

Social Anxiety And Usage Of Online Technological Communication Tools Among Adolescents

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Abstract

With the growing popularity of Internet communication applications among adolescents, the Internet, online social sites, instant messaging and cell phones have become an important social tool for their development. For adolescents who perceive low friendship quality, Internet use for communication purposes predicted less depression, whereas Internet use for non-communication purposes predicted more depression and more social anxiety. This study examined teens' use of social interactive technologies and the role that social anxiety plays on how adolescents communicate with others (technology or face-to-face). The questionnaire was prepared to apply in Afyonkarahisar, Manisa and Uşak cities in order to measure any relationship between social anxiety and choice of communication options among adolescents. Questionnaire data were gathered from High School adolescents (ranged from 15-18; freshman, sophomore, junior and senior) included 544. Adolescents almost don't use messenger sites and mail address. They generally use instant message with their cell phones. They spend 1-2 hours for a day by listening music and average 30 minutes during the day by using Facebook. More than half of teens have cell phones that able to call, message and access to Internet. The findings of the current study found that females are using text messaging more than males. However, males are playing games for a long time than females. In addition, females are feeling more uncomfortable talking with others face-to-face than males. And, females also prefer talking with some on computer instead of talking face-to-face than males. Similarly, females prefer making new friends with someone on computer more than males.

Keywords: Social Anxiety, Communication Tools, Technology, Adolescents

1.INTRODUCTION

The use of socially interactive technologies, such as online social sites, text messaging or instant messaging is rising among young people (Pierce, 2009). Among adolescents, the Internet has become indispensable for instrumental purposes such as school work information gathering as well as for communication purposes. The communication applications of the Internet, such as e-mail, instant messaging (IM), blogs and chat rooms have entrenched

themselves in the lives of adolescents and the Internet has become an important social context in the lives of adolescents today. In fact, a national survey of adolescents (10-17 years of age) revealed that in the year before they were surveyed 25% of Internet users had formed casual online friendships (Wolak et al., 2002; Subrahmanyam and Lin, 2007).

Instant messaging is also an increasingly popular form of communication. A study by the Pew Internet and American Life Project found that 53 million Americans use IM, and 36% of these users reported using IM on a daily basis (Shiu and Lenhart, 2004). IM is a textbased form of communication in which two or more people exchange text messages in realtime using the Internet (Lenhart, 2005).

Some researches suggest that socially interactive technologies allow users to avoid or replace face-to-face communication (Nie and Erbring, 2000). If the person is shy (socially anxious) and feels uncomfortable with face-to-face interactions, these technologies may serve as a useful tool for avoiding such unpleasant situations and therefore may replace face-to-face communication (Pierce, 2009).

US, Canadian and Dutch studies have shown that the vast majority of adolescents spends several hours daily online. Further surveys show that adolescents consider the Internet a highly important medium in their everyday social life and use it to form and maintain social relationships (Selfhout et al., 2009).

Social anxiety, social phobia and shyness are features that seen every individuals of all ages. Both adolescents and adults who have social anxiety against life and their environment scope, has led to more research on them. This study is related on teens that high school level about 15-18. The reason selecting this age range takes place the beginning of puberty and the end of puberty. Because, puberty is a vital phase for growing of young people and determine their personalities. The study is not only for Afyonkarahisar teens but also Uşak and Kütahya provinces are included. The purpose of this study is to research adolescents' use of online sites, computers, text messaging, cell phones and instant messaging related to social anxiety effective technological tools versus face-to-face communication. Because, especially 15-20 years-old-teens have been noticed to use on-line communication means having faster and interactive features rather than having face-to-face communication while talking to their friends or their parents. Consequently, in this study, whether the reason for this choice has a connection with social anxiety or gender will be researched.

1.1. Internet Use Among Teens

Usage of the Internet continues to increase worldwide. Colley and Maltby (2008) indicated that, in the UK 57% of households now have access, in comparison to 46% four years ago (National Statistics, 2006). The Digital Future Project in the US has found that 78.6% of Americans went online in 2005, with an accompanying increase in the amount of time spent per week on the Internet (Centre for the Digital Future, 2005).

Many of the studies in this area have been conducted with university students, in part because of their widespread use of the Internet as a social tool; indeed such use among students is increasing. In addition, a number of studies have found a high prevalence of social anxiety among university students who may then turn to the Internet as a way of regulating, challenging or escaping their social fears (Shepherd and Edelman, 2005). Many university students commenting that they are shy in social situations, but are more open, easy going on

the net, in chat rooms. They are shy about approaching people at a party or in large group, for example, but not about talking to people in chat rooms.

1.2. Cell Phone Use Among Adolescents

Auter (2007) researched that some of them related to adolescents and young adults use the cell phone differently than their parents and other older users. They prefer to consider it their primary phone – in lieu of the traditional landline phone – for its. Some studies have found little or no difference in use based on gender (e.g., DeBaillon, 2003; DeBaillon and Rockwell, 2005). Other studies have found, however that boys tend to be more intrigued with technical aspects of the devices, while girls tend to prefer the interpersonal connectivity – and spend more time using their phones for voice calls (Henderson et al., 2002; Rakow and Navarro, 1993; Skog, 2002). In fact, while women in one study felt the phones resulted in more freedom, male teens found the additional connectivity a constraining inconvenience (Auter, 2007).

A recent Pew Internet research study found that approximately 33% of teens have a cell phone. Of the 33% of teens who reported owning a cell phone, approximately 64% said they had sent text messages. In addition, the Pew study found that of the young cell phone users, teenage girls tended to use text messaging much more than their male counterparts. Older teens (17 year olds) also reported sending more text messages on average than younger teens. Although cell phone use and text messaging have risen among U.S. teens, their popularity remains considerably less than European teens (Lenhart et al., 2005; Pierce, 2009).

Seventy-five percent of teenagers now own cell phones, and 25% use them for social media, 54% use them for texting, and 24% use them for instant messaging. Thus, a large part of this generation's social and emotional development is occurring while on the Internet and on cell phones (Hinduja and Patchin, 2007).

2. SOCIAL ANXIETY

Social anxiety has variously been referred to as both shyness and social phobia. Social phobia, (also known as social anxiety disorder) is at the more extreme end of the continuum of social anxiety and “includes a collation of symptoms which unlike shyness can vary in severity throughout one's life” these symptoms are only elicited in certain social situations (Leary, 1983). In contrast shyness while at the less severe end of the social anxiety continuum is more likely to be a life long characteristic of an individual's temperament which is experienced in every social occurrences (Lecrubier et al., 2000; Shepherd and Edelman, 2005).

Individuals are often motivated by a need to feel a sense of belonging, however, those with social anxiety may find it difficult to fulfill this social need because of the Internet. For socially anxious individuals, the Internet and socially interactive technologies (text messaging) can have both positive and negative results. Kraut et al (1998) found that online interaction greatly reduced face-to-face social interaction.

2.1. Social Anxiety, Gender Differences and Online Communication

The two previously mentioned theoretical approaches might adhere to different types of Internet activities that may have differential effects on well-being. One type of activities

surfing, which can be described as visiting web sites on the Internet for non-communication purposes. In contrast to surfing, Instant Messaging (IM-ing) consists of sending messages directly to others one has invited to the online conversation. Because of its dyadic, real-time, and private format, IM-ing has been seen as an excellent 'training ground' for adolescents in terms of their social skills (Morgan & Cotten, 2003; Valkenburg & Peter, 2007). A survey study showed that among freshmen college students whereas increased time spent IM-ing was uniquely associated with less reported depression, increased time spent surfing was uniquely associated with more reported depression (Morgan and Cotten, 2003).

Females usually have more negative attitudes toward computers and greater computer anxiety than males. Researches on computer self-efficacy in general also revealed that males on average have better computer self-efficacy than females (Hackett, 1985). Similarly, one might expect adolescent girls to be more worried than boys about peers' negative evaluations of them. Indeed, surveys have found that adolescent girls are more concerned than boys about others' judgments of their appearance and behavior. Moreover, rates of internalizing problems are higher among girls than boys and adult women are about twice as likely to be socially phobic as men (Schneier et al., 1992). Thus, adolescent girls may be more vulnerable than boys to feelings of social anxiety, and this may have implications for their social functioning (La Greca and Lopez, 1998).

On the other hand, Shaw and Giacuinta (2000) discovered that educational technology students reported using computers more frequently, for a wider array of purpose, and for greater number of hours each week than students in the Educational Administration, Business Education and Higher Education programs. They also reported completing more formal instruction and more positive attitudes toward the value of computers in academic students (Sam et al., 2005).

Jackson et al. (2001) predicted that women would use e-mail more and men use the Web for information more, based on the greater interpersonal orientation of women and greater task orientation of men. This prediction was supported in a large sample of Anglo-American undergraduates, even after computer self-efficacy, loneliness and depression were controlled for. Wasserman and Richmond-Abbott (2005) found that women use e-mail slightly but not significantly more than men but that men use chat rooms more. Shepherd and Edelman (2005) study to explore social anxiety and Internet use in relation to regulation of social fears. It is hypothesised that high social anxiety will be associated with low ego strength as well as greater scores on the Internet.

3.METHODS

3.1.Purpose

Given the significant popularity of instant messaging, text messaging and other socially interactive technologies among teens, it is important to examine their use. Since social anxiety can effect one's type of social interaction, it is prominent to examine if social anxiety is influencing how adolescents communicate with others and which technology. The purpose of this study is to research adolescents' use of online social sites, cell phones, text messaging and instant messaging and if social anxiety influences technology versus face-to-face communication. So, the following hypotheses are proposed:

H1: Females use socially interactive technology (text messages, cell phones, e-mail, instant messages) more than males.

H2a: There is a relationship between not feeling comfortable talking with others in person and feeling more comfortable talking with others online.

H2b: There is a relationship between not feeling comfortable talking with others in person and feeling more comfortable messaging with others.

H2c: There is a positive relationship between social anxiety (social phobia) and making new friends online.

H2d: There is a relationship between the amount of their families' monthly income and social anxiety.

H3: Males are more social anxiety with face-to-face interactions than females.

H4: Males are feeling more comfortable talking with others through a social interaction technology than females.

3.2.Participants and Datas

Participants consisted of 544 students from six High Schools in Afyonkarahisar, Kütahya and Uşak cities. The age of the participants ranged from 15 to 18. 32.4% were freshman, 24.1% were sophomore, 28.1% juniors and 15.4% were seniors. The sample consisted of 227 (41.7%) males and 317 (58.3%) females.

We first were contacted the principals and asked permission in order to survey some classes on school. After that teachers was chosen to gain a sample of students from each school year. After obtaining permission from teachers, each students were warned about survey able to tell it their parents. The survey was applied in the students' classrooms and teachers was present during all testing. All students received the same instructions and their identity would remain secret. Each participant completed a report questionnaire.

3.3. Measures

The first two questions of the questionnaire consisted of primarily demographic questions such as age, sex, year in school, and general informations. The next series of questions included items of the students' comfort level in interacting with others face-to-face, online talking, cell phone or text messaging. Questions were prepared by using both nominal (yes or no) and 5 point likert-type scales. Cronbach α for social anxiety and technological communication is acceptable. ($\alpha=0.624$)

4.RESULTS

3.7% stated the amount of children who separate from their families is not adequate for measuring the relationship between social anxiety and family situation. First of all, participants were asked about type of technological tools they had use.

88.9% reported having Personal computer.

79.2% reported having Internet on their PC.

92.6% stated that having messenger address.

73% reported having e-mail accounts.

96.7% reported having cell phones.

72.2% reported having text messaging capabilities on their cell phones.

84.3% stated having online social sites and most of them are using facebook (49.2%). Most of the other have more than one membership in social sites (twitter, myspace, linkedin etc).

The following next questions asked how much time adolescents use each of their time on their technological tools on average day. Table 1 shows the results.

Table 1. Technological tools use

	9 h + (%)	7-8 h (%)	5-6 h (%)	3-4 h (%)	1-2 h (%)	30 min (%)	None(%)
Msn	0.4	0.4	0	0.6	4.3	13.6	80.7
Instant message	3.7	2.2	4.6	10.8	17.5	23.6	37.5
Cell phone	0.6	0.2	0.4	2.2	11.9	56.9	27.8
Social sites	0.7	1.7	1.5	8.0	29.0	33.3	25.8
Music	3.9	2,4	5.0	10.3	39.0	31.8	7.6
Game	0.7	0.9	1.3	4,3	17.7	24.0	51.0
Mail	0.9	0.2	0.2	1.1	3.9	12.8	80.9
Internet	1.1	0.4	1.1	6.7	26.8	40.1	23.8

As shown in Table 1, adolescents almost don't use messenger sites and mail address. They generally use instant message with their cell phones. They spend 1-2 hours for a day by listening music and average 30 minutes during the day by using Facebook. More than half of teens have cell phones that able to call, message and access to Internet. All following hypothesis were examined to 95% level of confidence.

Hypothesis 1 stated that females use socially interactive technology (text messages, cell phones, e-mail, instant messages) more than males. Females (M:1.08, SD:1.9) reported that they are using text messaging more than males and significant relationship between text messaging and interactive technology (M:1.52, SD:2.31, p:0.019). In addition, males (M:0,3, SD:0.75) reported that they are playing games for a long time than females and there is a gender differences between playing games on computer and social technology using (M:1.06, SD:1.66, p:0.000). There is not gender differences in use of instant messaging, e-mail, social network sites and chat rooms.

Hypothesis 2a posited that there could be a relationship between not feeling comfortable talking with others in person and feeling more comfortable talking with others online. When someone have to talk face to face, feeling anxiety was positively correlated with feeling comfortable with others through cell phones and social media sites ($r:0.445$, $p: 0.000$).

Hypothesis 2b related that there would be a relationship between not feeling comfortable talking with others in person and feeling more comfortable messaging with others. Results revealed, there isn't a relationship between social anxiety of face-to-face interaction and feeling comfortable with others via messaging ($p:0.204$).

Hypothesis 2c reported that there would be a positive relationship between social anxiety (social phobia) and making new friends online. There isn't any relationship between social anxiety and making new friends online ($p:0.072$, $t: 1.801$). but, there is a negative relationship between online communication without face-to-face interactions and feeling anxiety when having to talk face-to-face ($p:0.024$).

Hypothesis 2d revealed that there would be a relationship between the amount of their families' monthly income and social anxiety. The regression analysis showed, their isn't a relationship between the amount of families' monthly income with social interaction technologies ($p: 0.230$, $r: 0.134$).

Hypothesis 3 stated that males are more social anxiety (not comfortable with others by talking) face-to-face interactions than females. Significance was not found for this hypothesis. However, females are feeling more uncomfortable talking with other face-to-face than males (Levene's test $p:0.017$). There is just significant differences feeling comfortable by talking with social media sites with gender ($p:0.003$), that is; females ($M:2.12$, $SD:0.92$) are more uncomfortable than do males ($M:1.86$, $SD:0.99$, $p: 0.000$).

Hypothesis 4 posited that males could more preferred talking with others through a social interaction technology than females. There are significant difference, but only prefer talk with someone on computer instead of talking and make new friends with someone on computer. Females ($M:3.71$, $SD:0.96$) prefer talking with some on computer instead of talkin face-to-face than males ($M:3.48$, $SD:1.05$, $p: 0.009$). Similarly, females ($M:4.14$, $SD:1.04$) prefer making new friends with someone on computer more than males ($M:3.62$, $SD:1.19$, $p: 0.000$).

5.DISCUSSION AND CONCLUSION

In Turkey, cell phone, text messaging, instant message and social sites membership are recognized as the most important medium of communications among adolescents. Internet access via PCs and mobile phones plays very significant role Turkey adolescents. Technology tools effect teens' social emotions against their families and friends. This study demonstrated that teens are using socaily interactive technology to communicate with others and it serves social anxiety and decreasing face-to face communication.

The findings of the current study found that females are using text messaging more than males. However, males are playing games for a long time than females. In addition, females are feeling more uncomfortable talking with others face-to-face than males. And, females also prefer talking with some on computer instead of talking face-to-face than males. Similarly, females prefer making new friends with someone on computer more than males.

Beyond the results of this study, we examined something very important stuation related to adolescents' today currents. While the age of participants were increasing, the time spend in social media is decreasing. The reason for such conclusion revealed that, senior students have

to work more for university exams during education session. So, they can't spend their time on social media sites.

Many studies in this area is conducted for university students. The use of Internet as a social tool is more common among at this age adolescents. But this study is related to high school level for students and we examined the relationship between social anxiety and the use of Internet, cell phone as a technological tools. Further studies may apply for university students. Finally, adolescents who may be shy, have social fobia, and feel anxiety about talking with someone, vairous and different technologies provide reliable opportunity for them to contact with them. It is possible to reproduce the contributions of technology for our world. Although this technology facilities the lives of people, it sometimes breaks the peace. Technology has changed the way we live todayand also changing our communication skills with high costs. Only time will tell what is going on in the future. Parents and teachers have great responsibilities for this subject.

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