computer crimes, in the UAE Federal Law No. 2 of 2006 on the prevention of information technology crimes has been in place for 3 years now.

Respondent Demographics and Characteristics

The data analyzed in this paper were collected as part of a more extensive research exercise conducted at seven different institutions of higher education in the Abu Dhabi Emirate using anonymous questionnaires. A total of 571 students participated in the survey. All the data gained through the survey were analyzed using an SPSS 17.0 for Windows.

The questionnaires were handed out to students in class where they were asked to complete them. Students who did not have time to finish the questionnaire in class and who were still willing to complete it were given the option of bringing it back to their professor within a week. Completion of the questionnaire was fully voluntary and the questionnaire was designed with a coversheet so that students could discreetly return it blank. The questionnaire was in English since each of the participating institutions requires their students to speak the English language. The questionnaire began with a background information sheet that asked the students questions relating to demographic data and information about their studies. One of the sections of the questionnaire explored respondents' socializing over the Internet. The first two questions asked about the respondents' experience with hiding their identity and gender on the Internet (Yes, Sometimes, No, Not Applicable) and meeting people whom they first met on the Internet (No, Yes), and how many people they then met face to face. The other two sets of questions presented statements about communication over the Internet measured using a five point Likert scale.

*Gender*

Out of the 571 students, 353 (65.7%) were female and 183 were male (34.1%). The fact that the female respondents outweighed the male respondents corresponds with the overall gender distribution of students in higher education in the emirate of Abu Dhabi [BARDSLEY, 2009].

*Age*

The respondents' ages ranged from 17 to 42 years. The average age of a respondent was 21.8 years. The majority of the respondents (90.19 %, n= 515, were between 18 and 30 and almost half of the respondents (49.3%, n=282) were between the ages of 20 and 22. For the purpose of cross tabulations we use three main age categories 17-20 years old: age group I (36.4%, n=208), 21-24 years old: age group II (44.8%, n=256)) and 25 years and older: age group III (12.3%, n=70).

The male respondents were noticeably older than female respondents. Only 8% of males were between ages 17 and 19, while 27.2% of female students belonged to this group. At the same time, 18.7% of male students were 26 years old or above compared to only 5.5% of female respondents.

*Perceived social status*

Respondents were asked about their perceived social status within UAE society. More than half of the respondents reported their perceived social status to be upper middle class (51.8%, n=296), slightly more than one-third of respondents reported high class (14.5%, n=83) and upper class (19.8%, n=113) and only 5.8% (n=33) of the respondents saw themselves as lower middle class, and 0.9% (n=5) of respondents put lower class. For the purpose of the cross queries this variable was recoded into two categories: higher class (33.4%, n=193) and middle class (58.5%, n=334).

*Field of Study*

The vast majority of students (93.3%) were enrolled in undergraduate programs, whereas only 6.7% of the respondents were enrolled in a graduate program. There were more than thirty different programs of study represented in the sample. The most represented field

of study was that of business: including business in combination with either IT, HR, Economics or Languages (15.81%). The second largest group was Education (10.6%) followed by Finance (8.8%), Mass Communications including a combination with Marketing (6.8%), and Architectural Engineering (6%).

*Citizenship and Nationality*

Respondents were asked to provide their citizenship. This was defined to them as the country from which they hold a passport. Although the sample included respondents with a total of 37 different citizenships, the vast majority of respondents (67.7 %), were citizens of the UAE. The next largest groups, based on citizenship, were those from Palestine and Jordan.

Apart from their citizenship respondents were also asked about their nationality, which was explained to them as the country to which they feel they belong, where they were born, and/or spent the largest part of their lives. This question was pertinent in the UAE context, where the vast majority of residents - who even may have resided in the UAE all their lives - don't hold an Emirati passport. The question regarding nationality was supported by an additional question asking for the number of years the respondent has lived in the UAE. The average length of time respondents have lived in the UAE was 19.3 years. The largest group of students (70.5%) reported having lived in the UAE between 18 and 24 years, which in most of their cases meant all their lives. The only other value of this variable that exceeded 2% of all respondents was respondents, who have lived in the UAE for only 2 years (2.3%), respondents who came to the UAE for their university education.

*Internet Users' Profiles*

Most of the respondents appeared to be frequent Internet users, who spend a significant amount of time on the Internet per week, who have used the Internet for about 8 years on average and who consider themselves intermediate to advanced Internet users.

Almost three-quarters of respondents (74.8%) reported that they connect to the Internet a few times a day. Respondents who connect to the Internet once a day accounted for 10.0% and those who connect a few times a week, but not every day, accounted for 12.3%. Just 0.7% of respondents reported that they connect to the Internet once a week and only 0.4% said they connect less than once a week.

In terms of time spent on the Internet per week the reported mean was 31.93 hours. More than one-fifth (21.4%) of respondents use the Internet for 10 hours a week or less. Those who spend more than 10 to 24 hours a week on the Internet accounted for 22.4%. Less than one-fifth of the respondents (19.1%) spend 25 to 39 hours a week on the Internet and those respondents who spend 40 and more hours on the Internet a week accounted for 23.8%.

The highest number of respondents (17.3%) has been using the Internet for 10 years. Almost half of the respondents (47.7%) have been using the Internet for 5 to 8 years. Only 14.5 % of respondents reported using the Internet for more than 10 years, while 20.7% reported using it less than 5 years.

More than half of the respondents (52.0%) consider themselves advanced Internet users. Intermediate Internet users accounted for 39.2% and only 7% of respondents rated their Internet skills as those of beginner.

Socializing over the Internet and Cross-Queries

The analysis of different activities conducted by the respondents on the Internet showed that students dedicate a significant amount of time and also turn frequently to activities related to socializing on the Internet. In relation to their social activities on the Internet, respondents were asked to answer further questions. For each of these items, we first look at the frequencies of their responses followed by the analysis of the distribution of these variables within gender, age groups, and social status groups.

*1. Identity/ Gender hiding in the virtual environment*

Respondents were asked whether they hide their real identity and their gender on the Internet. It appeared that they tend to hide their identity and not hide their gender. While more than a quarter (25.6%) of respondents said they hide their identity and almost half (48%) of the respondents sometimes hide their identity, respondents hiding their gender online accounted for only 14.2%. Those who sometimes hide their gender stood at 26.3%. Similarly, almost half (47.5%) of the respondents stated that they don't hide their gender and 17.7 % reported that they don't hide their identity in the virtual environment. Only 3.3% and 5.4% of the respondents answered "not applicable" for hiding identity and gender online, respectively.

Looking at the distribution of these variables between genders it appears that overall women tend to hide both their identity and their gender more than men. Almost one-third (30.2%) of female respondents hide their identity on the Internet, while only about a fifth (21.1%) of male respondents does so. On the contrary, slightly more male students (54.6%) reported that they sometimes hide their identity than did female respondents (48.9%). Exactly one-fifth of male respondents (20%) and less than one-fifth of female respondents (17.8%) said they don't hide their identity on the Internet, and 4.3% of men and 3.1% of women checked "not applicable".

In terms of hiding one's gender on the Internet, the differences between genders were even more pronounced. Almost ten percent less males (8.8%) than females (18.2%) responded that they hide their gender, five percent less males (24.9%) than females (29.9%) said they sometimes hide their gender, and about ten percent more males (57.5%) than females (47.6%) stated they don't hide their gender. "Not applicable" was checked by 8.8% of male and 4.3% of female students.
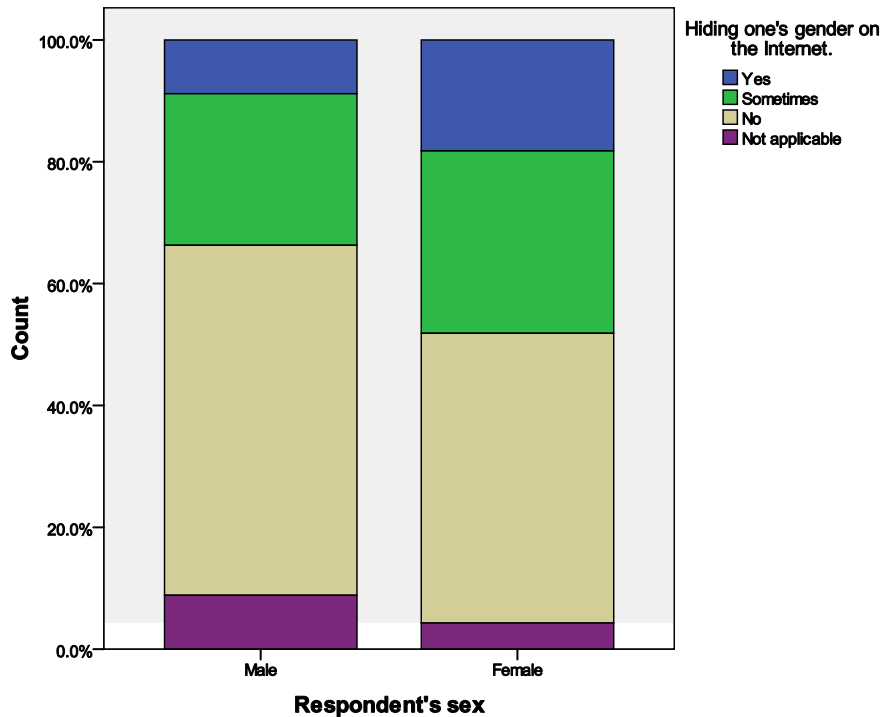
**Figure 3. Differences between males and females in hiding their gender on the Internet.**

There were no significant differences in terms of hiding identity on the Internet among the three age groups. In terms of hiding gender on the Internet the differences among the age groups were not that significant either, although there was a slight tendency not to hide one's gender on the Internet with increasing age. While 52.5% of the youngest respondents and 49.6% of the age group II said they don't hide their gender on the Internet, 58.1% of the oldest respondents said so. Similarly, 16.5% of the youngest group I, 14.3% of the group II and 12.9% of the oldest group III answered "yes".

Respondents of higher social status tend to hide their identity slightly less than those from the middle social status group. A similar proportion of the respondents from both subjectively-perceived social status groups said they do hide their identity on the Internet, while a higher proportion of respondents from the middle social status group (53.3%) than from the higher social status group (46.8%) said they sometimes hide their real identity on the Internet. A higher proportion of respondents of higher social status (22%) than of the middle social status (15.8%) said they don't hide their real identity. In terms of hiding gender on the Internet, the differences between the two groups were more significant. A higher proportion of respondents from the higher social status group said that they both hide it (18.1%) and don't hide it (56.6%) than did respondents from the middle social status group (yes: 13.6%; no: 48.7%). Middle social status groups had a significantly higher proportion of respondents, who said they sometimes hide their gender on the Internet (30.4%).

*2. Meeting Internet acquaintances in real life*

When asked whether they have met anybody in real life that they first met on the Internet, respondents' answers "yes/no" split roughly in half: slightly more respondents (49.7%) reported that they had not met anybody whom they first met on the Internet as opposed to 45.2% of those who have. Approximately half of those who answered "yes" also provided the additional answer on how many persons they have met that way. Less than half

of those respondents reported having met between 1 and 3 persons this way and more than half of them (54.5%) that they met four or more persons.

A higher percentage of men (57.1%) than of women (42.9%) reported that they have met somebody in real life that they first met on the Internet. Conversely, 42.9% of men and 57.1% of women said they did not. Men also reported higher numbers of persons whom they met this way than women. About half of women (50.3%) and slightly more than half of men (54.3%), who said they had met somebody in real life that they first met on the Internet, also provided a specific number of persons they met this way. More than half of the women (53.3%), who responded to this question, reported they met between one and three persons while only 35.1% of men met between one and three persons. The rest of the men and women who answered reported having met four or more persons this way.

The higher percentage of respondents between ages 21 and 24 (51%) in comparison to the younger (46%) and older (47%) group of respondents reported they have met somebody in real life, whom they first met on the Internet. Looking at the differences in the number of persons they have met, it appears that the older groups report to have met higher numbers of persons. While 55.3% of the youngest group I reported they have met one to three persons, only 40.3% of the age group II and 31.3% of the age group III did so. Similarly, 44.7 % of age group I, 59.7% of age group II, and 68.8% of age group III reported having met more than 4 persons in real life whom they first met on the Internet.
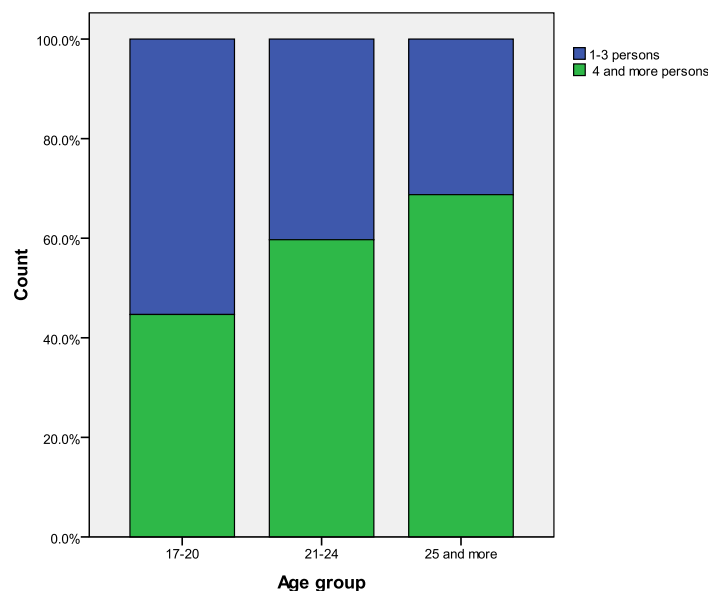


**Figure 4. The number of persons different age groups reported to have first met on the Internet and then later in real life.**

While more than half of respondents from the higher social status group reported having met somebody in real life whom they first met on the Internet (53.5%), the same proportion of the middle social status group reported that they had not (53.6%). There were no significant differences in the number of people respondents from both social class groups have met that way: less than 50% of both groups have met between 1 and 3 persons and the rest four persons and more.

*3. Attitudes towards the Internet as a medium for social interaction*

Since the communication between young people of opposite sexes in the UAE is limited for cultural and religious reasons, students were asked what their opinion is about

different statements regarding the Internet as a medium for social interaction, especially for facilitating communication between males and females.

More than half of all respondents (53%) think that the Internet is a medium via which they can communicate without being subjected to prejudice, while only 7.2% did not agree with this statement and more than one-third of respondents (34.7%) felt neutral about it. In terms of differences between genders, the female and male students' opinions about this statement did not differ significantly.

Looking at the distribution of this variable among the three age groups, the group II was the most positive about this statement with 59.7% of its respondents (compared to 54.% of group I and 49.3% of group III) agreeing that they can communicate without being subjected to prejudice on the Internet. The age group III was the most neutral (41.8%) followed by age group I (37.9%) and group II (33.3%). A similar percentage of all three groups disagreed with this statement.

A significantly higher proportion of respondents from the higher social status group (62.2%) than the middle social status one (52%) agreed that they can communicate without being subjected to prejudice on the Internet. Yet a higher proportion from the middle social status group (41.6%) than the higher social status (30.9%) was neutral about the statement. Approximately the same percentage of both groups disagreed with it.
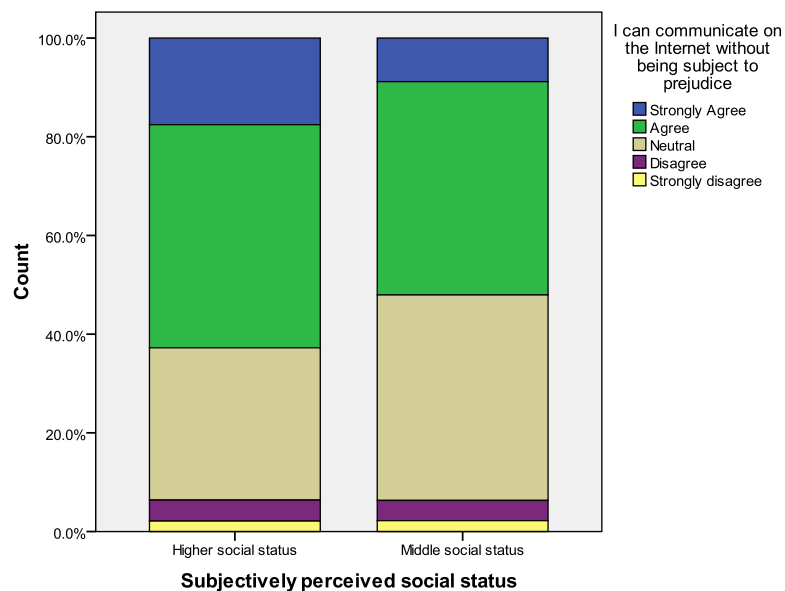


**Figure 5. Distribution of attitudes towards the Internet as a medium where one can communicate without being subject to prejudice within social status groups**

When asked whether they agree with the statement that they are treated differently on the Internet when people know they are female or male, respondents tend to be evenly distributed in their opinions. More than one-third of them (37.8%) agreed, less than one-third (31.3%) was neutral and about one-quarter disagreed (25.6%). These results also seem to correspond with the above-reported fact that almost half of them don't hide their gender on the Internet.

Men, more so than women, tend to think they are treated differently when others know their gender. While 44.6% of men agreed that they are treated differently on the Internet when people know they are female or male, only 37.7% of women agreed. A higher percentage of women than men were both neutral (34.8%; 29.9%) and disagreed (27.5%; 25.5%).
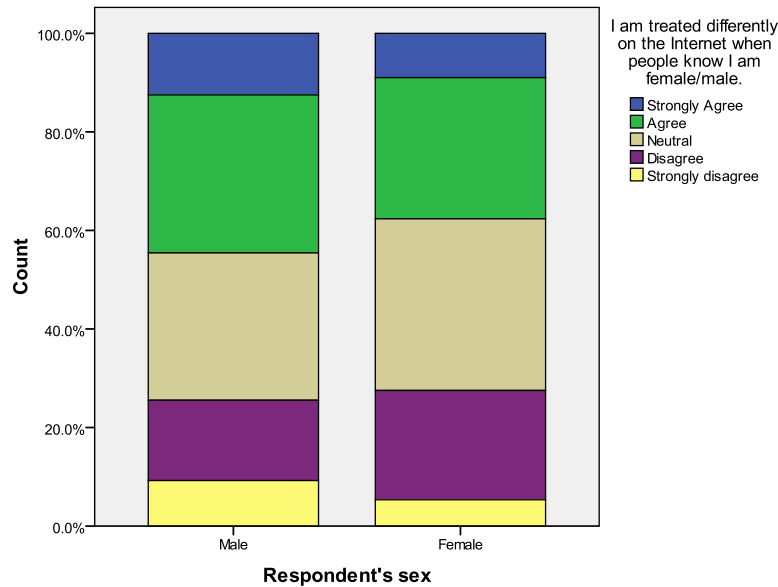
**Figure 6. Distribution of responses within genders regarding the statement that they are treated differently on the Internet when people know their gender.**

The youngest respondents (age group I) appeared to be more negative (30.6%) about the statement that they are treated differently on the Internet when people know their gender than did the two older age groups (II: 26.3%, III: 24.2%). Only 36.1% of age group I agreed with this statement in comparison with 42.2% of group II and 42.5 % of group III. Approximately one-third of each age group was neutral about this issue.

The higher social status group was more in agreement (42.8%) with the statement that one is treated differently on the Internet when people know his or her gender than the middle social status group (38.5%).   The latter was in turn more neutral (34.1%) about this than the higher social status group (30.5%).

Students tend to think they cannot trust relationships formed on the Internet. Slightly more than one-fifth (20.7%) of respondents agreed that they can trust relationships formed on the Internet, one-third of them (33.1%) were neutral about this statement and 41.2% of them disagreed.

Women tend to trust relationships formed on the Internet less than men.  46.7% of women did not agree with this statement compared to 36.8% of men. A higher percentage of men (40.5%) than women (32.0%) were neutral about trusting relationships formed on the Internet and about the same percentage of men and women agreed.

All age groups tend not to trust relationships formed on the Internet.  The highest number of respondents of age group I (46.9%) and II (42.6%) did not agree with this statement. Only age group III had a higher percentage of neutral responses (49.2%) than negative (38.4%), but at the same time it had the lowest rate of positive responses (12.3%). Age group II was the most positive having the highest percentage of "agree" responses (25.8%) in comparison with age group I (19.7%) and age group III.

Respondents from the middle social status group tend to trust relationships formed on the Internet less (agreed: 19.4%; disagreed: 44.9%) than those from the higher social status group (agreed: 27.1%; disagreed: 41.5%).  They were also more neutral (35.7%) about the statement than the higher social status group (31.4%).
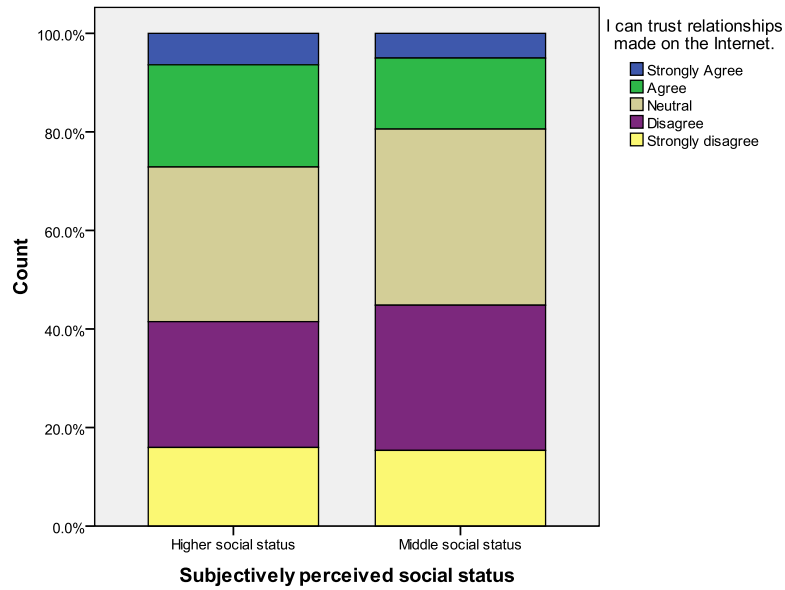
**Figure 7. Distribution of opinions about trusting relationships formed on the Internet within social status groups.**

Close to half of all respondents (45.1%) agreed that it is easier to meet people on the Internet than in real life, while only about a quarter of respondents (24.3%) disagreed with this statement. This left about a third of respondents' answers (31.1%) as neutral. In terms of differences between genders, the female and male students' opinions about this statement were similarly distributed.

All age groups tend to think that it is easier to meet people on the Internet than in real life with the age group II (51.5%) being the most positive about it in comparison to the groups I (46.3%) and III (42.4%). When compared to the age group I (26.6%) and II (23.3%), the age group III appeared to be the most neutral (39.4%) and also the least in disagreement (18.2%) with the statement. The group showing the highest level of disagreement was age group I (27.1%).
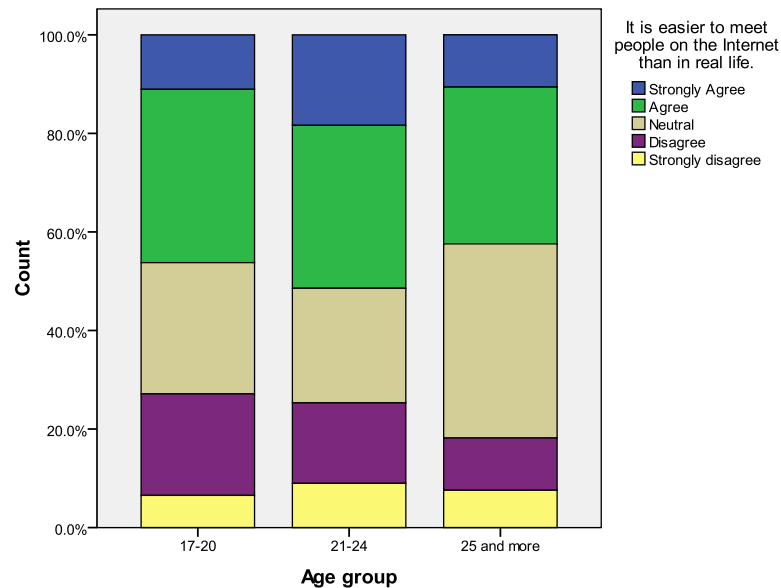


**Figure 8. Distribution of responses within age groups regarding the statement that it is easier to meet people on the Internet than in real life.**

There were no significant differences in the distribution of the responses to the statement that it is easier to meet people on the Internet than in the real life between the subjectively-perceived social status groups.

Respondents tend to think that it is easier to communicate with the opposite sex over the Internet. While 41.9% of respondents agreed with this statement, 31.3% were neutral and 22.1% disagreed.

More male respondents (47.8% agreed) find it easier to communicate with the opposite sex on the Internet than do female respondents (41.7%). A higher percentage of women (25.2%) than men (19.4%) disagreed with this statement leaving about the same proportion of women and men being neutral.
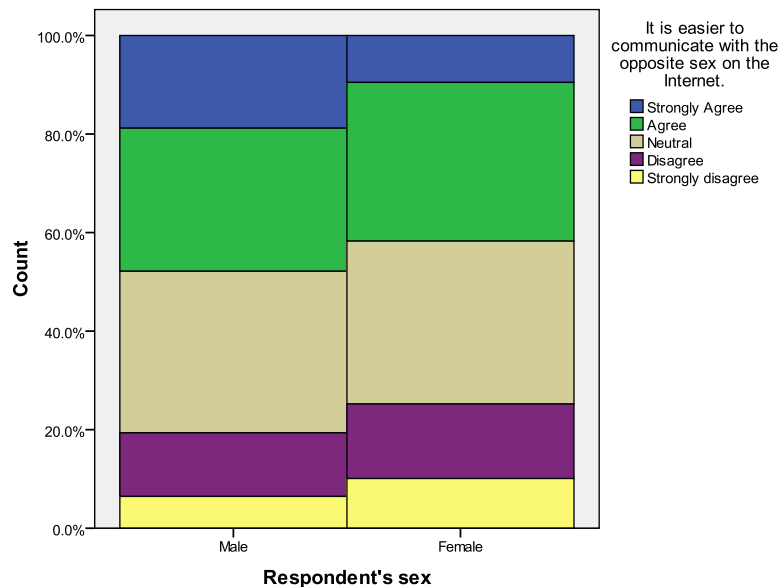


**Figure 9. Distribution of responses within genders regarding the statement that it is easier to communicate with the opposite sex over the Internet.**

The age group II was the most positive (48.4%) about the statement that it is easier to communicate with the opposite sex over the Internet. Respondents from the age groups I (43.8%) also tend to think that it is easier to communicate with the opposite sex over the Internet than to do so in real life, while the same percentages of the oldest group III were positive (38.8%) and neutral (38.8%) about it. The age group II was significantly less neutral (27%) about this statement than the other two groups (I: 36.2%) and similar proportions of all the groups disagreed.

Respondents from the higher social status group were more in agreement (47.3%) about the statement that it is easier to communicate with the opposite sex over the Internet than those from the middle social status group (43.3%). In turn, a higher proportion of the middle social status group (24.6%) than of the higher social status group (20.2%) disagreed with this statement.

Responses to the statement that it is inappropriate to communicate with the opposite sex over the Internet were quite evenly distributed: 26.3% of respondents agreed, 30.6% of them were neutral and 32.4% disagreed with the statement.

Looking at the distribution within genders, it appears that male respondents (32.1%) find it slightly more inappropriate to communicate with the opposite sex over the Internet than do female respondents (28.2%). The proportion of respondents who didn't find it inappropriate and who were neutral about it was similar among men and women.
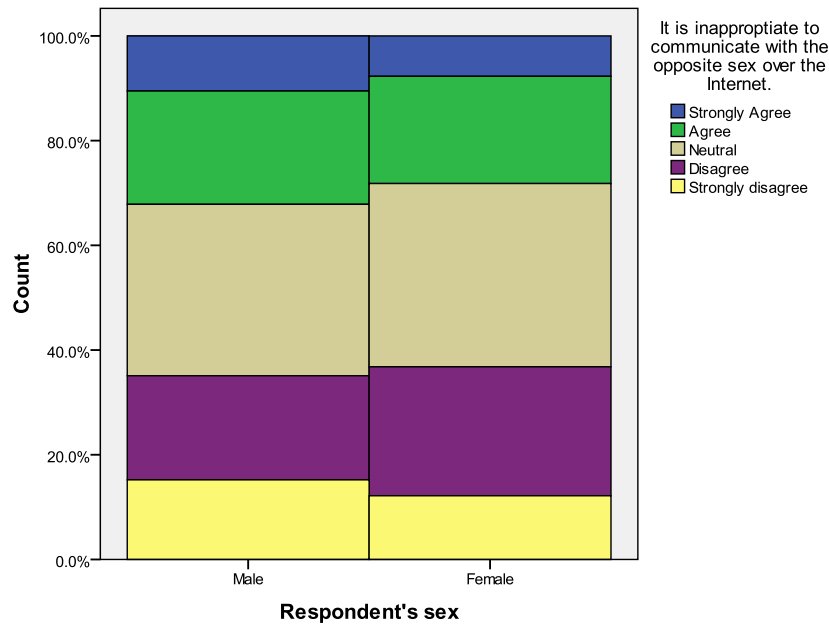
**Figure 10. Distribution of responses within genders regarding the statement that it is inappropriate to communicate with the opposite sex over the Internet.**

The group of the oldest respondents (III) agreed the most (33.4%) with the statement that it is inappropriate to communicate with the opposite sex over the Internet compared to 30.8% of respondents who agreed from age group I and 27% of respondents from age group II. The youngest group I was most in disagreement (42%) with this statement followed by the group II (34.4%) and III (31.3%). And group II appeared to be the most neutral (38.6%) about this statement, closely followed by the oldest group (35.4%) with only 27.3% neutral responses from the youngest group I.

The higher social status group was less neutral (31.6%) about the statement than the middle social status group (35.9%) with similar proportions of agreement and disagreement in the responses of both groups.

Conclusion

The Internet and new media are only part of a complex and interrelated set of variables influencing patterns of social interaction in the Arab world. Economic and cultural globalization, together with growing access to higher education, are similarly redefining norms and values pertaining to social relations, especially between genders.

The current generation of university and college students in the United Arab Emirates receives high quality, outward-looking education and is generously supported in their future careers by the government's policy of Emiratization. These students are often taught by professors from Western universities and have a broad awareness of the outside world. At the same time, they face challenges brought about by a large cultural and social gap between them and their parents' and grandparents' generations. These characteristics of the young Emirati population, including the fact that students are technologically savvy and the Internet plays an important role in their lives, have to be taken into account when discussing the outcomes of our research.

In this paper we specifically focused on the analysis of students' socializing via the Internet and attitudes towards the Internet as a medium of social interaction; especially between genders. Essentially, the analysis shows that the majority of respondents hide their identity on the Internet (at least sometimes), and that they tend to hide their identity more than

their gender in the virtual environment. There were slightly more respondents who reported not having met anybody whom they first met on the Internet than those who have met somebody that way. Less than half of those respondents, who said they have met somebody this way, reported having met between 1 and 3 persons and more than half of them four or more persons. Respondents tend to think that the Internet is a medium through which they can communicate without being subject to prejudice; yet, they think that they are treated differently on the Internet when people know they are female or male. Although they tend not to trust relationships formed on the Internet, they tend to think that it is easier to meet people on the Internet than in real life and that it is easier to communicate with the opposite sex over the Internet. Their opinions about the statement that it is inappropriate to communicate with the opposite sex over the Internet were quite evenly distributed between negative, neutral and positive.

More importantly, when we looked at the distribution of responses within genders, various age groups, and subjectively-perceived social status groups, the following differences became apparent:

*Gender*

Women tend to hide both their identity and, to an even larger extent, their gender on the Internet more than men do.

A higher percentage of men than of women reported that they have met somebody in real life that they first met on the Internet. Men also have higher numbers than women, as regards persons whom they first met on the Internet and then later in real life.

Men tend to be more positive than women about the statement that they are treated differently on the Internet when people know their gender; they tend to trust relationships formed on the Internet more than women, and they find it easier to communicate with the opposite sex on the Internet. At the same time, however, they find it slightly more inappropriate to communicate with the opposite sex over the Internet than women do.

These findings in fact closely correspond with those of Abdulla (2007) investigating the uses and gratifications of the Internet among students of the American University in Cairo (AUC). In her study, gender similarly appeared to be a significant factor. Essentially, males were more likely to use the Internet for social interaction than females, and females were more likely to use it for information-seeking purposes. Abdulla (2007, p. 144) suggests, that "culture may explain this finding, since males in the Arab world are always expected to take the initiative in meeting a member of the opposite sex, while females are almost never expected to do so." According to Abdulla, males are therefore more accustomed to "starting a conversation with a stranger" than females, and the Internet provides a new, exciting venue for them to do this.

*Age*

There are no significant differences in terms of hiding identity on the Internet among the three age groups, and there appeared to be a slight tendency not to hide one's gender on the Internet with increasing age.

A higher percentage of respondents between ages 21 and 24, in comparison to the younger and older groups of respondents, reported having met somebody in real life whom they first met on the Internet. They were also the most positive about communicating on the Internet without being subject to prejudice, about trusting relationships formed over the Internet, about the statement that it is easier to meet people on the Internet than in real life and about the statement that it is easier to communicate with the opposite sex over the Internet.

Respondents older than 24 years appeared to be the most neutral about the statements regarding Internet as a medium of social interaction, especially about communicating on the Internet without being subject to prejudice; trusting relationships formed over the Internet; and about the statement that it is easier to meet people on the Internet than in real life. They also seemed to be the most conservative: they had the highest proportion of respondents, who find it inappropriate to communicate with the opposite sex over the Internet.

The youngest respondents, between age 17-20, appeared to be more negative about the statement that they are treated differently on the Internet when people know their gender, and about the statement that it is inappropriate to communicate with the opposite sex over the Internet. However, at the same time, they tend to trust relationships formed over the Internet the least of all three age groups.

*Subjectively-perceived Social Status*

Respondents who perceive their social status as higher tend to hide their identity slightly less than those of the middle social status group. In terms of hiding gender on the Internet, they reported both hiding it and not hiding it to a larger extent than the middle social status group. A higher percentage of the higher social status group reported having met somebody in real life whom they met first on the Internet.

In general, respondents who perceived their social status as higher appeared to be more positive about the functions of the Internet as a medium for social interaction. They were more positive about the Internet as a medium through which they can communicate without being subject to prejudice; they agreed more with the statement that one is treated differently on the Internet when people know his or her gender and also with the statement that it is easier to communicate with the opposite sex over the Internet. They were also slightly less distrustful of relationships formed over the Internet than their counterparts who perceived themselves as being of middle social status.

These findings seem to affirm the research of Bunt (2009) who argued that the impact of the Internet is felt differently in varied sectors of the Arab public, and that there are inherent limitations in social, cultural, and economic contexts.

*Concluding Remarks*

Essentially, the findings presented in this paper suggest that although the Internet can largely act as a vehicle for resisting social exclusion and gender segregation, it can simultaneously serve as a mechanism for reinforcing pre-existing norms within newly-networked traditional communities. At the same time, our findings warn against the tendency to perceive the influence of the Internet on shaping social interaction in the Arab world in the light of a simple "cause" and "effect" equation. One must acknowledge the complexity and subtlety of the process of networked communication and social interaction on the Internet. This is particularly important in light of various predictions made about the inherently democratizing nature of the Internet and its promotion of "new voices" and "empowerment of marginalized actors" in all the political, religious and social domains, as pronounced for example by Telhami (2002), Alterman (2005), or Lynch (2005).

Indeed, regarding the gender issue, the Internet allows the expression and vocalization of long-silenced female voices in the Arab world, as shown for example by the study of Internet bulletin boards in Saudi Arabia by Samin (2008). Similarly, the findings of El-Nawawy and Khamis' (2009) study on Islamic websites revealed that women are increasingly becoming active participants in the virtual public sphere by posting in both general as well as gender-restricted (women's only) websites.

At the same time, regarding the socio-economic domain, the Internet's expanding audiovisual potential helps greatly in widening its appeal and accessibility among larger segments of the population in the Arab world; thus, breaking down the illiteracy barrier and narrowing the digital divide between the information "haves" and "have-nots" in various strata of Arab societies. The Internet is becoming available to vast segments of the wider public in the Arab world, rather than being restricted only to elites, intellectuals, and those in power. For example, Abdulla (2007, p. 48) reports that there are currently a huge number of Internet cafes in Egypt: even in the most rural and the poorest areas throughout the country. Nevertheless, having equal access to the Internet does not imply similarly equal position in social interaction within the virtual environments, nor equal perception of such interaction.

Abdulla (2007, p. 151) predicted that "social interaction on the Internet, although a new concept to the Arab world, has the potential to provide a basis for the creation of a more understanding and a more accepting people, [and] the creation of online virtual communities that could lead to a more democratic and more active civil society." This article has demonstrated that, although the online virtual communities in the Arab world are becoming increasingly open to previously-marginalized actors and voices, social inequality – both in gender and social status – still has a significant influence on the content of social relationships and social interactions on the Internet.

## About the Authors

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## Acknowledgements

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