Gender Differences in Internet Addiction and Tendency to Express Emotions

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Abstract

Social media applications become integral parts of daily life. People begin to live their emotions through these applications. Studies show that the main reason of using social networks is making social relations easier. But because of the excessive use of internet, the person can fall short off the real world, and that can give way to isolation and loneliness. Trying to decrease these emotions through establishing relations in virtual world, the person can be deprived of the benefits of face to face communication. The aim of this study is to analyze whether a gender-based difference exists between internet addiction and the tendency towards expressing emotions; to examine the relation between internet addiction and the ability to express emotions and to determine whether the degree for expression of emotions is a meaningful predictor of internet addiction. The results show that internet addiction among women is higher than among men, but there is no difference between the genders with respect to the degrees for expression of emotions. According to the results, eight percent of internet addiction can be explained by emotion expression skills. In future research, social and psychological factors may also be analyzed for aspects of their effect on the relation between internet addiction and the expression of emotions.

Keywords: Internet addiction, emotion expression, gender, face to face communication

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The Internet is a functional tool, which makes life easier most of the time. But it can also cause trouble if it is used improperly or excessively. The excessive use of internet, which makes people focus almost entirely on the Internet rather than broader life events, arises generally in three forms, excessive gaming, excessive sexual preoccupations and excessive e-mail messaging (Weinstein & Lejoyeux, 2010). These online activities can lead to be isolated from other forms of social contact.

The excessive use of internet may also be an escape mechanism that individuals tend towards to eradicate the negative emotions due to loneliness (Özen & Korukçu Sarıcı, 2010). According to Morahan-Martin and Schumacher (2003), solitary individuals make more use of internet compared to others, and as a consequence, they can be more comfortable in expressing their emotions in the virtual world. However, it is thought that trying to lessen the emotions of isolation and loneliness through communication established in the virtual world, may deprive the individual of the interaction that face-to-face communication provides. It may deactivate many devices such as facial gestures, which contribute to communication in a powerful way due to their ability to express emotions (Barutçugil, 2004).

The use of internet, while allowing for emotions to be expressed more freely in certain situations, may, in other situations, prevent management of emotions by individuals. Oktan (2011) has asserted that a negative relationship exists between the ability to manage emotions and internet addiction, and expressly, has found that the negative relationship between the display of emotions, a sub-dimension of emotion management, and internet addiction, was meaningful. It is considered that the study of the relationship between the ability to express emotions, which is thought to have significance in terms of providing fulfilling relationships for the individual, and internet addiction, will be beneficial in comprehending the patterns of contemporary social life.

Internet Addiction

Young (1996) defines internet addiction as an impulse-control disorder that does not involve an intoxicant and revealed that the pathological gambling is similar to internet addiction, in terms of its compulsive nature. In order to differentiate normal internet use from pathological internet use, Young (1996), developed a scale, in which he questioned preoccupation with internet, increase in time of internet use, efforts to control internet use, feelings during attempting to stop internet use, the relations between internet use and occupational and social life and the aim of internet use. Ybarra and colleagues (2005) have
analyzed the connection between symptoms of depression in the youth and their internet use, and have shown that those who display high degrees of depression are more inclined to exhibit acts of self-disclosure on the internet compared to those who display lower levels of the symptoms. This finding suggests that the people displaying depressive symptoms may express themselves in an easier manner in the virtual world compared to face-to-face communication. The act of self-disclosure assists in having emotions of sincerity felt (Bargh & McKenna, 2004). However, it is thought that the contribution of self-disclosure over the internet to the well-being of the individual is a multi-dimensional topic that requires further research. Kraut and colleagues (1998) argue that internet use removes the individual from the real world and negatively affects the individual’s psychological well being, and that as communication over the internet has replaced social activities in life, it could also replace ties between individuals. Moody’s study (2001), has put forth that high levels of internet use is associated with high levels of emotional loneliness, and that additionally, low levels of emotional loneliness is associated with high levels of face-to-face communication with friends. These findings may indicate that excessive internet use could have negative emotional consequences.

The difference of internet use between genders has been studied, and an analysis of the research performed between 1996 and 1999 has found that men use the internet more than women (Bimber, 2000). On the other hand, Ono and Zavodny (2003) have analyzed studies conducted between 1997 and 2001, and have shown that in 2001, women have spent more time online compared to men. The differences between internet use of men and women can be due to different factors. There are some sex differences, which are relevant to Internet use, such as social aggressiveness, expressiveness and the structure of friendship (Canary & Dindia, 1998). There are also some differences between genders in certain areas of cognition which can be effective on internet use (Halpern, 1996). In general, men are more likely to enjoy searching for information of personal interest other than the requirements of work (Ford and Miller, 1996).

In studies analyzing internet use and its connection to the quality of social relationships, some types of inconsistent conclusions are being observed. Certain studies reveal conclusions indicating that internet use lowers the quality of social relationships (Morgan & Cotten, 2003; Weiser, 2001). In certain other studies, there are findings that internet use leads to positive contributions to social relationships (Shaw & Gant, 2002; Valkenburg & Peter, 2007). Additionally, in yet other studies, there have been no linkage found between the two (LaRose, Ghuay, & Bovin, 2002; Sanders, Field, Diego, & Kaplan,
From the perspective of social relationships, the expression of emotions may have substantial consequences, and can cause significant changes in an ongoing interaction (Keltner & Kring, 1998). This in turn indicates that in the study of the effects of internet use on social relationships, an analysis of its connection to the tendency towards expressing emotions may be a significant factor.

**The Tendency to Express Emotions**

In recent years, emotions have begun to be studied not only for their connection to an individual’s well being, but also for their effects on business life (Fox & Spector, 2002). Emotions, initially considered to be separate from rationality, have, through studies performed in recent years, come to be considered as intertwined with rationality, and are seen to be of benefit to organizations (Ashfort & Kreiner, 2002). In studies cited in literature, it is becoming a widespread opinion that emotions play a fundamental role in behavior and cognitive processes (George, 2000). There is consensus that emotions shape judgements, decisions, priorities and activities of individuals and are the primary source of motivation (Salovey & Mayer, 1990). Studies conducted indicate that the expression of emotions have beneficial effects on health (Pennebaker & O’Heeron, 1984; Murray, Lamnin & Carver, 1989; Esterling et al., 1990). As the inclination to freely express emotions increases, psychological functions are observed to develop positively (Heyes et al., 2006). For individuals suppressing emotions, that is avoiding to express them, may lead them to experience social anxiety (Kashdan & Breen, 2008). In their studies, Clark and Finkel (2005) have found out that the attention and care that a counterpart shows to a relationship allows the individual the opportunity to freely express his or her emotions. In this context, it is considered that for emotions to be freely expressed, the conditions must be present such that the attention and care shown by the counterpart can be easily perceived. In communication, emotions may be expressed verbally and non-verbally. Emotional expression is the collection of acts and sounds aimed at another person to indicate the existence of emotions (Dönmez, 2007). Non-verbal messages relayed to the other side such as facial gestures, bodily posture, movement of hands and arms, fluctuations in the tone of one’s voice and emphasis on sounds, can more powerfully express an individual’s actual emotions compared to the verbal segment of the message (Cüceloğlu, 1999). It is considered that the absence of non-verbal messages during communication may lead to the inability to sufficiently convey emotions to the other side.

Studies concerning the manners in which women and men express their emotions have found that there are differences, but the reasons behind these differences have not been fully determined (Hess, Adams, & Kleck, 2004). It is considered that the tendency of women to
have a higher level of expression of emotions such as happiness and sadness, compared to men, may be associated with social roles and stereotyped expectations that are imposed on girls and boys from an early age (Haugh, Hoffman, & Cován, 1980). During their development, girls and boys receive highly dissimilar emotional approaches from their families (Brody & Hall, 1993). Compared to girls, boys receive less encouragement from their families to express their emotions (Tuğrul, 1999). As a consequence, the expectation for the tendency of men to express their emotions may be lower compared to women.

In light of studies performed in recent years, the concept of emotional IQ, which is comprised of the abilities to perceive, evaluate, and understand one’s own emotions as well as the others’, is thought to be the indicator for psychological well being (Austin, Saklofske & Egan, 2007). In their studies, certain researchers have put forth that a connection exists between lower levels of emotional IQ and substance addiction (Riley & Schutte, 2003; Reay, Hamilton, & Kennedy, 2006; Limonero, Tomás-Sábado, & Fernández-Castro, 2006). When viewed from the perspective of excessive use of the internet, it is found that not too many studies yet exist that directly analyze the connection between internet addiction and emotional IQ (cited in Engelberg & Sjöberg, 2004). It is known that many substance addicts experience difficulties being aware of their emotions and expressing them (Krystal, 1982). In their studies, Arcos and colleagues (Arcos et al., 2005) have shown that substance addicts provide a lower level of reaction to emotional stimulus compared to non-addicts, and that additionally, these individuals do not find their emotional lives to be sufficiently encouraging. To understand the effects of emotions, whose significance in the private life as well as in the business life has been emphasized in recent years, it is considered that it would be beneficial to conduct studies on the relation between emotional difficulties and internet addiction.

Method

This study is considered as a descriptive research and was performed in the scanning model. The sample comprised a total of 373 students (210 females, 163 males) from various departments of Istanbul Kültür University and Istanbul Aydın University in Turkey during the 2011/2012 academic year. Participants were selected randomly from the departments of Psychology, Business and Administration and Communication Arts in Kültür University (n=211), and from the departments of Public Relation and Publicity, Visual Communication Design and Radio Television and Cinema in Aydın University. Participants completed questionnaires after classes at their universities. They were informed about the nature of the study by the researcher. The average age of the participants is 20.54 (SD = 1.97).
In the study, the Emotional Expression Scale developed by King and Emmons (1990) and the Internet Addiction Scale developed by Young (1996) have been used. The Emotional Expression Scale was adapted to Turkish by Kuzucu (2006). The validity of the scale for criterion and structure has been reviewed, and it has been observed that items have been grouped along three factors. With respect to the sub-dimensions of the scale, for the sub-dimension for expression of positive emotions, Alpha was determined to be .74; for the sub-dimension of expression of negative emotions, Alpha was determined to be .67; for the sub-dimension for expression of intimacy, the Alpha was determined to be .63 (Kuzucu, 2011). The items were scored from 1 through 7. In the questionnaire consisting of 15 items, high scores indicate a high tendency towards expressing emotions. The Internet Addiction Scale (Young, 1996) created by utilizing the measures for pathological gambling found in DSM-IV. Frangos et al. (2012), revealed in their study, in which they construct a meta-analysis of the reliability of Young’s Internet Addiction Scale, that the overall Cronbach’s alpha computed from the studies was .89. The Internet Addiction Scale has been translated into Turkish by Bayraktar (2001). The reliability of the translated test based on a standardized Alpha value is .91, and based on the Spearman-Brown value, it is .87. In the Internet Addiction Scale, which is a type of Likert scale, the participants are asked to mark among the options scored 1 through 5. A high score obtained in the scale, which consists of 20 items, indicates a high degree of addiction (Bayraktar, 2001).

As part of this study, an explanatory research has been planned. The aim of the study is to analyze the relationship between the degree of an individual’s internet addiction and the degree of that individual’s tendency for expressing emotions. The research questions were prepared as follows:

1. Is there a significant difference between genders for the degree of internet addiction and the degree for the expression of emotions?
2. Is there a significant relation between the degree of internet addiction, and the degree for expression of emotions and its sub-dimensions?
3. Is the degree of emotion expression a meaningful predictor of internet addiction?

Findings

In the study, the scores of the male participants for expression of emotions varied from 37 through 83, and those for the female participants varied between 45 and 93. The highest and lowest scores were higher by females than men, but when the average scores were taken into consideration, they were nearly equal. The average score for women was 69.93
The average score for men was 69.42 (SD=8.42). The average scores for the participants for expression of emotions based on gender are presented in Table 1.

### Table 1
Scores for Expression of Emotions

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>210</td>
<td>69.93</td>
<td>10.32</td>
</tr>
<tr>
<td>Men</td>
<td>163</td>
<td>69.42</td>
<td>8.42</td>
</tr>
</tbody>
</table>

The scores for internet addiction for the male participants in the study vary from 23 through 69, while those for the female participants vary from 28 through 73. The highest and lowest scores were again higher by females than men, but this time the average scores were not close to each other, as they were by the emotion expression. The average scores for the participants for internet addiction based on gender are presented in Table 2.

### Table 2
Scores for Internet Addiction

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>210</td>
<td>49.20</td>
<td>10.36</td>
</tr>
<tr>
<td>Men</td>
<td>163</td>
<td>39.07</td>
<td>7.33</td>
</tr>
</tbody>
</table>

While no gender-based differentiation is observed among the scores of participants for the expression of emotions, it has been observed that there are differences between the averages of the scores based on the internet addiction scale. Whether the difference between the scores of the two groups for internet addiction is significant or not, has been analyzed through independent sample t-tests. There is a significant difference between the scores for internet addiction for women and the scores for internet addiction for men. That means, women do not differ than man by emotion expression degree, but women use Internet more excessively than men. The differences between men and women, by Internet addiction and emotion expression are presented in Table 3.

### Table 3
Difference between Internet Addiction Scores for Gender Groups

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>P</th>
<th>Df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td></td>
<td></td>
<td>Men</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Addiction</td>
<td>49.20</td>
<td>10.36</td>
<td>39.07</td>
<td>7.33</td>
<td>.000**</td>
<td>371</td>
<td>10.60</td>
</tr>
<tr>
<td>Expression of Emotions</td>
<td>69.93</td>
<td>10.32</td>
<td>69.42</td>
<td>8.42</td>
<td>.61</td>
<td>371</td>
<td>.51</td>
</tr>
</tbody>
</table>

**p < .01

The expression of intimacy, the expression of positive emotions, and the expression of negative emotions, all sub-dimensions of the scale for expression of emotions, and their relations to internet addiction, have been analyzed using the Pearson Correlation coefficient.
One example each for the items measuring the sub-dimensions for the expression of emotions has been provided below:

There is a reverse proportional and significant relationship among the expression of intimacy, the expression of positive emotions, and the expression of negative emotions, and with internet addiction. That means, as the excessive use of Internet increases, the degree of expressing intimacy, positive and negative emotions decrease. The relationship in the negative direction between the total score attained in the scale for expression of emotions and internet addiction is stronger than the relationship each sub-dimension of the expression of emotions has with internet addiction. The weakest relationship among the sub-dimensions is observed to exist between the expression of negative emotions and internet addiction. The relationships among the variables of the study are shown in Table 4.

Table 4
Correlation among Variables (N=373)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Internet Addiction</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Expression of Intimacy</td>
<td>-.26**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Expression of Positive Emotions</td>
<td>-.25**</td>
<td>.66**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Expression of Negative Emotions</td>
<td>-.22**</td>
<td>.62**</td>
<td>.58**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>5 Expression of Emotions</td>
<td>-.28**</td>
<td>.89**</td>
<td>.87**</td>
<td>.83**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**p<.01

According to the regression analysis results, only the total measure of emotion expression is significant ($R^2=.08$, $F(1, 371)= 32.38$, $p<.01$). The subscales of emotion expression- expression of intimacy, expression of positive emotions, expression of negative emotions- does not seem to be meaningful predictors of internet addiction. Taking the total measure of emotion expression into consideration, eight percent of internet addiction seems to be explained by emotion expression degree. The regression analysis results are given in Table 5.

Table 5
Multilinear Regression Analysis for Prediction of Internet Addiction from Emotion Expression Level (N=373)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$\Delta F$</th>
<th>$\beta$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.080</td>
<td>.078</td>
<td>32.378</td>
<td>17.296</td>
<td></td>
</tr>
<tr>
<td>Expression of Intimacy</td>
<td></td>
<td></td>
<td></td>
<td>-.040</td>
<td>-.381</td>
</tr>
<tr>
<td>Expression of Positive Emotions</td>
<td></td>
<td></td>
<td></td>
<td>-.036</td>
<td>-.356</td>
</tr>
<tr>
<td>Expression of Negative Emotions</td>
<td></td>
<td></td>
<td></td>
<td>.045</td>
<td>.514</td>
</tr>
<tr>
<td>Expression of Emotions</td>
<td></td>
<td></td>
<td></td>
<td>-.283</td>
<td>-5.690**</td>
</tr>
</tbody>
</table>

**p<.01

Discussion and Conclusion
The findings obtained as part of the study for the first research question indicate that internet addiction among women is higher than among men, but that there is no difference between the genders with respect to the degrees for expression of emotions.

It is observed that there are inconsistent findings in the literature on how internet use differentiates between genders (Chou, Condron & Belland, 2005). Young in his study (1998) has shown that the number of women displaying pathological internet use is higher than men. On the other hand, Morahan-Martin and Schumacker (2000) have put forth that pathological internet use is more prevalent among men than among women. Consistent to the results of this study, Üneri and Tanıdır (2010), examined the Internet addiction degree of male and female students, and they revealed that male students have higher scores on Internet addiction. In their study, Cömert and Ögel (2009), revealed that the risk for developing an Internet addiction is higher by male than female students. Contrary to these findings in studies conducted in Turkey, the findings of this study indicate that the degree of internet addiction for women is significantly higher compared to that of men.

As part of social life, men learn to hide their emotions, and women learn to more freely express their emotions compared to men (Simon & Nath, 2004). With respect to the outward expression of emotions, there are differences between genders (Fisher, et al., 2004). As part of the results of the study, it is an unexpected finding that the degrees for expression of emotions for women and men are very close to each other. It is considered that such proximity between the degrees the two genders have in the expression of emotions may be related to the distinct difference in their scores for internet addiction, and that there is need for further and more comprehensive studies.

The findings obtained as part of the study for the second research question has shown that a reverse proportional relationship exists between the degree for the expression of emotions and the degree for internet addiction. While certain researchers argue that it is difficult to express emotions through the use of a computer, other researchers argue that no significant difference is constituted between computer-facilitated communication and face-to-face communication (cited in Derks, Fisher & Bos, 2008). Shields and Kane (2011) have stated that internet use is associated with social and psychological factors, with both positive and negative aspects. To understand the relationship among various factors and internet use, the reasons that individuals have for internet use must be considered, as well as their internet use habits (Gordon, Juang & Syed, 2007). Individual or environmental conditions can have an effect on the relationship of internet use with social and psychological factors.
To satisfy such needs as self-confidence and sense of well-being, individuals who have a hard time coping with their emotions, instead of resorting to their intrinsic sources, gravitate towards various other sources (Gönüllü, Hacıoğlu, & Tarlacı, 2002). In today’s world, the internet may also serve as such an external source. However, it is considered that the gravitation to excessive internet use for those individuals having a hard time coping with emotions will not contribute to overcoming emotional difficulties. In his study, Walther (1995) has stated that the group that established computer-mediated communication did not display less sincerity than the group that established face-to-face communication, and therefore that in social terms, establishing computer-mediated communication would not necessarily lead to establishing less intimacy. When the findings resulting from this study are examined, it is observed that there is a negative relationship between internet addiction and the expression of intimacy, a sub-dimension of the expression of emotions. Considering the inconsistent findings, it is considered that further research, using various other related groups, on the aspect of the relationship addressed as part of this study, would be beneficial.

In today’s world, the forms of communication provided by technology make life easier and provide a multitude of practical benefits. However, even video-conferencing, the technology that comes closest to face-to-face communication, is not able to provide the secure interaction or the social advantages provided by the sharing of the same physical environment, that accompanies face-to-face communication (Whittaker, 1995). It is known that the expression of emotions contributes to subjective and psychological well-being (Novick-Kline, et al., 2005). The sharing of emotions is significant for the development of intimate and healthy relationships (Collins & Miller, 1994). In this context, it is considered that it is also important to examine the effects of the use of technology, especially related to emotional life.

The excessive use of internet becomes widespread and it certainly helps people to reach information, to communicate with each other across boundries and it provides many opportunities. But furthermore it is also a tool, which can deprive people from face-to-face interaction and benefits stem from sharing the same physical environment. An important result of this research is obtained as part of the study for the third research question. It is revealed that eight percent of internet addiction can be explained by emotion expression skills. The relation between internet addiction and emotion expression skills can be considered to be two sided. Excessive use of internet can cause lower levels of emotion expression; or people who have less tendency towards expressing emotions are more likely to be excessive internet users. This research examined internet addiction as a dependent variable and stated,
that internet addiction degree can be predicted from the emotion expression level, in the ratio of eight percent, which was found meaningful.

The constraint of the study is that the sample is comprised of university students. The study may be repeated with different populations. In this study, a status assessment has been performed; the existence of a negative relationship between internet addiction and the expression of emotions has been determined; the predictive value of emotion expression for predicting internet addiction degree has been revealed. In future studies, social and psychological factors may be analyzed for aspects of their effect on the relation between internet addiction and the expression of emotions.
References


