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## THE DETERMINATION OF INTERNET ADDICTION AND VIOLENCE TENDENCY LEVEL AMONG ADOLESCENTS <sup>1</sup>

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### ABSTRACT

The aim of this study was to determine internet addiction and violence tendency levels among adolescents, and then to examine their some variables as well as their interrelationship with those levels. This cross-sectional and descriptive type of research was conducted with 537 adolescents (male=363, female=174) studied in high schools. Data were collected with a personal information form, the Internet Addiction Scale (IAS) and the Violence Tendency Scale (VTS). The relationship was determined between adolescents' variables and the outcomes of IAS and VTS. It was determined that the internet addiction levels of the adolescents were low and their tendency toward violence was at moderate level. A statistically significant correlation was found in the direction of moderate positivity between the VTS and IAS totals. As a conclusion, it was determined that levels of tendency toward violence increase in adolescents as their levels of internet addiction increase. It is suggested that adolescents should be observed in terms of internet addiction and caution should be taken in terms of their tendency towards violence.

**Key Words:** Adolescents, Internet Addiction, Violence Tendency.

### 1. INTRODUCTION

The population of the world is above 7 billion and adolescents constitute one-fourth of this figure (UNFPA, 2016). Puberty can be defined as a period of transforming into adulthood, a times of biological, physical, social, psychological development and maturation (WHO, 2018). Starting from birth and on into adulthood, children form the main foundations of their personality and mental structure by internalizing the experiences gained from interactions and sharing in the society (Sawyer et al., 2012). Behaviors of the individual displayed either in daily life or school life are based upon these experiences. An individual experiencing a lack of sharing and interaction in the family isolates her/himself from the real world and focuses on the virtual environment. While easily accessible technological opportunities present the individual with many opportunities to enjoy the virtual environment, they start to take the place of the interpersonal communication that the individual misses (Esen, 2011).

In the current period, the use of computers and the internet has become an essential fact of life (Goswami & Singh, 2016). The basic purpose of the internet was originally to reach information easily, quickly, cheaply and safely, thereby facilitating communication. But the use of the internet for more extensive purposes than

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had been predicted has become prevalent, leading to what can be called pathological overuse or a new type of addiction that is now known as internet addiction (Arısoy, 2009). Because adolescents have as yet not reached psychological maturity, their lengthy use of the internet causes them to be defined as a risk group for internet addiction (Khatoon et al., 2016; Anderson et al. 2017). Besides contributing to our lives by providing communication and information, the widespread use of internet technologies has now started to threaten our lives. With the rise of computer and internet technologies, adolescents are now being exposed to various negative outcomes (Fengqiang et al., 2016; Anderson, 2016). In these cases, adolescents making use of these technological tools may encounter forms of physical, social, technical and psychological violence (Anderson, 2016).

Instead of decreasing as can be expected in developing societies, violence seems to be continuing from past to present. As in the past and today, violence is experienced in primitive form or in different ways through the use of technology (Khatoon et al., 2016). Because of this, ensuring the safety of the school environment is important in protecting the mental health of adolescents (Nijs et al., 2014). However, when a study of violence in adolescents is examined, it appears that violence is intensely experienced in the school environment (Özgür et al., 2011). There is research showing that violent internet and computer games result in an increase of aggressive thoughts and behaviors in adolescents (Khatoon, 2016). Because of this, the need for more research on tendencies toward violence continues to gain importance.

When the results of internet use apart from its educational-instructional purposes are taken into account, it becomes of more importance to emphasize that this type of use will affect aggression levels. In this context, this planned research, it is believed, will be of significance in determining the internet addition and violent tendencies of adolescents in school.

### Research Questions

- What are the internet addiction and violence tendency levels of the adolescents?
- Is there a statistically significant difference between internet addiction and violence tendency levels and adolescents' gender, situation of family members being violent toward the adolescent or each other, internet and computer use features?
- Is there a statistically significant correlation between the overall and subscale levels of internet addiction and tendency toward violence levels?

## 2. METHOD

### 2.1. Design, Participants and Procedure

This cross-sectional and descriptive type of research was conducted in the period of spring-2016. Its population consisted of students enrolled during the academic year 2015-2016 at high schools in a district of city province in the southern part of the Turkey. The study sample consisted of 537 9th, 10th, 11th, and 12th grade students enrolled at three high schools, randomly chosen by using the finite population sampling method. In the research, a personal information form, an internet addiction scale (IAS) and a violence tendency scale (VTS) were used in the data collection. A preliminary study was carried out with a group of students not included in the main sampling and no changes were made to the measure tools according to the preliminary application results. All data were collected in about 30 minutes via self-report inventories.

### 2.2. Ethical Considerations

Permission was obtained from the scale owners for the use of IAS and VTS via e-mail. Before the start of the study, students were informed about the purpose of the research in compliance with the 1964 Helsinki Declaration, and their verbal and written consent was taken with an informed consent form. For adolescents under 18 years of age, written permission was also received from their parents. The research was approved by University Medical Faculty, Clinical Studies Ethics Committee (16/09/2015/120). Written permission to conduct the study at the schools was obtained from the Provincial Directorate for National Education.

### 2.3. Measures

**Personal Information Form:** This form consisted of questions prepared in the direction of the literature and aimed at noting the gender, situation of family members being violent toward the adolescent or each other, internet and computer use features of the adolescents (Kuss et al., 2013; Haskan-Avcı & Yıldırım, 2014; Wallace, 2014; Yao & Zhong, 2014).

**Internet Addiction Scale (IAS):** The “Internet Addiction Scale,” designed by Hahn and Jerusalem (2001) and adapted to Turkish by Şahin and Korkmaz (2011), was used as a data collection tool. The internet addiction scale is a five-stage likert-type scale and consists of 19 items which can be gathered under three factors. The total score on the whole scale can be a minimum of 19 and a maximum of 95. It is accepted that as scores on the scale increase, so does the addiction level. There is no cut-off point. The scale has three subscales, the first of which is “loss of control,” the second, “the desire to remain online,” and the third, “negative consequences in social relationships.” The internal consistency coefficient of the scale was calculated as Cronbach Alpha=0.858. In this research, it was calculated as Cronbach Alpha= 0.945.

**Violence Tendency Scale (VTS):** Developed by Haskan and Yıldırım (2012), the scale has a total of 20 items, one of which is reverse-coded. The scale has three ratings. The regular articles are graded as is while the reversed item is scored in reverse. Scores on the VTS vary between 20 - 60. A high score means that the tendency toward violence level of the individual is high. There is no cut-off point. The Cronbach Alpha coefficient for VTS was found to be 0.870. In this research, it was calculated as Cronbach Alpha= 0.891.

## 2.4. Data Analysis

Analyses were performed in the SPSS (Statistical Package for Social Sciences) 21.0 statistical software by the researcher after data were collected. For descriptive statistics, numbers and percentages were used. While the Mann Whitney U Test and Kruskal Wallis Test were used in data evaluation, the Bonferroni Correction Mann Whitney U Test was performed for evaluating the differences in the sub-groups. The Spearman Correlation Coefficient Test was employed to evaluate the correlation between the total IAS and its sub-dimensions and VTS. In the statistical evaluations,  $p < 0.05$  was accepted as the level of significance.

## 3. RESULTS

### 3.1. Descriptive Characteristics

This study was conducted with 537 high school students (male=363, female=174; age range=14 to 18) who agreed to participate. It was determined that 67.6% (n=363) of the adolescents participating in the research were male (Table 2), family members of 85.1% (n=457) were not violent toward each other or toward the adolescent (Table 3) and 62.2% (n=334) owned computers, 39.5% (n=212) were on the internet for 1-3 hours daily, 70.9% (n=371) of the respondents used the internet for sharing on social networks (Table 4).

### 3.2. Internet Addiction and Violence Tendency Levels

The internet addiction and violence tendency levels of the adolescents were observed. The total mean score of the IAS was found to be  $34.62 \pm 15.8$ . From among the IAS subscales, the mean score on the loss of control subscale was found to be  $13.99 \pm 6.52$ , the mean score on the desire to remain online subscale was  $7.66 \pm 3.87$ , the mean score for the negative consequences in social relationships subscale was  $12.98 \pm 6.62$  and the VTS mean score was  $35.45 \pm 7.87$  (Table 1).

**Table 1.** Adolescents' Internet Addiction and Violence Tendency Levels (n=537)

| Variable                                      | $\bar{X} \pm SD$  | Minimum | Maximum |
|---|-------------------|---------|---------|
| Loss of Control                               | $13.99 \pm 6.52$  | 7.00    | 35.00   |
| The Desire to Remain Online                   | $7.66 \pm 3.87$   | 4.00    | 20.00   |
| Negative Consequences in Social Relationships | $12.98 \pm 6.62$  | 8.00    | 40.00   |
| Internet Addiction (Total)                    | $34.62 \pm 15.38$ | 19.00   | 95.00   |
| Violence Tendency                             | $35.45 \pm 7.87$  | 20.00   | 59.00   |

$\bar{X}$ =Mean,  
SD=Standart Deviation

### 3.3. Gender

A statistically significant difference between gender and VTS was detected ( $p < 0.01$ ). It was determined that male adolescents show more of a tendency toward violence in comparison to female adolescents (Table 2).

**Table 2.** Statistics related to scales point averages of adolescents according to gender

| Variable   | n   | Loss of Control<br>$\bar{X}\pm SD$ | The Desire to Remain Online<br>$\bar{X}\pm SD$ | Negative Consequences in Social Relationships<br>$\bar{X}\pm SD$ | Internet Addiction (Total)<br>$\bar{X}\pm SD$ | Violence Tendency<br>$\bar{X}\pm SD$ |
|------------|-----|------------------------------------|--|--|---|--------------------------------------|
| Female     | 174 | 14.29±6.54                         | 7.49±3.62                                      | 11.91±5.25   | 33.71±13.70                                   | 31.31±6.97                           |
| Male       | 363 | 13.84±6.51                         | 7.73±3.98                                      | 13.48±7.14   | 35.06±16.12                                   | 37.43±7.51                           |
| Test Value |     | Z=-1.02<br>p=0.306                 | Z=-0.10<br>p=0.916                             | Z=-1.14<br>p=0.252   | Z=-0.07<br>p=0.937                            | Z=-8.65<br><b>p=0.001</b>            |

Z=Mann-Whitney U Test,  $\bar{X}$ =Mean, SD=Standart Deviation

### 3.4. Situation of family members being violent toward the adolescent or each other

In the present study, statistically significant differences were detected between the VTS scores and IAS and its subscales in terms of whether or not the adolescents' family members were violent with each other or with the adolescent ( $p<0.05$ ). It was determined that adolescents whose family members were violent with the adolescent or with each other experienced more loss of control, more of a desire to remain online, more negative consequences in social relationships, a higher level of internet addiction and showed more of a tendency toward violence compared to adolescents whose family members did not display violence (Table 3).

**Table 3.** Statistics related to scales point averages of adolescents according to situation of family members being violent toward the adolescent or each other

| Variable   | n   | Loss of Control<br>$\bar{X}\pm SD$ | The Desire to Remain Online<br>$\bar{X}\pm SD$ | Negative Consequences in Social Relationships<br>$\bar{X}\pm SD$ | Internet Addiction (Total)<br>$\bar{X}\pm SD$ | Violence Tendency<br>$\bar{X}\pm SD$ |
|------------|-----|------------------------------------|--|--|---|--------------------------------------|
| Yes        | 80  | 16.92±8.46                         | 9.31±5.15                                      | 15.83±8.99   | 42.07±21.22                                   | 39.62±8.04                           |
| No         | 457 | 13.47±5.98                         | 7.36±3.52                                      | 12.47±5.99   | 33.31±13.73                                   | 34.71±7.62                           |
| Test Value |     | Z=-3.31<br><b>p=0.001</b>          | Z=-2.79<br><b>p=0.005</b>                      | Z=-3.24<br><b>p=0.001</b>  | Z=-3.33<br><b>p=0.001</b>                     | Z=-4.84<br><b>p=0.001</b>            |

Z=Mann-Whitney U Test,  $\bar{X}$ =Mean, SD=Standart Deviation

### 3.5. Internet and computer use features

In the current study, statistically significant differences were detected between having one's own computer and the IAS total and its subscales ( $p<0.05$ ). Those who had their own computers experienced more loss of control, more of a desire to remain online, more negative consequences in social relationships and higher levels of internet addiction compared to those who did not own computers (Table 4).

A statistical significance was detected between the duration of daily use of the internet, the IAS total and its subscales and the adolescents' VTS ( $p<0.05$ ). As the duration of daily use of the internet increased, it was seen that the adolescents experienced more loss of control, more of a desire to remain online, more negative consequences in social relationships, and their levels of internet addiction and tendency toward violence were higher (Table 4).

**Table 4.** Statistics related to scales point averages of adolescents according to internet and computer use features

| Variable                              | n   | Loss of Control<br>$\bar{X}\pm SD$ | The Desire to Remain Online<br>$\bar{X}\pm SD$ | Negative Consequences in Social Relationships<br>$\bar{X}\pm SD$ | Internet Addiction (Total)<br>$\bar{X}\pm SD$ | Violence Tendency<br>$\bar{X}\pm SD$ |
|---------------------------------------|-----|------------------------------------|--|--|---|--------------------------------------|
| <b>Having His/Her Own Computer</b>    |     |                                    |  |  |   |                                      |
| Yes                                   | 334 | 14.81±6.64                         | 8.02±4.04                                      | 13.21±6.44   | 36.04±15.45                                   | 35.85±7.59                           |
| No                                    | 203 | 12.63±6.08                         | 7.04±3.50                                      | 12.59±6.91   | 32.28±15.01                                   | 34.78±8.30                           |
| Test Value                            |     | Z=-4.34<br><b>p=0.001</b>          | Z=-2.74<br><b>p=0.006</b>                      | Z=-2.42<br><b>p=0.015</b>  | Z=-3.70<br><b>p=0.001</b>                     | Z=-1.63<br>p=0.103                   |
| <b>Duration of Daily Internet Use</b> |     |                                    |  |  |   |                                      |
| >1 Hour                               | 132 | 10.43±4.79                         | 5.78±2.88                                      | 10.75±5.72   | 26.96±11.96                                   | 34.25±8.52                           |
| 1-3 Hours                             | 212 | 13.32±5.30                         | 7.38±3.18                                      | 12.31±5.41   | 33.02±12.12                                   | 34.76±7.69                           |
| 4-6 Hours                             | 119 | 15.59±6.37                         | 8.26±3.83                                      | 13.37±5.57   | 37.24±13.92                                   | 35.73±6.03                           |
| 7-9 Hours                             | 36  | 19.05±7.07                         | 9.63±4.28                                      | 15.91±7.48   | 44.61±16.42                                   | 37.55±7.87                           |
| 9< Hours                              | 38  | 20.21±8.76                         | 11.89±5.37                                     | 20.39±10.74  | 52.50±23.21                                   | 40.52±9.51                           |

| Test Value                                      |            |     | $\chi^2=106.410$<br>$p=0.001$ | $\chi^2=83.197$<br>$p=0.001$ | $\chi^2=77.476$<br>$p=0.001$ | $\chi^2=107.900$<br>$p=0.001$ | $\chi^2=19.316$<br>$p=0.001$ |
|---|------------|-----|-------------------------------|------------------------------|------------------------------|-------------------------------|------------------------------|
| <b>Purpose of Internet Use</b>                  |            |     |                               |                              |                              |                               |                              |
| <b>Searching Information/ Homework</b>          | <b>Yes</b> | 371 | 13.45±5.97                    | 7.46±3.62                    | 12.51±5.98                   | 33.43±13.98                   | 34.70±7.35                   |
|   | <b>No</b>  | 166 | 15.18±7.48                    | 8.09±4.34                    | 14.01±7.78                   | 37.28±17.88                   | 37.10±8.74                   |
| <b>Test Value</b>                               |            |     | $Z=-2.15$<br>$p=0.031$        | $Z=-1.15$<br>$p=0.249$       | $Z=-1.84$<br>$p=0.065$       | $Z=-2.0$<br>$p=0.045$         | $Z=-3.14$<br>$p=0.002$       |
| <b>Making New Friends</b>                       | <b>Yes</b> | 82  | 15.70±6.82                    | 8.56±4.41                    | 15.58±8.57                   | 39.85±18.25                   | 39.02±7.28                   |
|   | <b>No</b>  | 455 | 13.67±6.42                    | 7.49±3.74                    | 12.50±6.10                   | 33.68±14.63                   | 34.80±7.81                   |
| <b>Test Value</b>                               |            |     | $Z=-2.78$<br>$p=0.005$        | $Z=-1.90$<br>$p=0.057$       | $Z=-2.96$<br>$p=0.003$       | $Z=-3.10$<br>$p=0.002$        | $Z=-4.58$<br>$p=0.005$       |
| <b>Playing Games</b>                            | <b>Yes</b> | 238 | 15.08±6.85                    | 8.36±4.07                    | 14.12±7.32                   | 37.57±16.46                   | 36.82±7.00                   |
|   | <b>No</b>  | 299 | 13.11±6.11                    | 7.09±3.60                    | 12.06±5.86                   | 32.27±14.05                   | 34.35±8.36                   |
| <b>Test Value</b>                               |            |     | $Z=-3.73$<br>$p=0.001$        | $Z=-4.15$<br>$p=0.001$       | $Z=-3.82$<br>$p=0.001$       | $Z=-4.42$<br>$p=0.001$        | $Z=-4.16$<br>$p=0.001$       |
| <b>Sharing on social networks/ social media</b> | <b>Yes</b> | 381 | 14.68±6.54                    | 8.12±3.97                    | 13.25±6.59                   | 36.07±15.40                   | 35.76±7.63                   |
|   | <b>No</b>  | 156 | 12.28±6.16                    | 6.50±3.35                    | 12.30±6.66                   | 31.08±14.79                   | 34.68±8.42                   |
| <b>Test Value</b>                               |            |     | $Z=-5.00$<br>$p=0.001$        | $Z=-5.19$<br>$p=0.001$       | $Z=-3.01$<br>$p=0.003$       | $Z=-4.87$<br>$p=0.001$        | $Z=-1.46$<br>$p=0.143$       |

$\chi^2$ =Kruskal Wallis Test,  $Z$ =Mann-Whitney U Test,  $\bar{x}$ =Mean,  $SD$ =Standart Deviation

When the reasons the adolescents made use of the internet were examined, there were statistically significant differences in terms of using the internet for sharing on social networks/social media, playing games, searching for information/homework and making new friends ( $p<0.05$ ). It was determined that the adolescents whose aim was to share something on the social networks/social media experienced more loss of control, more of a desire to remain online, more negative consequences in social relationships, and a higher level of internet addiction compared to the others. It was observed that the adolescents whose purpose was to play games experienced more loss of control, more of a desire to remain online, more negative consequences in social relationships and showed more of a tendency toward violence compared to the others. It was determined that the adolescents whose purpose was not to search for information/homework experienced more of a loss of control, a higher level of internet addiction and showed more of a tendency toward violence compared to those who used the internet for this purpose. It was determined that the adolescents aiming to make new friends experienced more of a loss of control, more of a desire to remain online, more negative consequences in social relationships, a higher level of internet addiction and showed more of a tendency toward violence tendency compared to those who did not have this aim (Table 4).

**3.6. Colleration between adolescent’s IAS and VTS levels**

In looking at the correlation between the internet addiction scale total and the IAS subscale, it can be seen that there is a strong positive correlation. As the level of loss of control, desire to remain online and negative consequences in social relationships rise, the level of internet addiction increased. When the correlation between the internet addiction scale total and its subscales and VTS was observed, a moderately positive correlation was detected. It was determined that as the level of internet addiction rises, the adolescents’ tendency toward violence increases (Table 5).

**Table 5.** Colleration between adolescent’s internet addiction and violence tendency levels

| Scales  |   | Scales          |                             |   |                            |                   |
|---|---|-----------------|-----------------------------|---|----------------------------|-------------------|
|   |   | Loss of Control | The Desire to Remain Online | Negative Consequences in Social Relationships | Internet Addiction (Total) | Violence Tendency |
| Loss of Control                               | r |                 |                             |   |                            |                   |
| The Desire to Remain Online                   | r | 0.755*          |                             |   |                            |                   |
| Negative Consequences in Social Relationships | r | 0.665*          | 0.671*                      |   |                            |                   |
| Internet Addiction (Total)                    | r | 0.917*          | 0.870*                      | 0.863*  |                            |                   |
| Violence Tendency                             | r | 0.324*          | 0.256*                      | 0.264*  | 0.329*                     |                   |

r=Spearman Colleration Coefficient Test  
\* $p < .001$

## 4. DISCUSSION

### 4.1. Adolescents' Internet Addiction and Violence Tendency Levels

The research was carried out with the aim of determining levels of internet addiction and tendency toward violence among adolescents and interrelationships between adolescents' variables and IAS and VTS levels. When the results of adolescents' IAS and VTS levels were evaluated (Table 1), as a similar with this research, Şahin (2014) found in his study, the IAS total score of high school students to be  $26.18 \pm 9.36$ , the loss of control subscale scores to be  $10.44 \pm 4.36$ , the desire to remain online subscale scores to be  $5.64 \pm 2.85$ , the negative consequences in social relationships subscale scores to be  $10.09 \pm 3.68$ . Şahin (2014) also reported that, based on the scores high school students received on the IAS and its subscales, the total internet addiction and subscale levels were low. As the results of the present study are consistent with Şahin's results, it can be said that the total internet addiction and subscale levels of the adolescents are low. Avcı and Çelikkaleli (2016) found in their study that adolescents exhibited violence tendency scores of  $34.91 \pm 7.17$ . The findings of this study are similar to the results of our research. When the mean violence tendency scores of the adolescents in this study are taken into account ( $35.45 \pm 7.87$ ) (max:60), it can be said that the adolescents show a moderate level of tendency toward violence.

### 4.2. According to gender of adolescents

An evaluation of studies conducted reveals that there are different results related to the relation between internet addiction and gender in adolescents. In many studies, it is emphasized that there is a significant correlation between internet addiction and gender. When these studies are assessed, it is seen that some report a higher level of internet addiction among males (Wu et al., 2015; Shek & Yu, 2016). Others similarly point to a higher prevalence of internet addiction among males (Adiele & Olatokun, 2014; Metin et al., 2015). In this research, statistical significance was detected between gender and VTS ( $p < 0.01$ ). It was determined that male adolescents exhibit more of a tendency toward violence than female adolescents. Many studies have shown that violence tendency levels in men are higher compared to women (Giles & Heyman, 2005; Haskan-Avcı & Yıldırım, 2014; Gençoğlu et al., 2014).

### 4.3. According to situation of family members being violent toward the adolescent or each other

Statistically significant differences between the IAS total with its subscales and VTS were determined in terms of family members being violent toward each other or the adolescent ( $p < 0.05$ ). Adolescents whose family members were violent toward the adolescent or each other experienced a higher level of internet addiction compared to those whose family members did not exhibit this tendency. According to the Bandura Social Learning Theory (1978), aggression and violence are not innate behaviors but learned. This approach suggests that violence and aggression occur by internalizing and intensifying the effects brought about by a model. In this sense, it can be said that the internet, which today is one of the most popular and remarkable media tools, has a great influence on the development of negative behaviors (Kim, 2013; Koo & Kwon, 2014). In the virtual environment, violent games are examples of how negative effects are intensified. It is through these games that figures of violence that are taken as models in real life find their way into the virtual environment. This is why constantly repeated virtual scenes of violence cause individuals to spend increasingly more time online. According to our research results, the adolescents whose family members were violent toward the adolescent or each other showed a higher level of tendency toward violence in comparison with those whose family members did not demonstrate such violence. Many studies have noted that experiencing violence in the family or witnessing it increases individuals' levels of tendency toward violence (Karagün, 2015; Houston & Grych, 2016).

### 4.4. According to internet and computer use features of adolescents

Statistical significance was detected between having one's own computer and the IAS total and its subscales ( $p < 0.05$ ). Total and subscale scores for internet addiction were higher in students who had their own computer compared to those who did not. The reason for this may be that adolescents can easily access the internet when they own a computer. In some studies that support this finding, it has been detected that having one's own computer and easy access to the internet dramatically increases the level of addiction (Usta et al., 2007; Dikme, 2014). At the same time, it has been suggested that parents disapprove of adolescents having their own computer because of the difficulties of maintaining control (Barkin & Finch, 2006).

In this research, statistically significant differences were detected between the daily duration of internet use and the IAS total and its subscales and VTS ( $p < 0.01$ ). In the case of adolescents who spent long periods on

the internet, it was seen that the internet addiction total and its subscale levels and violence tendency levels were higher than in those who spent lesser time on the internet. It has been reported in many studies that prevalence and levels of internet addiction rises with increasing durations of daily use (Balta-Çakır & Horzum, 2008; Durkee et al., 2012).

It has been observed that the internet addiction levels of adolescents who use the internet for searching for information and doing homework are lower than in those who do not use it for this purpose. It can be seen that studies on the intended usage of the internet reveal findings similar to the present study. In the study of Tahiroğlu et al. (2010), the internet addiction score of students who were using the internet for educational purposes was lower than the score of those using it for chats and games. This information supports our research results. The low internet addiction score of students who used the internet for the purposes of following lessons, doing homework and searching for information can be interpreted as stemming from the fact that they used the medium for dealing with specific responsibilities in a specific period of time. Our research findings led us to determine that adolescents whose purpose for being on the internet was to play games experienced more loss of control, more of a desire to remain online, more negative consequences in social relationships, and higher levels of internet addiction and tendencies toward violence compared to those who did not have this purpose. Adolescents who want to spend their free time enjoyably prefer to spend time on the internet and use the social media as a means of escape (İnal & Kiraz, 2008). Günüş (2009) found that using the internet more for playing games and chatting led to more of an inclination toward internet addiction. This information supports our research results. In some studies, it has been indicated that there is a correlation between online game activities, violent behavior and internet addiction (Kim, 2013; Teng et al., 2014). At the same time, it has been determined that using the internet for communication and sharing things on social networks lead to bad relationships with friends and to an inclination for violence (Haskan & Yıldırım, 2012; Şahin, 2014). This information supports our research results.

#### **4.5. According to colleration between adolescent's IAS and VTS levels**

When we look at the correlation between the internet addiction scale total and its subscales, a strong positive correlation was determined in the subscales of loss of control ( $r=0.917$ ), the desire to remain online ( $r=0.870$ ) and negative consequences in social relationships ( $r=0.863$ ). We can say that as levels of loss of control, desire to remain online and negative consequences in social relationships increase, internet addiction levels of adolescents also increase. In the study of Dikme (2014), a positive correlation was found between variables as a result of the Pearson Analysis performed to determine whether there was a significant correlation between the adolescents' scores on the overall IAS and its subscales. This data is similar to the results of our research. A moderately positive correlation was been determined between the violence tendency scale, the IAS total ( $r=0.329$ ) and its subscales of loss of control ( $r=0.324$ ), desire to remain online ( $r=0.256$ ) and negative consequences in social relationships ( $r=0.264$ ). In the study by Fengqiang et al. (2016), it was found that there is a strongly positive correlation between internet addiction and aggression. At the same time, they noted that internet addiction has a direct effect on aggression and that it is a preparative factor. These findings show similarity with our research results. It can be said that the existence of violent elements on the internet and the exposure of an individual to these elements leads to the development of an aggressive personality and increases levels of tendency toward violence.

### **5. CONCLUSIONS**

In line with the results of the research that was conducted with the 537 adolescents recruited into the study, it has been found that adolescents have low levels of internet addiction and moderate levels of tendency toward violence. It has been determined that the correlation between the internet addiction scale total and the IAS subscales is in the direction of strong positivity; the correlation between the internet addiction scale total and its subscales and VTS is in the direction of moderate positivity. We can say that an increase in IAS total levels and in its sub-scales creates a violence tendency in adolescents. As a result, it has been determined that as internet addiction levels of adolescents increase, their levels of tendency toward violence also increase. When these research results are taken into consideration, it is recommended that the duration of internet usage of adolescents should be brought under control, and that motivation should be provided for especially educational use of the internet, studies aimed at preventing violence in adolescents should be carried out, and more comprehensive research to explore the relation between internet addiction and the tendency toward violence should be conducted.

## 6. LIMITATIONS

This current research is limited to information related to the personal and family characteristics of the adolescents as given in their answers on the information collection form given to them. The study is also limited to the students studying at high schools in a district of city province in the southern part of the Turkey in the 2015-2016 academic year, who represent the scope of the research and the population.

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