INVESTIGATION OF THE PREDICTIVE RELATIONSHIPS BETWEEN INTERNET ADDICTION, PERCEIVED EMOTIONAL ABUSE AND WELL-BEING IN ADOLESCENTS¹

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Abstract:
In this study, it was aimed to examine the predictive relationships between adolescents' internet addiction and perceived emotional abuse and well-being. Correlational survey model was used in the research. The research group consisted of high school students studying in the 9th and 10th grades. This group was selected by simple random sampling method. 492 high school students, 271 girls (55.1%) and 221 boys (44.9%), participated in the study. In the study, Short-Form of Young’s Internet Addiction Test, Short-Form-II of Perceived Emotional/Psychological Abuse Scale for Adolescents, Five-Dimensional Well-Being Model Scale for Adolescents, and Personal Information Form were used. Independent sample t-test, One-Way Anova, Pearson Correlation Coefficient, and multiple linear regression analysis techniques were used to analyze the data. According to the findings of the study, no significant difference was found between adolescents' internet addiction and gender variable. On the other hand, a significant difference was found between internet addiction and grade level of adolescents, the average daily internet use duration during the week, the average daily internet use duration at the weekend, internet use purposes, and the effect of internet use on sleep patterns. A positive, moderately significant correlation was found between adolescents' internet addiction and the score of emotional abuse perceived from mother and father. A moderately significant negative relationship was found between the internet addiction

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scores and well-being scores of adolescents. According to the findings of the study, it was found that perceived emotional abuse by parents and well-being scores were predictors ($R = 0.411$, $R^2 = 0.17$) on adolescents’ internet addiction scores.

**Keywords:** internet addiction, perceived emotional abuse, well-being, adolescents

1. Introduction

The Internet enables information to spread around the world. In addition, the Internet creates an environment of cooperation and interaction between individuals and computers, regardless of geographical location (Leiner et al., 1997), and its usage area is increasing gradually with the rapid developments in technology (Rehman, Shafi, and Rizvi, 2016). Besides, the Internet saves time by finding the information users want to reach from different sources in a short time (Traş and Öztemel, 2019). Thus, it is seen that the Internet has become a tool placed in the center of human life (Griffiths, 2000). When used properly, the Internet increases the quality of life, but also includes negative components (Amichai-Hamburger, 2007). One of these negative components is internet addiction, which occurs due to the inability to control the duration of use because of excessive use of the Internet (Young, 2007). Addiction can be seen in the form of behavioral addictions that include human-machine interactions that affect behaviors as well as substances such as alcohol and drugs (Kim and Kim, 2002). Internet addiction is considered within the scope of behavioral addiction (Griffiths, 2000). Internet addiction is a multidimensional syndrome with emotional, behavioral, and cognitive anomalies that negatively affect control ability, primarily in the social and psychological domain (Young, 2007).

The concept of internet addiction (Goldberg, 1996) has been named differently by researchers. These include “internet addiction” (Beard, 2005; Beard and Wolf, 2001; Douglas et al., 2008; Griffiths, 2000; Shaw and Black, 2008); “pathological internet use” (Davis, 2001; Morahan-Martin and Schumacher, 2000); problematic internet use “problematic internet use” (Caplan, 2002; Shapira et al., 2003) “specific and generalized pathological internet use” (Davis, 2001) can be given as examples. In this study, it was preferred to use the concept of internet addiction, which is widely used in the literature.

One of the concepts thought to be associated with internet addiction is perceived emotional abuse. Emotional abuse is the actions that harm the physical, mental, moral, and social development of the child by not being in a developmentally appropriate, supportive environment (APA, 2019). Emotional abuse is the behaviors of adults that prevent the child from fulfilling the developmental tasks appropriate to the physical, cognitive, and psychosocial development periods by doing or not doing certain behaviors (Turan and Traş, 2017). There may be difficulty in defining emotional abuse, which may be hidden compared to physical and sexual abuse in terms of being visible and underestimated in terms of its effects (Nelms, 2001; Polat, 2007). Parental behaviors that cause emotional abuse are refusing to react emotionally, letting children alone, casting
children adult role early on, humiliating, using children for their benefit, make children turn into crime and neglect on mental health, medical and educational (Brassard, Hart, Baker and Chiel, 2019; Pearl, 1994; cited as in Hamarman and Bernet, 2000; Polat, 2016). However, not every behavior of the parent/caregiver towards the child can be evaluated within the scope of emotional abuse (Nelms, 2001). To qualify as emotional abuse, the behavior must be done with malicious intent to harm; the person must be aware that it will cause emotional problems and continues the behavior consciously (Hamarman and Bernet, 2000). The conceptual framework of emotional abuse consists of four criteria. These criteria: emotional abuse and neglect define the interaction between the parent/caregiver and the child; this interaction negatively affects the relationship between them; the interaction causes deterioration in the child’s psychological health and development; emotional abuse, including negligence, occurs without physical contact (Glaser, 2002).

2. Literature Review

Well-being, another concept that is thought to have an impact on adolescents’ internet addiction, refers to psychological functionality and experience (Ryan and Deci, 2008). Although well-being generally overlaps with each other, it is discussed under two headings as subjective well-being and psychological well-being, which include different characteristics (Ryan and Deci, 2001). Subjective well-being includes cognitive and emotional evaluations of individuals’ lives, and here, there are fewer negative emotions and more positive ones (Diener, 2000). Individuals’ emotional responses consist of life satisfaction and satisfaction areas (Diener et al., 1999). Ryff states that subjective well-being is insufficient in explaining positive psychological functionality, (1989) and there are six basic components in the well-being model in which he integrates many phenomena. These are self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989; Ryff, 1995). Taken together, these six components include the individual’s positive evaluations of her/his life, the feeling of personal continuous improvement, the belief that life is purposeful and meaningful, being in good relations with other people, autonomy, and the individual’s capacity to manage her/his environment effectively (Ryff, 1995). According to Onreat, Van-Hiel, and Dhont (2013), psychological well-being refers to a quality life in which the individual is psychologically functional and uses her/his potential.

Adolescence (Parlaz, Tekgül, Karademirci, and Öngel, 2012), which is characterized by physiological, psychological and social developmental changes and is the transition period from childhood to adulthood, consists of three periods. Adolescents spending more time with their peers than their parents in the middle adolescence period (Kulaksızoğlu, 2014), which includes the characteristics of adolescence more, and thinking that risky behaviors are less harmful (Derman, 2008) can be a risk factor for developing internet addiction (Ceyhan, 2008). However, some adolescents may see the
Internet as a tool to increase their well-being by avoiding negative emotions and life events, and this may lead to excessive use of the Internet.

When the relevant literature is examined in line with the above information, there are some studies (Stead and Bibby, 2017) that examine the relationship between internet addiction and perceived emotional abuse (Altunten, 2019; Hsieh et al., 2016), and internet addiction and well-being. Also, there are some studies examining internet addiction according to various variables such as gender (Ferlibaş, 2019; Tsai et al., 2009), grade level (Kubey, Lavin and Barrows, 2001) purpose of internet use (Kaval, 2018; Morahan-Martin and Schumacher, 2000) average duration of daily internet use on weekdays and weekends (Balca, 2018; Wu et al., 2016), the effect of internet use on sleep patterns (Cheung and Wong, 2011; Baturay and Toker, 2019). However, no study has been found in which internet addiction is examined together with the predictive relationship between perceived emotional abuse and well-being. It is aimed that this study will contribute to the relevant literature in this respect.

In this study, it was aimed to examine the predictive relationships between adolescents’ internet addiction levels and perceived emotional abuse and well-being. For this purpose, the following sub-purposes are included.

1. Adolescents’ average scores on internet addiction
   1.1 Does it differ significantly according to gender, grade level, average duration of daily internet use on weekdays and weekends, purposes of internet use, and effects on sleep patterns?
   2. Is there a significant relationship between internet addiction and perceived emotional abuse and well-being in adolescents?
   3. Do perceived emotional abuse and well-being in adolescents predict internet addiction significantly?

3. Material and Methods

3.1 Research Model
The research was carried out according to the correlational survey model. Survey model aims to determine the past or ongoing situation as it is (Karasar, 2018).

3.2 Study Group
The study group consisted of high school students studying in 9th and 10th grades in five different secondary education institutions in Selçuklu, Meram and Karatay districts of Konya province in 2019-2020. High school students were selected by a simple random sampling method, in which members of the study population had an equal chance of eligibility (Karasar, 2018). The study group consists of 271 female (55.1%) and 221 male (44.9%) students. The ages of the students vary between 13 and 17 and the average age is 14.94. (sd: 0.71). 242 (49.2%) of the students are 9th grade and 250 (50.8%) are 10th grade.
3.3 Data Collection Tools

3.3.1 Young's Internet Addiction Test Short-Form (YIAT-SF)
Developed by Young (1998) and transformed into short-form by Pawlikowski et al. (2013), YIAT-SF consists of 12 items with a five-point Likert type. The adaptation of the form to Turkish was carried out by Kutlu et al. (2016). As a result of the confirmatory factor analysis, it was found that YIAT-SF fit well ($\chi^2 = 173.58$, $sd = 53$, CFI = 0.95, SRMR = 0.064 and RMSEA = 0.079). The Cronbach alpha coefficient of the scale was calculated as .91 for university students and .86 for adolescents. Test-retest reliability, which was conducted with three weeks interval, was found as .93 for university students and .86 for adolescents (Kutlu et al., 2016). For this study, Cronbach's alpha internal consistency reliability coefficient was calculated as .83.

3.3.2 Short-Form-II of Perceived Emotional/Psychological Abuse Scale for Adolescents
The scale developed by Arslan and Kabasakal (2014) consists of 32 items, each of which is a four-point Likert type, including mother and father form. The Cronbach’s alpha reliability coefficient for the scale was .88 for the mother form and .92 for the father form. The internal consistency reliability coefficient of the sub-dimensions of the mother form of the scale consisting of five sub-dimensions is .83 for severe rejection, .78 for hidden rejection, .73 for unrealistic expectations, .91 for humiliation, and .86 for acceptance/respect. The internal consistency coefficient of the sub-dimensions of the father form is .80 for severe rejection, .77 for hidden rejection, .73 for unrealistic expectations, .89 for humiliation, and .85 for acceptance/respect dimensions. As a result of the confirmatory factor analysis, the mother form ($\chi^2 = 1725.6$, $sd = 454$, CFI = 0.98, SRMR = 0.045 and RMSEA = 0.047) and the father form ($\chi^2 = 1630.84$, $sd = 454$, CFI = 0.98, SRMR = 0.042 and RMSEA = 0.046) of the scale was found to have a good fit (Arslan and Kabasakal, 2014). For this study, the Cronbach's alpha reliability coefficient was calculated as .91 for the mother form and .92 for the father form. The reliability coefficient of the sub-dimensions of the mother form was calculated as 0.63 for severe rejection, .60 for hidden rejection, .70 for unrealistic expectations, .85 for humiliation, and .79 for acceptance/respect. The reliability coefficient of the sub-dimensions of the father form was found as .66 for severe rejection, .64 for hidden rejection, .74 for unrealistic expectations, .86 for humiliation, and .81 for acceptance/respect.

3.3.3 Measure of Adolescent Well-Being (EPOCH)
Adapted by Demirci and Ekşi (2015), the scale consists of 20 items in a five-point Likert type. Confirmatory factor analysis was performed to determine the fit of the five-dimensional model of the scale ($\chi^2 = 381.29$, $sd = 160$, RMSEA = .074, NFI = .96, NNFI = .98, CFI = .98,IFI = .98, RFI = .96 and SRMR = .052). Cronbach’s alpha internal consistency coefficient of the scale was found as .95 for the total score. The internal consistency coefficient of the sub-dimensions of the scale was found as .84 for engagement, .72 for perseverance, .88 for connectedness, .84 for optimism, and .88 for happiness (Demirci ve Ekşi, 2015). For this study, the Cronbach’s alpha coefficient was calculated as .88 for the total score of the scale. The internal consistency coefficient of the sub-dimensions of the
scale was found as .71 for engagement, .63 for perseverance, .79 for connectedness, .79 for optimism, and .84 for happiness.

3.3.4 Personal Information Form

Personal Information Form created by the researcher was formed to collect general information from the individuals participating in the study. This form consists of questions to determine the adolescents’ gender, age, grade, average duration of daily internet use on weekdays and weekends, for what purpose the Internet is mostly used, and the effect of internet use on sleep patterns.

In the research, the high school students selected with unbiased sampling were given Young’s Internet Addiction Test Short-Form, Short-Form-II of Perceived Emotional/Psychological Abuse Scale for Adolescents, Measure of Adolescent Well-Being (EPOCH) and Personal Information Form prepared by the researcher. Before the application, students were informed about the purpose of the study and data collection tools. Later, data were collected from students who wanted to participate in the study voluntarily. The average application time of the scales varied between 20-25 minutes.

3.4 Data Analysis

The data obtained at the end of the research were analyzed using the SPSS 20.0 package program. Multiple linear regression, which is the analysis for estimating the dependent variable depending on two or more independent variables related to the dependent variable, was used in the analysis of the data. The correlation between the scores obtained from the scales was calculated using the Pearson Correlation coefficient. The t-test was also used to test whether the difference between two unrelated sample averages was significant. One-Way Anova was used to test whether the difference between two or more unrelated sample averages is significant (Büyüköztürk, 2018).

4. Results and Discussion

Table 1: Skewness and Kurtosis Values of the Variables

<table>
<thead>
<tr>
<th></th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young’s Internet Addiction Test Short-Form</td>
<td>.653</td>
<td>.412</td>
</tr>
<tr>
<td>Short-Form-II of Perceived Emotional/Psychological Abuse Scale for Adolescents</td>
<td>.936</td>
<td>.640</td>
</tr>
<tr>
<td>Measure of Adolescent Well-Being (EPOCH)</td>
<td>-.066</td>
<td>-.447</td>
</tr>
</tbody>
</table>

The skewness and kurtosis coefficients were checked to determine whether the scores obtained from the scales used in the study showed normal distribution. As can be seen in Table 1, the values of skewness and kurtosis of the variables are between +1 and -1. This situation shows that there is a normal distribution (Hair, Black, Babin, Anderson, and Tatham, 2006). In the study, 3 data determined by looking at Cook’s, Leverage Values and Mahalanobis values were extracted and not included in the analysis. In the scales where data was distributed to 500 students, the extreme data was sorted out and 5 scales
with missing data was excluded and so the scale of 492 high school students in total were analyzed.

<table>
<thead>
<tr>
<th>Table 2: Comparison of Internet Addiction Scale Scores by Gender Variable with the t-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
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</table>

* p <.05

In Table 2, it was examined by t-test whether the average scores of adolescents for internet addiction differed significantly according to the gender variable. As a result of the examination, it was observed that the internet addiction average scores of adolescents did not differ significantly according to gender (p = .44, p > .05).

<table>
<thead>
<tr>
<th>Table 3: Comparison of the Internet Addiction Scale Scores with the T-test According to the Grade Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

* p <.05

In Table 3, it was examined by t-test whether the adolescents’ average scores of Internet addiction differ significantly according to the grade variable. According to the result, the adolescents’ internet addiction average scores differ significantly according to the grade (p = .001, p < .05). Average score of 10th grade students on the internet addiction scale (X = 30.18) was found to be significantly higher than that of the 9th grade students (X = 27.72).

<table>
<thead>
<tr>
<th>Table 4: Descriptive Statistics of Adolescents’ Average Scores of the Internet Addiction Scale According to Average Duration of Daily Internet Use on Weekdays and Weekends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Duration of Daily Internet Use on Weekdays</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>0-2 hours</td>
</tr>
<tr>
<td>2-4 hours</td>
</tr>
<tr>
<td>4-6 hours</td>
</tr>
<tr>
<td>6-8 hours</td>
</tr>
<tr>
<td>10 hours and more</td>
</tr>
</tbody>
</table>

Average Duration of Daily Internet Use on Weekends |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 hours</td>
</tr>
<tr>
<td>2-4 hours</td>
</tr>
<tr>
<td>4-6 hours</td>
</tr>
<tr>
<td>6-8 hours</td>
</tr>
<tr>
<td>10 hours and more</td>
</tr>
</tbody>
</table>

When Table 4 is examined, it is seen that adolescents (X = 36.36) who use the Internet for 6-8 hours on weekdays get the highest score when looking at the average scores of the internet addiction scale. Then come the adolescents who use the Internet for 4-6 hours (X = 33.14), 10 hours and more (X = 29.00), 2-4 hours (X = 27.74) and 0-2 hours (X = 25.27)
on weekdays, respectively. When looking at the results regarding the average duration of daily internet use at the weekend, it is seen that the adolescents (X = 37.25) who use the Internet for 10 hours or more on the weekend get the highest score. Then come the adolescents who use the Internet for 6-8 hours (X = 31.82), 4-6 hours (X = 29.67), 2-4 hours (X = 26.10) and 0-2 hours (X = 21.95) on the weekend, respectively.

Table 5: Variance Analysis Results on the Average Scores of the Internet Addiction Scale According to Adolescents’ Average Duration of Internet Use on Weekdays and Weekends

<table>
<thead>
<tr>
<th>Source</th>
<th>KT</th>
<th>Sd</th>
<th>KO</th>
<th>F</th>
<th>p</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Duration of Daily Internet Use on Weekdays</td>
<td>Between Groups</td>
<td>6234.032</td>
<td>4</td>
<td>1558.508</td>
<td>26.178</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>28993.824</td>
<td>487</td>
<td>59.536</td>
<td>491</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35227.857</td>
<td>491</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Duration of Daily Internet Use on Weekends</td>
<td>Between Groups</td>
<td>8219.287</td>
<td>4</td>
<td>2054.822</td>
<td>37.051</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>27008.569</td>
<td>487</td>
<td>55.459</td>
<td>491</td>
<td>1-5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35227.857</td>
<td>491</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p <.05 1: 0-2 hours 2: 2-4 hours 3: 4-6 hours 4: 6-8 hours 5: 10 hours and more

When Table 5 is examined, it is seen that there is a significant difference between adolescents’ average scores on the internet addiction scale in terms of average duration of daily internet use on weekdays and weekends. According to the results of the Tukey test conducted to determine which groups have differences between units, the average score of individuals who use the Internet for 0-2 hours on weekdays and weekends per day is significantly lower than individuals who use it 2-4 hours, 4-6 hours, 6-8 hours and 10 hours or more.

Table 6: Descriptive Statistics of Adolescents’ Average Scores on the Scale of Internet Addiction According to Internet Use Purposes

<table>
<thead>
<tr>
<th>Purposes of Internet Use</th>
<th>N</th>
<th>X</th>
<th>Ss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Addiction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale Score Averages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Acquisition</td>
<td>55</td>
<td>21.69</td>
<td>7.36</td>
</tr>
<tr>
<td>Social Sharing</td>
<td>185</td>
<td>30.52</td>
<td>7.53</td>
</tr>
<tr>
<td>Entertainment</td>
<td>151</td>
<td>29.75</td>
<td>8.95</td>
</tr>
<tr>
<td>Communication</td>
<td>45</td>
<td>26.28</td>
<td>7.71</td>
</tr>
<tr>
<td>Game</td>
<td>56</td>
<td>31.05</td>
<td>8.04</td>
</tr>
</tbody>
</table>

When Table 6 is examined, it is seen that adolescents who use the Internet for games (X = 31.05) get the highest score when looking at the average scores of the internet addiction scale. Adolescents who use the Internet for social sharing (X = 30.52), entertainment (X = 29.75), communication (X = 26.28) and information (X = 21.69) follow them, respectively.
When Table 7 is examined, it is seen that adolescents' average scores on the internet addiction scale vary significantly according to their internet use purposes. According to the results of the Tukey test, it is seen that the difference between internet use purposes is between information acquisition and social sharing, entertainment, communication, and gaming; between social sharing and communication; and between communication and gaming.

When Table 8 is examined, it is seen that adolescents (X̄ = 35.27) whose internet use affects their sleep patterns have the highest score. They are followed by adolescents whose internet use sometimes affects sleep patterns (X̄ = 29.42) and does not affect sleep patterns (X̄ = 23.39).

When Table 9 is examined, adolescents' average scores on the internet addiction scale vary significantly according to the effect of internet use on sleep patterns. According to the results of the Tukey test, it is seen that internet use is among those that affect sleep patterns and those that sometimes affect sleep patterns, and do not affect sleep patterns.
When Table 10 is examined, it is observed that there is a moderately significant positive correlation between the adolescents’ average scores on the internet addiction scale and the average scores they got from the scale of perceived emotional abuse by mother (r = .33, p <.01). It was observed that there was a moderately significant positive correlation between the adolescents’ average scores from the internet addiction scale and the average scores they got from the scale of perceived emotional abuse by father (r = .32, p <.01). A moderate negative correlation was found between adolescents’ average scores from the internet addiction scale and their average scores from the well-being scale (r = -.34, p <.01).

When Table 11 is examined, it is seen that the total score obtained from the internet addiction scale significantly predicts the scale of perceived emotional abuse by mother and father and the well-being scale (R = 0.411, R² = 0.17). The total score of the internet addiction scale predicts 17% of the total variance regarding the scale of perceived emotional abuse by mother and father and the well-being scale.
5. Discussion, Conclusion and Recommendations

In the study, adolescents’ average scores in internet addiction do not differ significantly according to the gender variable. When the relevant literature is examined, it is seen that there are studies supporting the research finding (Balcı, 2018; Ferlibaş, 2019; Kaval, 2018; Yavuzarslan-Gök, 2017). On the other hand, there are studies in which internet addiction levels of high school students differ significantly in favor of male students (Derin, 2013; Döner, 2018; Esen and Siyez, 2011; Günüç, 2009; Öner, 2015; Rehman et al., 2016; Türkoğlu, 2013; Zorbaz and Tuzgöl-Dost, 2014). There are studies in which male undergraduate students have significantly higher internet addiction levels than females (Morahan-Martin and Schumacher, 2000; Tsai et al., 2009). In a study by Wu et al. (2016), the internet addiction level of students who continue secondary education differs significantly in favor of female students.

In the study, internet addiction average scores in adolescents differ significantly according to the grade variable. In the relevant literature, there are studies in which the internet addiction level of 10th grade students differs significantly from those studying at other grades (Döner, 2018; Siğrili, 2017). On the other hand, there are studies that do not support the related research findings (Akdeniz, 2018; Altunten, 2019; Balcı, 2018; Güneauç, 2009). As a result of their research on 7th-12th grade students, Jang, Hwang, and Choi (2008) found that the level of internet addiction changes significantly as the grade level increases. Accordingly, the level of internet addiction differs in favor of high school students.

In the research conducted, the average scores of internet addiction among adolescents differ significantly according to the duration of internet use. In the relevant literature, there are studies showing that adolescents who use the Internet for more than six hours a day have a significantly higher Internet addiction level than adolescents who use the Internet for six hours or less (Balcı, 2018; Döner, 2018; Wu et al., 2016). In the research by Yavuzarslan-Gök (2017), the internet addiction levels of high school students differentiate in favor of students who use the Internet for 20 hours or more per week. Yadav, Banwari, Parmar, and Maniar (2013), as a result of a study conducted on high school students, found that the level of internet addiction differs in favor of students who have high durations of being online. As a result of the study conducted by Stavropoulos, Alexandraki, Motti-Stefanidi (2013) on high school students, it was found that the internet addiction level of adolescents with an average of two hours and more daily internet use on weekdays and weekends was found to be significantly higher.

In the research, internet addiction average scores among adolescents differ significantly according to internet use purposes. In the study of Kaval (2018), it was found that the internet addiction level of individuals who use the Internet for social sharing, betting and gambling purposes is significantly higher than those who use the Internet for communication, video watching, listening to music, and shopping. As a result of her research Ferlibaş (2019) found that the internet addiction levels of adolescents who prefer social networking sites on the Internet are significantly higher than those who prefer
other websites. Kim and Kim (2002), as a result of their research, found that the internet addiction level of adolescents who use the Internet for games, chat and entertainment significantly differentiate than those who use the Internet for educational and shopping purposes. Morahan-Martin and Schumacher (2000), in their study, found that the internet addiction level of undergraduate students significantly differentiates in favor of individuals who use the Internet for meeting new people, gaming and gambling. Jang et al. (2008), in their study, found that the internet addiction level of adolescents who use the Internet for chatting and games is significantly higher than that of adolescents who use it for information purposes.

In the study, internet addiction average scores in adolescents differ significantly according to the effect of internet use on sleep patterns. Baturay and Toker (2019), as a result of their study on high school students, found a positive and significant relationship between internet addiction level and the variable of disturbed sleep. As a result of their research on individuals aged 13-50, Ferraro, Caci, D’Amico, and Blasi (2007) stated that individuals using the Internet late at night tend to develop internet addiction. Cheung and Wong (2011) investigated the relationship between insomnia, internet addiction and depression in adolescents and found a positive and significant relationship between internet addiction, depression, and insomnia. Internet-addicted adolescents experience prolonged sleep latency, lower sleep efficiency, more frequent use of sleeping pills, more sleep disturbances, and more functional impairments in fulfilling daily responsibilities than non-addicts. As a result of their research, Yeh, Lin, Tseng, and Hwang (2012) found a strong and positive correlation between problematic internet use of university students and disturbed sleep.

In the study, a positive and significant relationship was found between adolescents' average scores on the internet addiction scale and perceived emotional abuse. When the relevant literature is examined, it is seen that there are studies in parallel with the research findings (Altunten, 2019; Dalbudak, Evren, Aldemir, and Evren, 2014; Yadav et al., 2013; Yates et al., 2012). Schimmenti et al. (2015) found a positive significant relationship between traumatic experiences, alexithymia and internet addiction. Hsieh et al. (2016) found a positive and significant relationship between physical neglect, psychological neglect, physical abuse, sexual abuse and internet addiction. Worsley, McIntyre, Bentall, and Corcoran (2018) found a positive and significant relationship between maltreatment in childhood and problematic social media use, according to their study on young adults. As a result of Kircaburun, Griffiths, Billieux (2019), a relationship was found between adolescents' exposure to emotional abuse in childhood and problematic social media use.

In the study, a significant negative correlation was found between adolescents' average scores on the internet addiction scale and well-being. Considering the relevant literature, Traş (2019) as a result of her study examining the relationship between internet game addiction and internet addiction and loneliness levels in university students, found that loneliness variable significantly predicts the internet addiction. Özteke-Kozan, Baloğlu, and Biçak (2019) found a strong positive correlation between problematic
internet use and loneliness among university students. Traş, Öztemel, and Baltacı (2019) as a result of their study examining the effect of Facebook use intensity among university students on problematic internet use, belonging and social appearance anxiety stated that a positive significant relationship was found between Facebook density scale scores and social appearance anxiety and problematic internet use scale scores. Yarar (2019) found a significant negative correlation between well-being and cyberbullying in his study on high school students. Sharma and Sharma (2018) found a negative significant relationship between internet addiction and sub-dimensions of psychological well-being as a result of a study conducted on 440 university students who used the Internet for at least six months. Ivanova (2013) found a significant negative correlation between internet addiction and well-being as the result of her research on 378 individuals. Casale, Lecchi, and Fioravanti (2015) found a significant negative relationship between generalized problematic internet use and all sub-dimensions of psychological well-being as a result of a study conducted on undergraduate students. Lai et al. (2015) examined the mediator role of internet addiction in the relationship between depression, social anxiety and psychosocial well-being in 5366 adolescents, and according to this, internet addiction negatively mediated the relationship between social anxiety and psychosocial well-being in adolescents. Van den Eijnden, Meerker, Vermulst, Spijkerman, and Engels (2008) found a positive significant relationship between compulsive internet use and loneliness, according to a study on adolescents. Stead and Bibby (2017) found a negative significant relationship between problematic internet use and subjective well-being of individuals between the ages of 18-30.

6. Recommendations

Intercultural and longitudinal studies can be conducted in order to explain the findings obtained from this research more accurately. In the studies to be carried out, more detailed information about internet addiction can be obtained by examining the time of day that adolescents usually connect to the Internet, and their weekday and weekend sleep duration. The effectiveness of group psychotherapies in the treatment of internet addiction in adolescents with a high level of internet addiction can be investigated by experimental method.

7. Conclusion

In the study, adolescents’ average scores in internet addiction do not differ significantly according to the gender variable. Internet addiction average scores in adolescents differ significantly according to the grade variable. The average scores of internet addiction among adolescents differ significantly according to the duration of internet use. Internet addiction average scores among adolescents differ significantly according to internet use purposes. internet addiction average scores in adolescents differ significantly according to the effect of internet use on sleep patterns. a positive and significant relationship was
found between adolescents' average scores on the internet addiction scale and perceived emotional abuse. A significant negative correlation was found between adolescents' average scores on the internet addiction scale and well-being.

7.1 Limitations
This study has some limitations. The study group of the research consists of 9th and 10th grade students. The data obtained in the research are limited to the answers given by the students participating in the research to the scale forms.

Ethic Statement
All procedures in this study involving human participants were conducted in accordance with the ethical standards of the Research Ethics Board of the University and the 1975 Helsinki Declaration.

Author Contributions Statement
This article was written with the joint contributions of two authors.

Conflict of Interest Statement
The authors declare that they have no conflict of interest. Each author certifies that he or she has no commercial associations (e.g., consultancies, stock ownership, equity interest, patent/licensing arrangements, etc.) that might pose a conflict of interest in connection with the submitted article.

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References


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