The Relationship between Internet and Computer Game Addiction Level and Shyness among High School Students

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Abstract
This study is conducted to determine the relationship between the internet and computer games addiction level and the shyness among high school students. The participants of the study consist of 365 students attending high schools in Giresun city centre during 2009-2010 academic year. As a result of the study a positive, meaningful, and high correlation between the internet addiction and the computer games addiction level was found. When the relationship between the shyness and the internet addiction and computer games addiction level is studied, another positive correlation is found, as well. In this study, fit indices obtained from the structural equation model which was established to determine the relationships among internet addiction, computer game addiction and shyness showed that the model was confirmed.

Key Words
Internet Addiction, Computer Games Addiction, Shyness.

Recently, the fast developments occurred due to the technological developments provide people with the facility of accessing and sharing information instantly. Among the technological developments computer and the internet take place as well. In a society, like everyone needs to use computer and the internet, some problems come along because of the misuse and the frequency of use.

Excessive use of computer and the internet among the school age children- who are eager to learn technological developments- has a negative effect on young adults' psychological, physical, academic success, which possibly give way to addiction (Kubey, Lavin, & Barrow, 2001; Young, 1996).

In this technological era, the internet and computer have become the most often used technological devices. Likewise, according to the data gathered 23.8 % of world population, 74.2% of American society, 48.9% of Europe population and 35% of Turkey population use Internet (Internet World Stats [IWS], 2009). With the rise in the Internet and computer use rate, peoples' time allocated for computer has risen accordingly. Excessive use of the Internet and computer brings the risk of computer/Internet addiction along (Chou, Condron, & Belland, 2005; Lee et al., 2007; Watson, 2005). Internet addiction can be roughly defined as the inability of resistance for using the Internet excessively, seeing the time spent outside the virtual environment as a loss of time, being very furious and aggressive when deprived of, deteriorating of the person's work, social and family life (Young, 2004). When the prevalence of the studies done about the Internet addiction is checked, it is seen that the prevalence is between 6-14% (Chou & Hsiao, 2000; Kraut et al., 1998; Young & Rogers, 1998). In this context, excessive use of the online communication, online games or other excessive uses can be the first signals of Internet-computer addiction (Fleming & Rickwood, 2004; Watson, 2005). Computer games have become one of the most important entertainment tools for children (Horzum, 2011).
Shy people tend to be alone much more than the ones who are not shy. Shyness which affects the communication between people negatively causes people who have communication problems to be alone (Cheek & Buss, 1981). When the people who use the Internet excessively are studied, it is seen that these people tend to be extremely sensitive to the possible disappointments in their relations with the other people and this mood causes them to be very anxious about communicating with others (Whang, Lee, & Chang, 2003). The Internet is used for not being alone and communicating with others by some people. Especially shy, introvert people use the Internet to have social relations and manage these relations as a way of socialize (Davis, Flett, & Beser, 2002). Studies have shown that these shy people who have difficulty in having social support in their real lives, use the Internet's interactive functions, such as chat rooms very often (Young, 1999).

Shy people experience more problems in their face to face relations than online ones (Ward & Tracey, 2004). In a virtual context people tend to use nicknames, and know that the possibility of refusal or criticism is lower than face to face communication; so that they feel themselves more comfortable. Therefore, possibly they use the Internet more and more as a way of social communication. Shy people generally highly tend to be computer addicts, because they use messenger programs, news groups and chat room more often than the others (Chak & Leung, 2004).

The results of the studies done for checking whether there is a relationship between the shyness and the Internet addiction show that there is a correlation between the two (Chak & Leung, 2004; Ebeling-Witte, Frank, & Lester, 2007; Güneri, Mesutoğlu, & Aydin, 2011; Hollingswort, 2006; Yang & Tung, 2007; Yuen & Lavin, 2004). Scealy, Phillips, and Stevenson (2002) express that there is no relationship between the Internet and the shyness, but shy people use the Internet in order to communicate with others more. People who are not addicts use the computer generally for accessing information and keeping in touch with their existing friends; whereas the addict use it in order to make new friends, socialize and exchange ideas (Young, 1997). Middle East Technical University – North Cyprus Campus- Student Development and Psychological Consulting Centre (2008) states that introvert personality raises the risk of computer addiction, as well. With the help of the Internet, people are able to get the social support they need and lack from the people who are online, even if it is temporarily. While adults use the Internet as a tool for their work, such as getting required information; teenagers (13–19) use it for playing computer games, listening to music and getting to know new people (Kubey et al., 2001). There is a difference between the introvert and extravert people in terms of using technological tools. Henderson and Zimbardo (2005) have found out in their studies for use of technology and shyness among the teenagers that shy people use the technology more often than the ones who are not introvert. Review of the literature showed that there is no study in the domain of the relationship between computer games addiction and shyness. However, Loton (2007) has studied a group of people who are computer games addicts and seen that there is just one shy person in the group; so that, he states that there is no relationship between the addiction and shyness. In the survey mentioned before (Henderson & Zimbardo), it can be said that shy people are assessed as potential addicts as they use the Internet more often than the others, so their span of time before a computer screen is expected to be more.

The aim of this study is to determine the relationship between the Internet and computer addiction level and shyness among the teenagers. Whether shyness and the Internet-computer games addiction differ in terms of gender and choice of game is also dealt with in this study.

Method

The study was conducted based on general survey model. General survey models in a universe composed of many elements to arrive at a generally judgment about the universe is the arrangements of the scan performed on a sample of the universe to be taken. Relational scanning models are the researches to determine the exchange between two or more number of variables (Karasar, 1995). In this study, individual survey model was selected to investigate the relationship between the levels of Internet and game addiction and shyness in a randomly selected group.

Study Group

The population of the study consists of 8485 high school students whose schools are around Giresun city centre. With this fact in mind, sampling of the
study includes 176 girls and 189 boys who are high school students in the second term of 2008-2009 academic year.

Instrument
In the study the tool developed by Ayas, Balta, and Horzum (2011) ‘Scale for Adolescents’ Computer Addiction’ is used. For the comments on computer games addiction tests, Likert type 5 gradation is used. This gradation is: ’always’ 5; usually ’4’; often ’3’; sometimes ’2’, and hardly ’1’.

The scale consists of 54 items and two factors, first of which includes 28 items. The items’ values factor loadings change between .512 and .792. The factor reflecting 29.49% of the total variance is called ‘the Internet Addiction’. The second factor on the scale consists of 26 items. The items’ values for the second factor loadings change between .424 and .788. The factor reflecting 19.13% of the total variance is called ‘Computer Games Addiction’.

In order to check the reliability of the scale Cronbach Alfa internal-consistency coefficient has been calculated. At the end of internal-consistency tests, the sub factor’s, which is called the Internet addiction, internal consistency modulus is .96 and the sub factor’s, which is called computer games addiction, internal consistency modulus is calculated .95. The scale’s total internal consistency which consists of 54 items is found out to be .95.

In the study, Turkish adoption of ‘Shyness Scale’, which is developed originally by Cheek and Buss (1981) is used. The Turkish form was adapted by Gungör in 2001. Each item is graded as between 1-5 on the scale and then total points can be calculated. The items has following points: ‘not for me’ (1), ‘not appealing’ (2), ’I don’t know’ (3), ’appeals to me’ (4), ‘for me’ (5). The lowest mark of the test is 20, and the highest one is 100. The high mark taken from the Shyness Scale points out that the person’s shyness level is high, and it is commented as the person thinks him/herself as ‘shy’.

In Turkey, the study of shyness scale was performed by Gungör (2001) with the help of internal consistency and test-retest methods. The scale has been applied to 78 students twice with the three week intervals, and the correlation coefficient is calculated as .83. Cronbach Alfa coefficient, which has been used to determine scale’s self-consistency, was found out to be .91. Gokce’s (2002) studies show that Cronbach Alfa coefficient is .87.

Validity studies of shyness scale have been performed by Gungör (2001). In order to determine construct validity of the scale, analysis of principal components has been applied. Although, at the end of the analysis it is seen that 20 items are gathered around three factors, total number of the items are gathered under the first factor. For the validity studies, some similar scales are also used and ‘Self-Assessment Form in a Social Context’ (SAFSC) has been also applied. Both scales have been applied to a group of 84 university students and the correlation coefficient between the two is calculated. The correlation between ‘Avoidance’ and ‘Social Anxiety’ dimensions of the scale and shyness scale is found as .71, and the correlation between shyness and avoidance is calculated as .78. The scale’s validity studies for high school students have been performed by Gokce (2002). The correlation coefficient between shyness scale and anxiety level of SAFSC is .75, shyness and avoidance level is .72, and the correlation coefficient between the total points of anxiety and avoidance is .75. At the end of the factor analysis, the scale’s first factor reflects 29.18% of variance (Gokce).

Data Collection and Analysis
In analysing the data, in order to determine the preferred game variables, t-test is used for gender differences and correlation method is preferred for the relationship between internet and computer games addictions and shyness. All resolutions of the study are performed with the help of SSPS pack program and the level of significance is accepted as .05.

Results
The aim of this study was to determine the correlation between shyness and the Internet-computer game addiction level among high school students, and study the differences in their shyness level in terms of gender and preference of games. Accordingly, as a first step the relationship between shyness and the Internet-computer game addiction level is studied. Looking at the results of the study, it is seen that there is a correlation between the Internet and computer addiction; and another positive correlation between the Internet-computer addiction and shyness. The finding that there is a correlation between the Internet and shyness is consistent with the studies done before (Chak & Leung, 2004; Ebeling-Witte et al., 2007; Gueneri et al., 2011; Hollingswort, 2006; Yang & Tung, 2007; Yuen & Lavin, 2004). The fact that computer games are usually played online is thought to be an effect on the positive relation between the Internet and
computer games addiction. The Internet can also be assessed as a way of communication enabling people to know different people and keeping in touch with existing friends. In this study, it is found out that there is a positive correlation between shyness and the Internet addiction as in the similar studies. Human beings as social organisms need to communicate and continue these relations in order to lead a social life. If people do not have strong relationships, they can be isolated from the society and may have some problems. As they have difficulties in having face to face relationships, shy people try to communicate with the help of the Internet and express their feelings and thoughts by doing so. This state may have effect on building a correlation between the Internet and shyness. Likewise, as computer games are played online, shy people can communicate easily with the others while playing computer games. So, the relationship between shyness and computer games addiction is explained.

During the research analysis, as not any studies about the relationship between shyness and computer games addiction, this study is thought to be beneficial.

According to the results of the study, it is seen that the Internet- computer games level of boy students is higher than the girls. This finding is consistent with other studies done in the field (Chou & Hsiao, 2000; Chou et al., 2005; Kubey et al., 2001).

As shy people have difficulty in face to face communication, they usually prefer doing their activities alone. Likewise, their preference of being alone along with the Internet and computer activities has possibly an effect on this study. The researches show that social support decreases person’s Internet addiction (Nałwa & Anand, 2003). At schools, shy people need to be socially supported and placed in group activities in order to enhance their relationships with their friends. If they are accepted as a part of a group, feel less anxiety about being criticized, shy people will be feeling more comfortable and feel themselves better. These experiences will help them to lead a life which is more comfortable, peaceful and easy-going. Parents may not have any clues about their children’s problems. These children are generally seen as decent and well-behaved. Sometimes, parents may encourage their children to use computers more as they cannot disturb them and have problems while playing on computers. These children meet their needs with the help of the online people, they do not need real friends and they do not have any ideas about how to play with real friends. For these reasons, parents should control the children’s time spent on computers and provide contexts for their children to play with their real friends.

References/Kaynakça


