Prediction of happiness of university students by some cyberpsychology concepts

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ABSTRACT

This research aims to investigate the problematic levels of internet usage and smartphone addiction as predictors of university students' happiness levels. The research was carried out using the relational screening method, which is among the quantitative research methods. The research study group consisted of 340 university students, in which 229 were females (67.4%), and 111 were males (32.6%), studying at various departments of a state university, and voluntarily agreeing to partake in the research. In the research; "Oxford Happiness Scale - Short Form", the "Problematic Internet Usage Scale", and "Smartphone Addiction Scale - Short Form" were all adapted into Turkish and implemented. From the results of the research, there was a strong negative correlation between the levels of happiness of university students and problematic internet usage and smartphone addiction. Furthermore, it was found that university students' problematic internet use and smartphone addiction levels explained 14% of their level of happiness. The results of the study were discussed and recommendations presented in light of the literature.

Keywords: Happiness, problematic internet usage, smartphone addiction, cyberpsychology.

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INTRODUCTION

Psychology research on negative mental health symptoms in individuals such as depression, burnout, and anxiety were performed until the 1980s, and positive mental health symptoms were largely ignored. Researchers have been studying positive mental health symptoms such as happiness, well-being, and satisfaction of life since the 1980s, which are vital for individuals to become strong and satisfied with their lives. The concept of happiness, which is among these positive mental health symptoms, can be considered as a detailed answer to the question that is often asked individuals in daily life “How are you?” Cyberpsychology factors will be discussed in this study which predicts the happiness levels of university students.

Happiness, which is one of the concepts emphasized by positive psychology, is a concept that includes people's cognitive and affective evaluations of all areas of their lives (Aypay and Eryılmaz, 2011). Happiness can be defined as the sense of well-being, joy or contentment of a person or a good or fulfilling experience. In its widest terms, while the general satisfaction of individuals with their families, school, professional and social life comprises the cognitive dimension of happiness, experiencing positive emotions such as love, joy, excitement, and trust frequently in these areas of life but rarely feeling negative emotions such as anger, hate, anxiety, fear and hopelessness, is the affective dimension of happiness (Diener, 1984; Özer et al., 2016). Many psychological and social factors affect individual happiness levels (Savi Çakar, 2018). With technological advancement in recent years, smartphones and the internet, which have become a significant part of the everyday lives of people, can also influence their levels of happiness (Derin and Bilge, 2016; Kutlu et al., 2016; Totan et al., 2019). In this study, smartphone addiction and problematic internet usage are explored as the concept of cyberpsychology.

Problematic internet usage, one of the concepts of cyberpsychology, can be described as people with difficulties managing their internet usage, being mentally incredibly busy with the internet even when they are away from it during the day, the emergence of deprivation reflecting frustration, irritability, and aggression when they are unable to access the internet, and this negative
situation negatively influences their academic, professional, social and family life (Chakraborty et al., 2010; Young, 2011). Problematic use of the internet consists of the following dimensions: overuse of the internet by spending a long time on the web, isolation with psychological withdrawal symptoms when the person is unable to access the internet, tolerance of the urge to spend more time on the internet, and ultimately negative consequences that affect the everyday life of the individual (Block, 2008). The combination of these dimensions can be effective in characterizing individuals’ internet use as problematic. Smartphone addiction, another definition of cyberpsychology can be characterized as individuals’ physical, psychological, social, and financial problems owing to their compulsion to use a smartphone in a manner that they cannot manage (Noyan et al., 2015). These principles of cyberpsychology have significant physical, psychological, and social implications in people’s lives (Avşaroğlu and Akbulut, 2020).

Examining these subjects in the literature, it is observed that there is a positive relationship between individuals’ problematic internet usage and smartphone addiction levels and physical problems (Baranowski et al., 2011; Çubuk, 2019; Erdoğanoglu and Arslan, 2019; Hazar et al., 2017), academic problems (Chi et al., 2020; Malak et al., 2017; Peng et al., 2019; Zhang et al., 2018), psychological problems (Aktaş and Yılmaz, 2017; Blachnio et al., 2017; Çakır and Oğuz, 2017; Capetillo-Ventura and Juárez-Treviño, 2015; Dağlı and Gündüz, 2017; Eroğlu and Bayraktar, 2017; Hadlington and Scase, 2018; Özözen et al., 2018), and family problems (Çetinkaya, 2019; Çırak et al., 2018; Gao et al., 2018; Moral and Kumcağız, 2019; Taş and Ateş, 2020).

When all of these are assessed in general, it is assumed that the factors of problematic Internet usage and smartphone addiction, which are among the terms of cyberpsychology, may harm the levels of happiness, which represent the cognitive and affective evaluation of the overall lives of people. In this context, this research explored the predictive relationships between problematic internet usage of university students and the levels of smartphone addiction and their happiness levels.

Aim of the study

This research aims to investigate problematic levels of internet usage and smartphone addiction as predictors of university students’ happiness levels. During the study, the following sub-goals were pursued following this primary goal:

1. What are the levels of happiness, problematic internet usage, and smartphone addiction scores of university students?
2. What is the relationship between university students' happiness, problematic internet usage, and smartphone addiction levels?
3. To what extent do university students' problematic internet usage and smartphone addiction levels predict their happiness levels?

METHODODOLOGY

This section includes information on the model of the research, study group, data collection tool, data collection and analysis, validity and reliability of the research, and the limitations of the research.

Research model

The research was carried out using the relational screening method, which is among the quantitative research methods. In relational type screening models, it is aimed to determine the presence and level of co-change between two or more variables (Büyüköztürk et al., 2018).

Study group

The research study group consisted of 340 university students, in which 229 were females (67.4%), 111 were males (32.6%), studying at various departments of a state university, and voluntarily agreeing to partake in the research. Table 1 contains demographic information on the participants of the study group.

Table 1 shows that 229 of the university students participating in the study are women and 111 are men. Of these university students, 22 are 18 years old, 70 are 19 years old, 106 are 20 years old, 76 are 21 years old, 48 are 22 years old, and 18 are 23 years old. Besides, 41 of these university students perceive their academic achievement as low, while 238 of them perceive it as moderate and 61 of them perceive it as high. While 195 of the university students participating in the study spend approximately 1-4 h daily on their smartphones or the internet, 112 of them spend 4-8 h, 27 of them spend 8-12 h and 6 of them spend 12 or more hours. Of these university students, 139 of them check their social media accounts 0-10 times daily, 91 of them check 10-20 times, 42 of them check 20-30 times, 68 of them check 30 or more times daily. Finally, 14 of the university students do not have any social media accounts, 203 of them have 1-3 social media accounts, while 103 of them have 3-5 accounts, and 20 of them have more than 5 social media accounts.

Data collection tool

In the research, "Oxford Happiness Scale - Short Form" adapted into Turkish by Doğan and Çötok (2011),
Table 1. Demographic information about university students participating in the research.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>229</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>111</td>
</tr>
<tr>
<td>Age</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>18</td>
</tr>
<tr>
<td>Perceived academic success</td>
<td>Low</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>238</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>61</td>
</tr>
<tr>
<td>Daily smart phone and internet usage time</td>
<td>1-4 hours</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>4-8 hours</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>8-12 hours</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>12+ hours</td>
<td>6</td>
</tr>
<tr>
<td>Number of daily checks of social media accounts</td>
<td>0-10 times</td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>10-20 times</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>20-30 times</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>30+ times</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>1-3</td>
<td>203</td>
</tr>
<tr>
<td></td>
<td>3-5</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>5+</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>340</td>
</tr>
</tbody>
</table>

“Problematic Internet Usage Scale” developed by Ceyhan and Gürçan (2007), and “Smartphone Addiction Scale - Short Form” adapted into Turkish by Noyan et al. (2015) were implemented. Authors who created and modified the scales for the use of these measuring tools in the research received permission. Moreover, the researchers created the "Personal Information Form" to assess the demographic details of the university students involved in the study.

Oxford happiness scale - short form

To determine the happiness level of university students, the "Oxford Happiness Scale Short Form" developed by Hills and Argyle (2002) and adapted to Turkish by Doğan and Cötok (2011) was applied. The scale consists of one dimension and 7 items. The scale is prepared in a 5-point Likert type. The first and seventh items of the scale are reverse coded. The lowest score that can be obtained from the scale is 7, while the highest score is 35. The rise in scores from the scale shows that the peoples’ happiness levels are increasing. The internal consistency of the scale was found as 0.74, while the test-retest reliability coefficient was calculated as 0.85. In the reliability study re-performed on the study group of this research, the Cronbach alpha coefficient was calculated as 0.72.

Problematic internet usage scale

To determine the problematic internet usage levels of university students, the "Problematic Internet Use Scale" developed by Ceyhan et al. (2007) was used. The scale consists of three sub-dimensions, such as the negative consequences of the internet, social benefit / social comfort, and excessive use. The scale consists of 33 items as in a 5-point Likert type. The scores that can be received from the scale can vary from 33 to 165, and the high scores which can be obtained from the scale suggest that the use of the internet by individuals is unhealthy; this impacts their lives adversely and can lead to pathology such as internet addiction. The internal
consistency of the scale was found as 0.94. In the reliability study re-performed on the study group of this research, the Cronbach alpha coefficient was calculated as 0.93.

**Smartphone addiction scale - short form**

To determine the smartphone addiction levels of university students, the "Smartphone Addiction Scale - Short Form" developed by Kwon et al. (2013) and adapted into Turkish by Noyan et al. (2015) was applied. The scale consists of 10 items as in 6-point Likert-type. The lowest score is 10, whereas the highest score is 60. Rising scores on the scale suggest that the risk of smartphone addiction has increased among individuals. The internal consistency of the scale was found as 0.91. In the reliability study re-performed on the study group of this research, the Cronbach alpha coefficient was calculated as 0.79.

**Process**

First, the requisite permits were acquired for using the scales in the data collection process. Students from the university who took part in the study were informed about the aim of the research and the scales. Participation in the study was reported as voluntary and people who did not want to participate were not included in the study. Data were collected in a single session. The data collection process took approximately 15 min. It was reported that those who wished to know the results of the scale filled in for themselves after the data were gathered were obliged. In this context, communication was established with these people who wanted to learn their results at the end of the research. After the research data were collected, the SPSS package program was utilized for analysis. Then, appropriate data analysis was performed depending on the sub-problems of the research. First of all, the values of frequency, percentage, mean and standard deviation were calculated to define the levels of happiness, problematic internet usage, and smartphone addiction of university students. Pearson Product-Moment Correlation Analysis was then performed to investigate the relationship between the happiness of university students, problematic use of the internet, and the levels of smartphone addiction. Last but not least, a simple linear regression analysis was conducted to find out to what extent the problematic internet usage of university students and the levels of smartphone addiction predicted their level of happiness.

**Limitations of the study**

The relationship between happiness, problematic internet usage, and smartphone addiction levels of University students was examined in a predictive relationship. The research is limited to 340 university students studying in different departments in a state university. Also, the results of the study are limited by the qualities measured by the "Oxford Happiness Scale - Short Form" used to determine the happiness levels of university students, the "Problematic Internet Usage Scale" used to determine the level of problematic internet usage, and the "Smartphone Addiction - Short Form" used to determine the levels of smartphone addiction and also by the analysis performed by the researchers.

**RESULTS**

This section of the research contains the results of the analysis carried out following the primary goal and sub-goals of the research.

**Happiness, problematic internet usage and smartphone addiction levels of university students**

Table 2 demonstrates the levels of happiness, problematic internet usage, and smartphone addiction of university students. When reviewing Table 2, university students’ mean score of happiness was calculated to be 23.57, problem Internet usage was 119.06, and smartphone addiction was 32.85.

**The relationship between happiness, problematic internet usage and smartphone addiction levels of university students**

Pearson correlation research was performed to investigate the relationship between the happiness of university students, the problematic use of the internet, and the level of smartphone addiction. Table 3 contains the findings obtained as a result of the analysis. Table 3 shows that there is a strong negative relationship between students participating in the study's happiness levels and their problematic internet usage and smartphone addiction. Based on this result, it can be assumed that while university students' problematic internet usage and smartphone addiction levels increase their level of happiness decreases.

**The prediction state of problematic internet usage and smartphone addiction levels of university students regarding their happiness levels**

A simple linear regression analysis was conducted to find out to what extent problematic internet usage of university students and the levels of smartphone addiction predicted their level of happiness (Table 4).
Table 2. Happiness, problematic internet usage and smartphone addiction levels of university students.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>x̄</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness</td>
<td>340</td>
<td>23.57</td>
<td>4.495</td>
</tr>
<tr>
<td>Problematic internet usage</td>
<td>340</td>
<td>119.06</td>
<td>22.921</td>
</tr>
<tr>
<td>Smartphone addiction</td>
<td>340</td>
<td>32.85</td>
<td>11.254</td>
</tr>
</tbody>
</table>

Table 3. The relationship between happiness, problematic internet usage and smartphone addiction levels of university students.

<table>
<thead>
<tr>
<th>S/No</th>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Happiness</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Problematic internet usage</td>
<td>-.366**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Excessive Use</td>
<td>-.300**</td>
<td>.702**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Social benefit / social comfort</td>
<td>-.333**</td>
<td>.866**</td>
<td>.431**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Negative results</td>
<td>-.329**</td>
<td>.965**</td>
<td>.593**</td>
<td>.763**</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Smartphone addiction</td>
<td>-.308**</td>
<td>.582**</td>
<td>.609**</td>
<td>.413**</td>
<td>.540**</td>
<td></td>
</tr>
</tbody>
</table>

Note: * p < 0.001; significance level.

Table 4: Simple linear regression analysis result for the prediction of university students' happiness levels.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SHβ</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>29.457</td>
<td>.800</td>
<td>36.822</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Problematic Internet Usage</td>
<td>-.051</td>
<td>.011</td>
<td>-.282</td>
<td>-4.558</td>
<td>.000</td>
</tr>
<tr>
<td>Smartphone Addiction</td>
<td>-.055</td>
<td>.024</td>
<td>-.144</td>
<td>-2.331</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: * p <0.001; significance level.

Based on the simple linear regression analysis, a significant negative correlation between happiness and problematic Internet use, as well as smartphone addiction was reported when Table 4 was examined (R = 0.384, R² = 0.147, p < 0.01). According to this result, problematic internet usage and smartphone addiction explained 14% of the total variance in happiness levels. When examining the standardized coefficient and t values, it can be said that problematic usage of the internet and addiction to smartphones are significant predictors of happiness.

DISCUSSION AND CONCLUSION

The result shows there was a strong negative correlation between the levels of happiness of university students, their problematic internet usage, and smartphone addiction. Furthermore, it was found that university students' problematic internet use and smartphone addiction levels explained 14% of their level of happiness. Risky internet and smartphone usage may have detrimental effects on the professional, family, social, and psychological lives of individuals (Avşaroğlu and Akbulut, 2020; Block, 2008).

In a study conducted by Kozan et al. (2019) with university students, a significant negative relationship was found between smartphone addiction and happiness. In another study carried out by Dan et al. (2015), a significant negative relationship was found between smartphone addiction and well-being. Another research conducted by Derin and Bilge (2016) showed a significant negative correlation exist between internet addiction and well-being. Apart from these studies, literature studies indicate that there is a negative relationship between happiness and problem Internet usage and smartphone addiction (Akin, 2012; Bahar and Meral, 2016; Dağlı and Gündüz, 2017; Kumcagiz and Gündüz, 2016; Longstreet et al., 2019; Nal et al., 2013; Totan et al., 2019).

The results of the current study are similar to other research results. Risky usage patterns such as problematic use of the internet and smartphone addiction lead individuals to experience negative mental health issues which can have detrimental effects on their level of happiness (Kozan et al., 2019). It is a significant finding in this regard that problematic Internet use and smartphone addiction are important predictors of happiness. This study was conducted to determine to what extent university students' problematic internet usage and...
smartphone addiction levels predicted their happiness level. The research showed that problematic internet usage and level of smartphone addiction are significant and important predictors of the level of happiness. In this context, skill-oriented studies such as healthy internet psycho-education and smartphone usage for university students can be considered important in terms of their happiness levels.

Moreover, this research focused on only two concepts of cyberpsychology that forecast the university students' happiness levels. The predictive state of happiness of various concepts in the field of cyberpsychology may be examined in future studies. Finally, this research was conducted using quantitative research methods with students in universities. In future, studies may be performed with different study groups and research methodology.

REFERENCES


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