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An Investigation of High School Students' Social Media Use, Internet Addiction and Self-Confidence Levels

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Abstract

This mixed-methods study examines high school students' self-confidence, social media use, and internet addiction. The data were collected from 340 high school students in Samsun during the 2019-2020 academic year. Participants completed self-confidence, internet addiction, and social media use scales, and interviews. Descriptive analyses, t-tests, ANOVA, and Pearson correlation tests were used. Results showed that self-confidence levels varied among participants, and 6.5% of participants were addicted to the Internet. Self-confidence levels were higher among 9th-grade students, while social media use differed significantly among 11th-grade students. No significant differences were found by gender. Internet addiction increased as social media use and self-confidence levels decreased. Qualitative findings revealed that participants use the internet and social media for various purposes, and some struggle to control their internet use. These results suggest that social media use, self-confidence levels, and age predict internet addiction. Future studies could explore these variables in more detail.

Introduction

Social media is a popular form of communication where individuals share and discuss. In general, the sharing and mutual discussions of individuals by using applications on the internet reveal social media (Vural & Bat, 2010). Social media, which has an important place in people's lives, is developing in an unprecedented way (Erol & Hassan, 2014). Approximately 5 billion people were using social media in 2022 and it is projected to reach 6 billion in 2027 (Statista, 2023). According to Carr and Hayes (2015, p.50), social media can be defined as "Internet-based channels that allow users to opportunistically interact and selectively self-present, either in real-time or asynchronously, with both broad and narrow audiences who derive value from user-generated content and the perception of interaction with others".

There are various definitions of social media in the literature. The common point of the concept of social media in all definitions is that it has simultaneous information sharing and duplex communication (Erkek, 2016). Since social media facilitates life with many features and eliminates the concept of long distance, it has become indispensable for individuals and social life (Babacan, 2016). The way people communicate with each other has changed with social media (Chen et al., 2023). However, with the increasing popularity of social media, its negative effects on users became an issue. For example, problematic social media use is significantly related to

social anxiety and academic procrastination (Yıldız Durak, 2020).

Since the Internet is a network open to all individuals, it has both positive and negative aspects (Günüç & Kayri, 2010; Williams & McKercher, 2023). It is possible to say that one of the negative aspects of the Internet is addiction. The fact that individuals lose control over any object or a verb they use, and that this behavior continues continuously expresses addiction (Yeşilay, 2017). Addiction is a psychological condition in which the symptoms of abstinence arise if the use of any substance or object is used outside of its purpose, its use continues to increase day by day, although its use continues, decreases, or ceases despite the adverse events in its life (Uğurlu et al., 2012).

According to Alyanak (2016), Internet addiction is a technological, behavioral addiction. Daily increasing use of the internet, unrest when not in use, mental depression, lack of self-confidence, troubles in daily life, and disruption of social life are indicators of Internet addiction. There are many factors of psychological reasons underlying Internet addiction such as not knowing oneself, excessive introversion, pessimistic thoughts, lack of life energy, and lack of self-confidence (Yeşilay, 2017). Moreover, studies show that one of the important predictors of internet addiction is young age and there has been an observed increase in internet addiction among newer generations (Lozano-Blasco et al., 2022).

Internet addiction and using social media frequently may result in some negative effects on personality characteristics. For instance, according to Lee (2014)'s study, there is a positive relation between the frequent use of social networks and experiencing adverse emotions due to making comparisons. A young person can make some definitions about himself and can decide whether he likes these features or not. While making self-evaluations about whether the personality characteristics are liked or not, the result may be positive, and this positive result, the emphasis and expression of the positive features result from the lack of self-confidence, rather than self-confidence (Özbay, 2009).

Self-confidence means self-knowledge and awareness of individual value and it means a sense of achievement and realization (Özbay, 2009). An individual creates a self-identity with the awareness of self-knowledge, which is one of the most basic features that distinguish people from other living creatures therefore self-confidence is a psychological and emotional state regarding the degree of acceptance of this identity (Sert, 2019). According to Feltz (1988), self-confidence is "the belief that it can successfully carry out a certain activity rather than a global feature which forms the overall performance optimism". The concept of self-confidence is one of the important psychological situations and it is a concept that affects the academic success of students (Akin, 2007). Having different levels of self-confidence in each field makes it difficult to define individuals who have high or low self-confidence (Akyıldız, 2010). In contemporary society, social media usage is very common. As reported by Keen and Gainsbury (2021), excessive technology use (social media, internet, digital games, etc.) among young adults is perceived to result in problems in many psychological harms and self-confidence is one of them. Therefore, describing the current situation of high school students in terms of social media use, Internet addiction, and self-confidence is important. In this context, the purpose of this study was to explore social media use, Internet addiction, and self-confidence levels of high school students in Turkey. Hence, this study focused on the following

questions:

1. How is the self-confidence, social media use, and Internet addiction level of high school students?
2. Do self-confidence, social media use and Internet addiction levels of high school students vary according to gender, level, and internet usage time?
3. Is there any relationship between high school students' self-confidence, social media use, and internet addiction levels?
4. Do self-confidence, social media use, and the age of high school students affect their Internet addiction level?
5. What are high school students' views about Internet addiction, social media use, and self-confidence?

Method

An explanatory mixed method research was used in this study. In explanatory mixed-method studies, quantitative data are collected and analyzed, and qualitative data are obtained later (Creswell, 2009). It tries to eliminate the gaps and weaknesses between the mixed approach and quantitative and qualitative research (Tzagkarakis & Kritas, 2023). Analysis of quantitative and qualitative data is often combined in data interpretation and conclusion discussion sections (Baki & Gökçek, 2012). In this context, the research was carried out with analyses obtained from quantitative and qualitative data, and a mixed-method research model was used to examine the social media use, Internet addiction, and self-confidence levels of high school students.

Participants

Convenient sampling was used, and 340 high school students participated in this study. Details about the participants are provided in Table 1.

Table1. Demographic Characteristics of Participants

| Demographic | | N | % |
|-------------|--------------------|-----|------|
| Gender | Female | 183 | 53.8 |
| | Male | 157 | 46.2 |
| | Total | 340 | 100 |
| Age | 14 years | 97 | 28.5 |
| | 15 years | 91 | 26.8 |
| | 16 years | 75 | 22.1 |
| | 17 years and older | 77 | 22.6 |
| | Total | 340 | 100 |
| Classroom | 9th grade | 134 | 39.7 |
| | 10th grade | 84 | 24.7 |
| | 11th grade | 65 | 19.1 |
| | 12th grade | 56 | 16.5 |

| Demographic | N | % |
|-------------------|-----|------|
| Total | 340 | 100 |
| Internet Usage | | |
| 0-1 Hours | 22 | 6.5 |
| 1-2 Hours | 72 | 21.2 |
| 2-3 Hours | 114 | 33.5 |
| 3-4 Hours | 65 | 19.1 |
| 4 Hours and Above | 65 | 19.1 |
| Total | 338 | 99.4 |

Data Collection Tools

High school students' self-confidence was measured by using the "Self-Confidence Scale" developed by Akin (2007) It is a five-point Likert scale consisting of 33 items and of two factors. High school students' Internet addiction levels were determined by using the "Internet Addiction Scale" developed by Günüş (2009). The scale is a five-point Likert scale and consists of 35 items. It consists of four sub-factors (deprivation, control difficulty, disruption in functionality, and social isolation). The data on high school students' social media use was determined by the "Social Media Use Scale" developed by Deniz and Ünal (2019). The scale is a five-point Likert scale and consists of 8 items. It consists of two sub-factors: continuity and competence. For the qualitative data, a semi-structured interview protocol was developed by researchers. It has 18 questions about social media use, Internet addiction, and self-confidence.

Data Analysis

In this research, the SPSS 18.0 program was used to analyze the data obtained with the scales. Descriptive statistics were calculated for the total scores of high school students obtained from the scales. According to the normality test results, there was a normal distribution because skewness and kurtosis values were between -1 and +1 (Büyükoztürk, 2019). Therefore, independent Sample t-test one-Way Analysis of Variance (ANOVA) tests were used. The Pearson Correlation Test was used to analyze correlation between variables.

In the qualitative data analysis, the demographic information for the participants who participated in the qualitative phase of the research was collected in a semi-structured form. NVivo was used to analyze qualitative data. First interviews were transcribed into texts and texts were analyzed by using content analysis.

Findings

Self-Confidence, Social Media Use, and Internet Addiction

As it is shown in Table 2, it appears that total average based on social media usage is (\bar{X} = 2.71) for high school students. Total average on self-confidence is (\bar{X} = 3.66) for high school students, when it comes to internet addiction scale, total average is (\bar{X} = 2.31).

Table 2. Self-Confidence, Social Media Use and Internet Addiction

| Sub-factors | N | \bar{X} | SD |
|----------------------------|-----|-----------|-----|
| Continuity | 340 | 2.67 | .93 |
| Competency | 340 | 2.75 | .92 |
| Social media usage (total) | 340 | 2.71 | .80 |
| Inner self-confidence | 340 | 3.61 | .68 |
| External self-confidence | 340 | 3.71 | .68 |
| Self-confidence (total) | 340 | 3.66 | .65 |
| Withdrawal | 340 | 2.82 | .79 |
| Control difficulty | 340 | 2.26 | .78 |
| Malfunction | 340 | 2.10 | .83 |
| Social isolation | 340 | 1.77 | .75 |
| Internet addiction (total) | 340 | 2.31 | .67 |

According to Table 3, the addiction levels of high school students are presented as four groups; the addicted group is 8.8%, the risk group is 35%, the threshold group is 37.7%, and 18.5% is the non-internet addictive group. The clusters of this study were formed according to the clusters created in the scale developed by Güniç (2009), and the Internet addiction status of the participants was determined.

Table 3. Addiction Levels

| Levels | N | % |
|---------------------|-----|--------|
| Addicted Group | 30 | 8.82 |
| Risk Group | 119 | 35.00 |
| Threshold Group | 128 | 37.65 |
| Non-Addictive Group | 63 | 18.53 |
| Total | 340 | 100.00 |

Self-Confidence, Social Media Use, and the Internet Addiction Levels of High School Students according to Gender

To determine whether there are any differences between boys and girls in self-confidence, social media usage, and Internet addiction level of high school students, independent sample T-tests were used. According to the results, there is only a significant difference between boys and girls in terms of external self-confidence (Table 4). However, there is no significant difference between self-confidence ($t(340) = 2.67$; $p > 0.05$), and inner self-confidence ($t(340) = 3.08$; $p > 0.05$). Moreover, there is no significant difference in social media usage levels of students in total scores ($t(340) = .11$; $p > 0.05$) and sub-factors (continuity ($t(340) = 1.93$; $p < 0.05$) and competency ($t(340) = 2.15$; $p > 0.05$)). Similarly, there are no significant differences in Internet addiction levels of students in total score ($t(340) = 1.31$; $p > 0.05$) and sub-factors of Internet addiction: withdrawal ($t(340) = .87$; $p > 0.05$), control difficulty ($t(340) = 1.00$; $p > 0.05$), malfunction difficulty ($t(340) = 1.34$; $p > 0.05$) and social isolation ($t(340) = 1.39$; $p > 0.05$).

Table 4. t-test Results of Self-confidence Levels in High School Students According to Gender

| | Gender | N | \bar{X} | S | SD | t | p |
|--------------------------|--------|-----|-----------|-----|-----|------|-----|
| Inner Self-Confidence | F | 183 | 3.51 | .69 | 338 | 3.08 | .45 |
| | M | 157 | 3.74 | .66 | | | |
| External Self-confidence | F | 183 | 3.65 | .73 | 338 | 1.94 | .02 |
| | M | 157 | 3.79 | .61 | | | |
| Self-confidence | F | 183 | 3.58 | .67 | 338 | 2.67 | .22 |
| | M | 157 | 3.76 | .61 | | | |

Self-Confidence, Social Media Use, and Internet Addiction Levels of High School Students according to Class Level

To determine whether there were any differences in self-confidence levels of high school students depending on class levels, a way ANOVA Test was applied, and results are shown in Tables 5 and 6.

Table 5. Self-confidence Levels of High School Students According to Grades

| | | N | \bar{X} | SD |
|---------------------------------|------------|-----|-----------|-----|
| Inner Self-Confidence Factor | 9th grade | 135 | 3.66 | .66 |
| | 10th grade | 84 | 3.60 | .67 |
| | 11th grade | 65 | 3.59 | .73 |
| | 12th grade | 56 | 3.55 | .70 |
| | Total | 340 | 3.61 | .68 |
| External Self-confidence Factor | 9th grade | 135 | 3.73 | .65 |
| | 10th grade | 84 | 3.76 | .68 |
| | 11th grade | 65 | 3.65 | .74 |
| | 12th grade | 56 | 3.69 | .72 |
| | Total | 340 | 3.71 | .68 |
| Self-confidence Levels | 9th grade | 135 | 3.69 | .62 |
| | 10th grade | 84 | 3.68 | .63 |
| | 11th grade | 65 | 3.62 | .71 |
| | 12th grade | 56 | 3.62 | .68 |
| | Total | 340 | 3.66 | .65 |

When self-confidence levels of high school students are examined depending on class level, 9th grade has the highest average (\bar{X} = 3.69). In terms of sub-factors, in inner self-confidence factor, 9th grade has the highest average (\bar{X} = 3.66), in external self-confidence factor, 10th grade has the highest average (\bar{X} = 3.76). According to one-way ANOVA results shown in Table 6, self-confidence levels of high school students don't change depending on grades ($F(3,339) = 0.29$; $p > 0.05$). Likewise, both inner self-confidence factor ($F(3,339) = 0.36$; $p > 0.05$) and external self-confidence factor ($F(3,339) = 0.35$; $p > 0.05$) don't change depending on grades.

Table 6. One-way ANOVA Results of Self-confidence Levels according to Grades

| | | SS | SD | MS | F | p |
|--------------------------|------------|--------|-----|-----|-----|-----|
| Inner Self-Confidence | Intergroup | .52 | 3 | .17 | .36 | .77 |
| | In-Group | 159.18 | 336 | .47 | | |
| | Total | 159.70 | 339 | | | |
| External Self-Confidence | Intergroup | .50 | 3 | .16 | .35 | .78 |
| | In-Group | 160.44 | 336 | .47 | | |
| | Total | 160.94 | 339 | | | |
| Self-confidence Levels | Intergroup | .37 | 3 | .12 | .29 | .82 |
| | In-Group | 143.72 | 336 | .47 | | |
| | Total | 144.09 | 339 | | | |

To determine whether social media use levels of high school students change depending on grades, a one-way ANOVA Test was used, and the results are shown in Tables 7 and 8.

Table 7. Social Media Use Levels in High School Students According to Grades

| | | N | \bar{X} | SD |
|---------------------------|------------|-----|-----------|-----|
| Continuity Sub-factor | 9th grade | 135 | 2.60 | .94 |
| | 10th grade | 84 | 2.62 | .91 |
| | 11th grade | 65 | 3.11 | .95 |
| | 12th grade | 56 | 2.39 | .74 |
| | Total | 340 | 2.67 | .93 |
| Competency Sub-factor | 9th grade | 135 | 2.73 | .99 |
| | 10th grade | 84 | 2.69 | .80 |
| | 11th grade | 65 | 2.96 | .95 |
| | 12th grade | 56 | 2.65 | .86 |
| | Total | 340 | 2.75 | .92 |
| Social Media Usage Levels | 9th grade | 135 | 2.67 | .87 |
| | 10th grade | 84 | 2.65 | .65 |
| | 11th grade | 65 | 3.03 | .88 |
| | 12th grade | 56 | 2.52 | .64 |
| | Total | 340 | 2.71 | .80 |

As it is seen in Table 7, 11th grade has the highest averages in total (\bar{X} = 3.03), continuity factor (\bar{X} = 3.11) and competency factor scores (\bar{X} = 2.96). According to one way ANOVA results (Table 8) there is a significant difference in social media use levels of high school students depending on grades ($F(3,339) = 4.97$; $p < 0.05$). As it is seen in Table 8, we found a significant effect of grade on social media usage levels ($F(3,339)=4.97$; $p < 0.05$) and continuity factor of social media usage ($F(3,339)=7.17$; $p < 0.05$). Post hoc analysis using the Tukey criterion for significance indicated that continuity in social media usage of 11th graders ($\bar{X}=3.11$, $SD= .95$) and total social

media usage of 11th graders ($X=3.03$, $SD=.88$) was significantly higher than other grades. However; the competency factor doesn't show any differences depending on grades ($F(3,339)=1.44$; $p>0.05$).

Table 8. ANOVA Results of Social Media Use Levels in High School Students According to Grades

| | | <i>SS</i> | <i>SD</i> | <i>MS</i> | <i>F</i> | <i>p</i> | <i>g</i> |
|---------------------------|------------|-----------|-----------|-----------|----------|----------|----------|
| Continuity | Intergroup | 17.76 | 3 | 5.92 | 7.17 | .00 | 1-3 |
| | In-Group | 277.41 | 336 | .82 | | | 2-3 |
| | Total | 295.17 | 339 | | | | 3-4 |
| Competency | Intergroup | 3.68 | 3 | 1.22 | 1.44 | .23 | |
| | In-Group | 286.53 | 336 | .85 | | | Not |
| | Total | 290.22 | 339 | | | | |
| Social Media Usage Levels | Intergroup | 9.31 | 3 | 3.10 | 4.97 | .00 | 1-3 |
| | In-Group | 209.66 | 336 | .62 | | | 2-3 |
| | Total | 218.97 | 339 | | | | 3-4 |

To determine whether there is a difference in the Internet addiction levels of high school students depending on grades, One Way ANOVA Test was used, and the data based on analysis and descriptive results are shown in Table 9.

Table 9. Descriptive Results of Internet Addiction Levels of High School Students According to Grades

| | | <i>N</i> | \bar{X} | <i>SD</i> |
|--------------------|------------|----------|-----------|-----------|
| Withdrawal | 9th grade | 135 | 2.95 | .88 |
| | 10th grade | 84 | 2.73 | .63 |
| | 11th grade | 65 | 3.06 | .76 |
| | 12th grade | 56 | 2.37 | .63 |
| | Total | 340 | 2.82 | .79 |
| Control Difficulty | 9th grade | 135 | 2.36 | .85 |
| | 10th grade | 84 | 2.11 | .68 |
| | 11th grade | 65 | 2.45 | .79 |
| | 12th grade | 56 | 2.02 | .64 |
| | Total | 340 | 2.26 | .78 |
| Malfunction | 9th grade | 135 | 2.11 | .85 |
| | 10th grade | 84 | 2.06 | .75 |
| | 11th grade | 65 | 2.31 | .92 |
| | 12th grade | 56 | 1.85 | .74 |
| | Total | 340 | 2.10 | .83 |
| Social Isolation | 9th grade | 135 | 1.79 | .75 |
| | 10th grade | 84 | 1.75 | .75 |
| | 11th grade | 65 | 1.90 | .81 |

| | | N | \bar{X} | SD |
|---------------------------|------------|-----|-----------|-----|
| 12th grade | | 56 | 1.58 | .62 |
| Total | | 340 | 1.77 | .75 |
| Internet Addiction Levels | 9th grade | 135 | 2.38 | .71 |
| | 10th grade | 84 | 2.23 | .58 |
| | 11th grade | 65 | 2.50 | .68 |
| | 12th grade | 56 | 2.01 | .55 |
| | Total | 340 | 2.31 | .67 |

When internet addiction levels of high school students are examined in Table 9 depending on grades, 11th grade has the highest average ($\bar{X}= 2.53$). By an examination of sub-factors depending on grades, 11th grade has the highest average in withdrawal factor ($\bar{X}=3.06$), control difficulty factor ($\bar{X} = 2.45$), malfunction factor ($\bar{X}= 2.31$) and social isolation factor ($\bar{X}= 2.01$). To analyze whether this difference has any significance, One Way ANOVA Test was done. The test results are shown in Table 10.

Table 10. ANOVA Results of Internet Addiction Levels in High School Students According to Grades

| | | SS | SD | MS | F | p | g |
|---------------------------|------------|--------|-----|------|-------|-----|-------------------------|
| Withdrawal | Intergroup | 18.04 | 3 | 6.01 | 10.24 | .00 | 1-4 Group |
| | In-Group | 197.17 | 336 | .58 | | | 2-3 Group |
| | Total | 215.21 | 339 | | | | 2-4 Group 3-4 Group |
| Control Difficulty | Intergroup | 8.69 | 3 | 2.89 | 4.88 | .00 | 1-4 Group |
| | In-Group | 199.19 | 336 | .59 | | | 1 in favor 3-4 Group |
| | Total | 207.89 | 339 | | | | 3 in favor |
| Malfunction | Intergroup | 6.35 | 3 | 2.11 | 3.10 | .02 | 3-4 Group |
| | In-Group | 229.26 | 336 | .68 | | | 3 in favor |
| | Total | 235.62 | 339 | | | | |
| Social Isolation | Intergroup | 3.21 | 3 | 1.07 | 1.90 | .12 | |
| | In-Group | 189.29 | 336 | .56 | | | |
| | Total | 192.51 | 339 | | | | |
| Internet Addiction Levels | Intergroup | 8.80 | 3 | 2.93 | 6.83 | .00 | 1-4 Group |
| | In-Group | 144.27 | 336 | .42 | | | 1 in favor 3-4 Group |
| | Total | 153.08 | 339 | | | | 3 in favor |

It concludes that Internet addiction levels of high school students show significant differences in Table 10. ($F(3,339)=6.83$; $p<0.05$). According to Tukey Post Hoc test results, there is a significant difference between 9th grade and 12th grade in favor of 9th grade and there is a significant difference between 11th grade and 12th grade

in favor of 11th grade. When we examine the sub-factors of Internet addiction, there is also a significant difference between grades according to the withdrawal factor ($F(3,339)=10.24$; $p<0.05$).

According to the Tukey Post Hoc test results, there is a significant difference between 9th grade and 12th grade in favor of 9th grade. There are also significant differences between 10th grade and both 11th and 12th grades in favor of 10. There is a significant difference between 11th grade and 12th grade in favor of 11th grade.

Moreover, It control difficulty factor shows a significant difference depending on grade ($F(3,339)=4.88$; $p<0.05$). According to Tukey Post Hoc analysis results, there is a significant difference between 9th grade and 12th grade in favor of 9th grade and between 11th and 12th in favor of 11th grade. Likewise, there is a significant difference in malfunction factor ($F(3,339) =3.10$; $p<0.05$) depending on grades. According to Tukey Post Hoc analysis results, there is a significant difference between 11th grade and 12th grade in favor of 11th grade.

Self-Confidence, Social Media Use, and the Internet Addiction Levels of High School Students to Internet Usage Time

To determine whether the self-confidence levels of high school students' change depending on Internet usage time, the One-Way ANOVA test was used, and the analysis data and descriptive results are shown in Table 11.

Table 11. Results of Self-confidence Levels in High School Students According to Internet Usage Time

| | | N | \bar{X} | SD |
|---------------------------------|-------------------|-----|-----------|-----|
| Inner Self-confidence Factor | 0-1 Hours | 22 | 3.43 | .88 |
| | 1-2 Hours | 72 | 3.72 | .68 |
| | 2-3 Hours | 114 | 3.60 | .67 |
| | 3-4 Hours | 65 | 3.59 | .68 |
| | 4 Hours and Above | 65 | 3.59 | .64 |
| | Total | 338 | 3.61 | .68 |
| External Self-confidence Factor | 0-1 Hours | 22 | 3.54 | .77 |
| | 1-2 Hours | 72 | 3.71 | .74 |
| | 2-3 Hours | 114 | 3.76 | .64 |
| | 3-4 Hours | 65 | 3.78 | .63 |
| | 4 Hours and Above | 65 | 3.63 | .73 |
| | Total | 338 | 3.71 | .69 |
| Self-confidence Levels | 0-1 Hours | 22 | 3.48 | .80 |
| | 1-2 Hours | 72 | 3.71 | .68 |
| | 2-3 Hours | 114 | 3.68 | .62 |
| | 3-4 Hours | 65 | 3.68 | .62 |
| | 4 Hours and Above | 65 | 3.61 | .65 |
| | Total | 338 | 3.66 | .65 |

When self-confidence levels of high school students are examined in Table 11 depending on internet usage time, 1-2 hours user group has the highest average ($\bar{X}= 3.71$). In terms of sub-factors, in inner self-confidence factor, 1-2 hours user group has the highest average ($\bar{X}= 3.72$). In external self-confidence factor, 3-4 hours user group has the highest average. ($\bar{X}= 3.78$). To analyze whether this difference is significant, the One-Way ANOVA test was done. The test results are shown in Table 12.

Table 12. ANOVA Results of High School Students' Self-confidence Levels According to Internet Usage Time

| | | SS | SD | MS | F | p |
|--------------------------|------------|--------|-----|-----|-----|-----|
| Inner Self-Confidence | Intergroup | 1.63 | 4 | .40 | .86 | .48 |
| | In-Group | 157.93 | 333 | .47 | | |
| | Total | 159.56 | 337 | | | |
| External Self-confidence | Intergroup | 1.71 | 4 | .42 | .89 | .46 |
| | In-Group | 158.79 | 333 | .47 | | |
| | Total | 160.50 | 337 | | | |
| Self-confidence Levels | Intergroup | 1.17 | 4 | .29 | .68 | .60 |
| | In-Group | 142.68 | 333 | .42 | | |
| | Total | 143.85 | 337 | | | |

According to Table 12, the self-confidence levels of high school students do not change depending on Internet usage time ($F(4,337) = 0.68$; $p>0.05$). Likewise, both the inner self-confidence factor ($F(4,337)=0.86$; $p>0.05$) and external self-confidence factor ($F(4,337)=0.89$; $p>0.05$) do not change depending on Internet usage time. To determine whether there is a significant difference in social media use levels of high school students depending on Internet usage time, the One Way ANOVA test was done, and the data based on analysis and descriptive results are shown in Table 13.

Table 13. Results of Social Media Usage Levels in High School Students According to Internet Usage Time

| | | N | \bar{X} | SD |
|-----------------------|-------------------|-----|-----------|------|
| Continuity Sub-factor | 0-1 Hours | 22 | 2.38 | .82 |
| | 1-2 Hours | 72 | 2.15 | .71 |
| | 2-3 Hours | 114 | 2.53 | .81 |
| | 3-4 Hours | 65 | 3.06 | .87 |
| | 4 Hours and Above | 65 | 3.16 | 1.04 |
| | Total | 338 | 2.66 | .93 |
| Competency Sub-factor | 0-1 Hours | 22 | 2.41 | .64 |
| | 1-2 Hours | 72 | 2.15 | .69 |
| | 2-3 Hours | 114 | 2.78 | .84 |
| | 3-4 Hours | 65 | 2.90 | .92 |
| | 4 Hours and Above | 65 | 3.31 | .95 |
| | Total | 338 | 2.75 | .92 |

| | | N | \bar{X} | SD |
|---------------------------|-------------------|-----|-----------|-----|
| Social Media Usage Levels | 0-1 Hours | 22 | 2.39 | .50 |
| | 1-2 Hours | 72 | 2.15 | .61 |
| | 2-3 Hours | 114 | 2.65 | .69 |
| | 3-4 Hours | 65 | 2.98 | .70 |
| | 4 Hours and Above | 65 | 3.24 | .90 |
| | Total | 338 | 2.70 | .80 |

When social media usage levels of high school students are examined in Table 13 depending on internet usage time, 4 hours and above internet user group has the highest average ($\bar{X}= 3.24$). In terms of sub-factors, 4 hours and above internet user group has the highest average in both continuity factor ($\bar{X}= 3.16$) and competency factor ($\bar{X}= 3.31$). To determine whether this difference is significant, the One-Way ANOVA test was done. The test results are shown in Table 14.

Table 14. Results of Social Media Usage Levels in High School Students According to Internet Usage Time

| | | SS | SD | MS | F | p | g |
|-------------------|------------|--------|-----|-------|-------|-----|---|
| Continuity Factor | Intergroup | 49.07 | 4 | 12.26 | 16.67 | .00 | 1-4 Group 4 in favor |
| | In-Group | 245.07 | 333 | .73 | | | 1-5 Group |
| | Total | 294.15 | 337 | | | | 5 in favor 2-3 Group 3 in favor 2-4 Group 4 in favor 2-5 Group 5 in favor 3-4 Group 4 in favor 3-5 Group 5 in favor |
| Competency Factor | Intergroup | 50.10 | 4 | 12.52 | 17.53 | .00 | 1-5 Group |
| | In-Group | 237.82 | 333 | .71 | | | 5 in favor |
| | Total | 287.92 | 337 | | | | 2-3 Group 3 in favor 2-4 Group 4 in favor 2-5 Group 5 in favor 3-5 Group 5 in favor |

| | | SS | SD | MS | F | p | g |
|---------------------------|------------|---------|-----|-------|-------|-----|-------------------------|
| Social Media Usage Levels | Intergroup | 47.60 | 4 | 11.90 | 23.33 | .00 | 1-4 Group 4 in favor |
| | In-Group | 169.84 | 333 | .51 | | | 1-5 Group 5 in favor |
| | Total | 217.452 | 337 | | | | 2-3 Group 3 in favor |
| | | | | | | | 2-4 Group 4 in favor |
| | | | | | | | 2-5 Group 5 in favor |
| | | | | | | | 3-4 Group 4 in favor |
| | | | | | | | 3-5 Group 5 in favor |

The examination of Table 14 concludes that social media usage levels of high school students show a significant difference depending on Internet usage time ($F(4,337)=23.33$; $p<0.05$) to determine intergroup differences, Post Hoc analysis was done. According to Levene analysis results, because variances are homogenous ($p>0.05$), Tukey analysis was preferred as Post Hoc analysis. According to Tukey Post Hoc test results, there is a significant difference in favor of the 4th group between the 1st intergroup (0-1 hour Internet users) and the 4th intergroup (3-4 hours Internet users) social media usage level totals; in favor of the 5th group between the 1st intergroup (0-1 hour Internet users) and the 5th intergroup (4 hours and above Internet users) social media usage level totals; in favor of the 3rd group between the 2nd intergroup (1-2 hours Internet users) and the 3rd intergroup (2-3 hours Internet users) social media usage level totals; in favor of the 4th group between the 2nd intergroup (1-2 hours Internet users) and the 4th intergroup (3-4 hours Internet users) social media usage level totals; in favor of the 5th group between the 2nd intergroup (1-2 hours Internet users) and the 5th intergroup (4 hours and above Internet users) social media usage level totals; in favor of the 4th group between the 3rd intergroup (2-3 hours Internet users) and the 4th intergroup (3-4 hours Internet users) social media usage level totals; in favor of the 5th group between the 3rd intergroup (2-3 hours Internet users) and the 5th intergroup (4 hours and above Internet users).

It concludes that the continuity factor shows a significant difference depending on Internet usage time ($F(4,337)=16.67$; $p<0.05$). To determine the intergroup difference, Post Hoc analysis was done. According to Levene analysis results, because variances are homogenous ($p>0.05$), Tukey analysis was preferred as Post Hoc analysis.

According to Tukey Post Hoc test results, there is a significant difference in favor of the 4th group between the 1st intergroup (0-1 hour Internet users) and the 4th intergroup (3-4 hours Internet users) social media usage level totals; in favor of the 5th group between 1st intergroup (0-1 hour Internet users) and the 5th intergroup (4 hours and above Internet users) social media usage level totals; in favor of the 3rd group between the 2nd intergroup (1-

2 hours Internet users) and the 3rd intergroup (2-3 hours Internet users) social media usage level totals; in favor of the 4th group between the 2nd intergroup (1-2 hours Internet users) and the 4th intergroup (3-4 hours Internet users) social media usage level totals; in favor of the 5th group between the 2nd intergroup (1-2 hours Internet users) and the 5th intergroup (4 hours and above Internet users) social media usage level totals; in favor of the 4th group between the 3rd intergroup (2-3 hours Internet users) and the 4th intergroup (3-4 hours Internet users) social media usage level totals; in favor of the 5th group between the 3rd intergroup (2-3 hours Internet users) and the 5th intergroup (4 hours and above Internet users).

It concludes that the competency factor shows a significant difference depending on Internet usage time ($F(4,337)=17.53; p<0.05$). To determine the intergroup difference, Post Hoc analysis was done. According to Levene analysis results, because variances are homogenous ($p>0.05$), Tukey analysis was preferred as Post Hoc analysis.

According to Tukey Post Hoc test results, there is a significant difference in favor of the 5th group between the 1st intergroup (0-1 hour Internet users) and the 5th intergroup (4 hours and above Internet users) social media usage level totals; in favor of the 3rd group between the 2nd intergroup (1-2 hours Internet users) and the 3rd intergroup (2-3 hours Internet users) social media usage level totals; in favor of the 4th group between the 2nd intergroup (1-2 hours Internet users) and the 4th intergroup (3-4 hours Internet users) social media usage level totals; in favor of the 5th group between the 2nd intergroup (1-2 hours Internet users) and the 5th intergroup (4 hours and above Internet users) social media usage level totals; in favor of the 5th group between the 3rd intergroup (2-3 hours Internet users) and the 5th intergroup (4 hours and above Internet users) social media usage level totals. To determine whether Internet addiction levels of high school students change depending on Internet usage time, the One Way ANOVA test was done, and the data based on analysis and descriptive results are shown in Table 15.

Table 15. Results of Internet Addiction Levels in High School Students According to Internet Usage Time

| | | N | \bar{X} | SD |
|---------------------------|-------------------|-----|-----------|-----|
| Withdrawal Factor | 0-1 Hours | 22 | 2.52 | .71 |
| | 1-2 Hours | 72 | 2.51 | .70 |
| | 2-3 Hours | 114 | 2.77 | .75 |
| | 3-4 Hours | 65 | 3.01 | .71 |
| | 4 Hours and Above | 65 | 3.20 | .88 |
| | Total | 338 | 2.83 | .79 |
| Control Difficulty Factor | 0-1 Hours | 22 | 1.85 | .94 |
| | 1-2 Hours | 72 | 1.90 | .64 |
| | 2-3 Hours | 114 | 2.25 | .68 |
| | 3-4 Hours | 65 | 2.37 | .72 |
| | 4 Hours and Above | 65 | 2.72 | .83 |
| | Total | 338 | 2.26 | .78 |

| | | N | \bar{X} | SD |
|---------------------------|-------------------|-----|-----------|------|
| Malfunction Factor | 0-1 Hours | 22 | 2.01 | 1.10 |
| | 1-2 Hours | 72 | 1.76 | .67 |
| | 2-3 Hours | 114 | 2.10 | .79 |
| | 3-4 Hours | 65 | 2.09 | .77 |
| | 4 Hours and Above | 65 | 2.49 | .87 |
| | Total | 338 | 2.10 | .83 |
| Social Isolation Factor | 0-1 Hours | 22 | 1.64 | .86 |
| | 1-2 Hours | 72 | 1.45 | .55 |
| | 2-3 Hours | 114 | 1.89 | .77 |
| | 3-4 Hours | 65 | 1.76 | .65 |
| | 4 Hours and Above | 65 | 1.97 | .86 |
| | Total | 338 | 1.77 | .75 |
| Internet Addiction Levels | 0-1 Hours | 22 | 2.05 | .78 |
| | 1-2 Hours | 72 | 1.98 | .57 |
| | 2-3 Hours | 114 | 2.31 | .62 |
| | 3-4 Hours | 65 | 2.39 | .57 |
| | 4 Hours and Above | 65 | 2.67 | .70 |
| | Total | 338 | 2.31 | .67 |

When internet addiction levels of high school students are examined in table 15 depending on internet usage time, 4 hours and above internet users have the highest average ($\bar{X} = 2.67$). In terms of sub-factors, 4 hours and above internet users have the highest average in withdrawal factor ($\bar{X} = 3.20$), control difficulty factor ($\bar{X} = 2.72$), malfunction factor ($\bar{X} = 2.49$) and social isolation factor ($\bar{X} = 1.97$). To analyze whether this difference is significant, the One-Way ANOVA test was done. The test results are shown in Table 16.

Table 16. Results of Internet Addiction Levels in High School Students According to Internet Usage Time

| | | SS | SD | MS | F | p | g |
|---------------------------|------------|--------|-----|------|-------|-----|---|
| Withdrawal Factor | Intergroup | 20.90 | 4 | 5.22 | 8.99 | .00 | 1-5 Group |
| | In-Group | 193.58 | 333 | .58 | | | 5 in favor |
| | Total | 214.48 | 337 | | | | 2-4 Group 4 in favor 2-5 Group 5 in favor 3-5 Group 5 in favor |
| Control Difficulty Factor | Intergroup | 27.39 | 4 | 6.85 | 12.70 | .00 | 1-5 Group |
| | In-Group | 179.54 | 333 | .53 | | | 5 in favor |
| | Total | 206.93 | 337 | | | | 2-3 Group |

| | | | | | | | |
|---------------------------|------------|--------|-----|------|-------|-----|------------|
| | | | | | | | 3 in favor |
| | | | | | | | 2-4 Group |
| | | | | | | | 4 in favor |
| | | | | | | | 2-5 Group |
| | | | | | | | 5 in favor |
| | | | | | | | 3-5 Group |
| | | | | | | | 5 in favor |
| Malfunction Factor | Intergroup | 18.34 | 4 | 4.58 | 7.03 | .00 | 2-5 Group |
| | In-Group | 216.98 | 333 | .65 | | | 5 in favor |
| | Total | 235.44 | 337 | | | | |
| Social Isolation Factor | Intergroup | 11.78 | 4 | 2.94 | 5.43 | .00 | 2-3 Group |
| | In-Group | 180.68 | 333 | .54 | | | 3 in favor |
| | Total | 192.46 | 337 | | | | 2-5 Group |
| | | | | | | | 5 in favor |
| Internet Addiction Levels | Intergroup | 18.57 | 4 | 4.64 | 11.53 | .00 | 1-5 Group |
| | In-Group | 134.10 | 333 | .40 | | | 5 in favor |
| | Total | 152.68 | 337 | | | | 2-3 Group |
| | | | | | | | 3 in favor |
| | | | | | | | 2-4 Group |
| | | | | | | | 4 in favor |
| | | | | | | | 2-5 Group |
| | | | | | | | 5 in favor |
| | | | | | | | 3-5 Group |
| | | | | | | | 5 in favor |

An examination of Table 16, concludes that Internet addiction levels of high school students show a significant difference depending on Internet usage time ($F(4,337)=11.53$; $p<0.05$). To determine the intergroup difference, Post Hoc analysis was done. According to Levene analysis results, because variances are homogenous ($p>0.05$), Tukey analysis was preferred as Post Hoc analysis. According to Tukey Post Hoc test results, there is a significant difference in favor of the 5th group between the 1st intergroup (0-1 hour Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals; in favor of the 3rd group between the 2nd intergroup (1-2 hours Internet users) and the 3rd intergroup (2-3 hours Internet users) Internet addiction level totals; in favor of the 4th group between the 2nd intergroup (1-2 hours Internet users) and the 4th intergroup (3-4 hours Internet users) Internet addiction level totals; in favor of the 5th group between the 2nd intergroup (1-2 hours Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals; in favor of the 5th group between the 3rd intergroup (2-3 hours Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals.

It concludes that the withdrawal factor shows a significant difference depending on Internet usage time ($F(4,337)=8.99$; $p<0.05$). To determine the intergroup difference, Post Hoc analysis was done. While Post Hoc analysis

was being done, to determine whether variances were homogenous, Levene statistics were examined. According to Levene analysis results, because variances are homogenous ($p>0.05$), Tukey analysis was preferred as Post Hoc analysis. According to Tukey Post Hoc test results, there is a significant difference in favor of the 5th group between the 1st intergroup (0-1 hour Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals; in favor of the 4th group between the 2nd intergroup (1-2 hours Internet users) and the 4th intergroup (3-4 hours Internet users) Internet addiction level totals; in favor of the 5th group between the 2nd intergroup (1-2 hours Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals; in favor of the 5th group between the 3rd intergroup (2-3 hours Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals.

It concludes that the control difficulty factor shows a significant difference depending on Internet usage time ($F(4,337)=12.70$; $p<0.05$). To determine intergroup differences, Post Hoc analysis was done. While Post Hoc analysis was being done, to determine whether variances were homogenous, Levene statistics were examined. According to Levene analysis results, because variances are homogenous ($p>0.05$), Tukey analysis was preferred as Post Hoc analysis. According to Tukey Post Hoc test results, there is a significant difference in favor of the 5th group between the 1st intergroup (0-1 hour Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals; in favor of the 3rd group between the 2nd intergroup (1-2 hours Internet users) and the 3rd intergroup (2-3 hours Internet users) Internet addiction level totals; in favor of the 4th group between the 2nd intergroup (1-2 hours Internet users) and the 4th intergroup (3-4 hours Internet users) Internet addiction level totals; in favor of the 5th group between the 2nd intergroup (1-2 hours Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals; in favor of the 5th group between the 3rd intergroup (2-3 hours Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals.

It concludes that the malfunction factor shows a significant difference depending on Internet usage time ($F(4,337)=7.03$; $p<0.05$). To determine the intergroup difference, Post Hoc analysis was done. While Post Hoc analysis was being done, to determine whether variances were homogenous, Levene statistics were examined. According to Levene analysis results, because variances are homogenous ($p>0.05$), Tukey analysis was preferred as Post Hoc analysis. According to Tukey Post Hoc test results, there is a significant difference in favor of the 5th group between the 2nd intergroup (1-2 hours Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals.

It concludes that the social isolation factor shows a significant difference depending on internet usage time. ($F(4,337)=5.43$; $p<0.05$). To determine intergroup differences, Post Hoc analysis was done. While Post Hoc analysis was being done, to determine whether variances were homogenous, Levene statistics were examined. According to Levene analysis results, because variances are homogenous ($p>0.05$), Tukey analysis was preferred as Post Hoc analysis.

According to Tukey Post Hoc test results, there is a significant difference in favor of the 3rd group between the 2nd intergroup (1-2 hours Internet users) and the 3rd intergroup (2-3 hours Internet users) Internet addiction level

totals; in favor of the 5th group between the 2nd intergroup (1-2 hours Internet users) and the 5th intergroup (4 hours and above Internet users) Internet addiction level totals. The correlation among self-confidence, social media use, and Internet addiction levels of high school students was tested by Pearson Correlation analysis. The data based on the Pearson Correlation Test is shown in Table 17.

Table 17. Pearson Correlation Test Results

| | | Self-confidence Levels | Internet Addiction Levels |
|---------------------------|---|------------------------|---------------------------|
| Social Media Usage Levels | R | .06 | .53** |
| | P | .24 | .00 |
| | N | 340 | 34 |
| Self-Confidence Levels | R | | -.23** |
| | P | | .00 |
| | N | | 340 |

** p<.01

In Table 17 Pearson Correlation test results show that there is a medium level of a significant relationship between social media use and internet addictions of high school students in a positive way (R=0.53, p<0.05). According to this, as social media use increases, Internet addiction level increases. There is also a lower level of a significant relationship between self-confidence level and Internet addiction level in a negative way (R=-0.24, p<0.05), in that case, as self-confidence levels of high school students decrease, Internet addiction levels increase.

After correlation analysis, multiple linear regression analysis was conducted to determine whether Internet addiction levels of high school students were predictive in terms of self-confidence, social media use, and age. A significant regression equation was found (F(3,336)=66.36, p <.00) and R² of .37, and the results of this analysis are presented in Table 18.

Table 18. Multiple Regression Analysis Results Based on Prediction of Internet Addiction

| | B | Standard Error | β | t | p |
|------------------------|----------------------|----------------|------|-------|-----|
| Constant | 2.23 | .19 | - | 11.22 | .00 |
| Social Media Usage | .46 | .03 | .55 | 12.83 | .00 |
| Self-Confidence Levels | -.27 | .04 | -.26 | -6.20 | .00 |
| Age | -.06 | .02 | -.11 | -2.67 | .00 |
| R =0.61 | R ² =0.37 | | | | |
| F(3,336)=66.36 | p = .00 | | | | |

As seen in Table 18, Internet addiction level scores of the participants were 2.23 + 0.46 (Social Media Usage) - 0.27 (Self-Confidence Levels) - 0.06 (Age). In another saying, it appears that Internet addiction in high school students predicts social media use, self-confidence levels, and ages at a rate of 37% of total variance. As it affects most social media use and the least self-confidence factor.

Qualitative Findings

Four basic themes which are Internet, Internet addiction, social media usage, and self-confidence levels emerged and are shown in Figure 1.

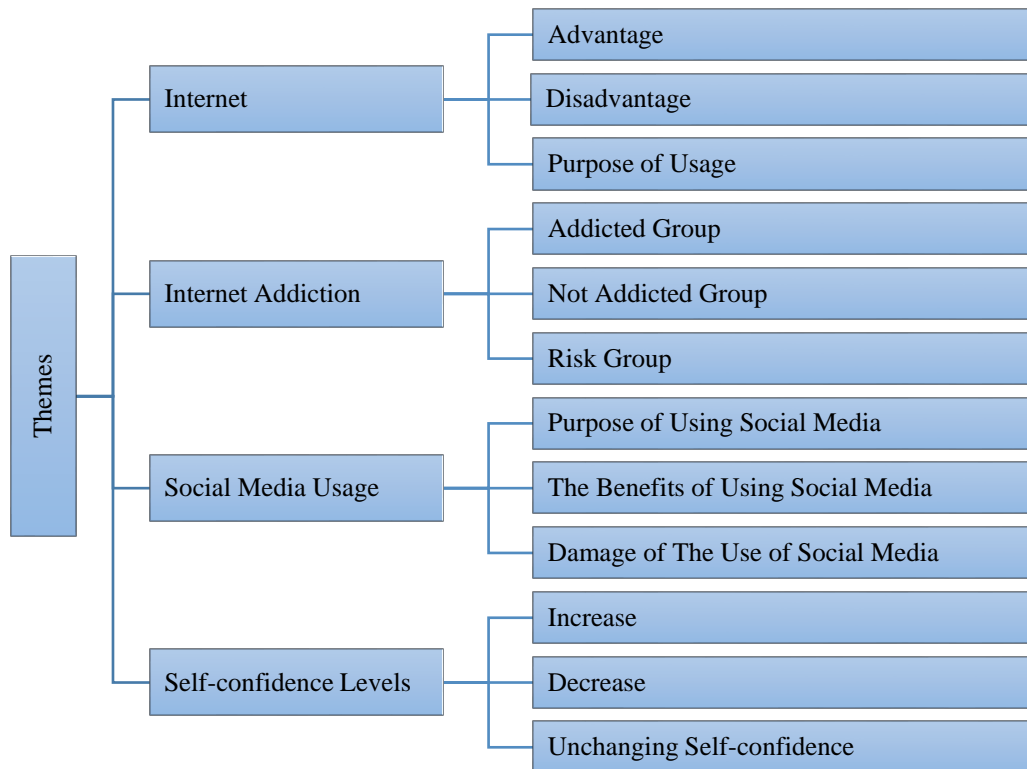


Figure 1. Disadvantages of Social Media

One of the themes that emerged with qualitative findings is the Internet. The codes related to the Internet are the advantages of the Internet, the disadvantages of the Internet, and the purpose of usage of the Internet. Related to the advantages of the Internet, ease of access, instant communication, and an auxiliary tool for studying and doing research for the course were the most mentioned advantages. Some sample statements of the participants related to this theme were provided below:

“To access information. I use it for task research and learning daily life news.” (K10)

“Sometimes I use it for contacting my friends. This is a little better for us. After all, we help each other from the Internet because the Internet has it all.” (K4)

“There are also videos for all questions of many books and test books. Whenever I want, I can look at them.” (K2)

Five of the participants stated that the harm of the Internet is the inability to control time. Also, unsociality (4 participants), health problems (2), eye health, negative psychological effects, learning bad news, and time consumption were the other disadvantages of Internet usage.

“I can’t notice how long I use the Internet. Time flies like an arrow. If we want to look at every

information, time goes by.” (K1)

“It is harmful in a socializing way. You cannot socialize.” (K9)

“If we take care of it, our eye health may deteriorate. Like that. ” (K1)

Six of the participants answered that the purpose of using the Internet is to deal with social media. Also, research on the Internet (6 participants), studying on the Internet (5), communication (2), playing games and video lecturing (2), shopping, and programming (1) were the other purposes of using the Internet.

“Mostly I spend my time on social media when I use the Internet. One of the purposes of Internet usage is to research.” (K7)

“When there is something, I don’t know, I use it for searching.” (K9)

“While I am studying at night, there is an answer to a question I can’t do on the Internet in the way of video lecturing. Among the aims of Internet usage, there is studying lessons over the Internet by students.” (K2)

The second theme from the analysis results is Internet addiction. Internet addiction has three sub-categories. These are addictive groups, non-addictive groups, and risk groups. Spending too much time on Internet usage any other way, stopping, and wanting to reuse the Internet can be explained as addiction (Kaman, 2019).

According to Güntünç (2009), Internet addiction levels are divided into 4 groups. These are the addictive group, risk group, threshold group, and non-addictive group. In that case, the risk group forms a before-addiction group. Also, they stated that the participants were addicted (4 participants) with their Internet addiction levels, not addicted, and moderately addicted (3). Some sample statements of the participants’ regarding this theme are given below:

“Actually, I am a little addicted. For instance, as time goes by, I want to use it a little more. I stop, and after that, I look at it again. I am passing the time. I can say I am a little addicted.” (K6)

“Because I spend too much time on the Internet. Because I am a senior, I must focus on my lessons even more. I cannot be without a phone. Phone is a piece of my life, I can say.” (K9)

“I use it 2-3 hours a day, to be addicted, you must use it 8-10 hours. I can say I am a mid-level addict. That using less time than the aim of any substance or object use is addiction related to substance or object would not be appropriate.” (K2)

“I think I am not addicted to it because I use it a little. I could do without.” (K8)

The other one of the themes is social media use. Sub-categories of social media use are the aim of social media use, benefits, and damage of social media use. Five of the participants answered that the purpose of using social media is communication. Also, social media are shopping (5 participants), daily news follow-up (4), sharing, studying and research (2), video lectures, entertainment, chatting, and playing games (1).

“To contact my family, if I am far away, to call them on FaceTime etc.” (K3)

“I also use the Internet for shopping, I order some things over the Internet. Clothes, technological devices, etc. Another aim of social media use is following daily news.” (K6)

“I use social media for recent media events.” (K10)

Five of the participants answered that the benefit of using social media is instant communication. Also, getting information (4 participants), sharing (3), research, and discussion environment.

“I use social media for connecting my friends. This always happens. Mostly WhatsApp.” (K4)

“Be it a magazine or article, we can send it to a person through there. That could be a plus. We can think of it like an e-mail. It can be used like that.” (K4)

Three of the participants answered that the damage of using social media is asociality. Also, some of the participants stated that there is use included a tendency to cybercrime, bullying, loss of time, psychological effects, and personal information theft. They stated that there was unreal information and social media pressure.

“You become asocial and can’t make friends because of mostly phones.” (K5)

“Social media takes most of the time I spend on the Internet. I can say it steals my time.” (K1)

“However, people whose dark sides we don’t know can steal your information. Some students talk to strangers to meet. The students put their information on their accounts. Strangers learn where they live from there etc. and misuse their information.” (K3)

The last theme is self-confidence. Sub-categories of self-confidence themes are increase, decrease, and unchanging self-confidence. The opinions of some participants about the fact that social media use increases self-confidence (5 participants) and that Internet and social media use decreases self-confidence (3) and does not change (2) are given below.

“Actually, it raises. Social media environment or something. It affects my real life, too. My self-confidence is rising, yes.” (K6)

“My self-confidence affects me. I become more confident. Because I already was withdrawn. As I use social media and chat with people, my self-confidence increased more.” (K8)

“A lot of videos I watched on the Internet destroy self-confidence, if I did same things as them, I’m putting myself in their shoes, it destroys my self-confidence.” (K1)

“Social media use does not affect my self-confidence. I don’t think such a like this affects self-confidence.” (K9)

According to qualitative analysis results, the participants who use the Internet and social media stated that the Internet and social media had both advantages and disadvantages. It was revealed that the self-confidence levels of the participants using social media increased and decreased and self-confidence does not change according to their internal state.

Discussion

As the findings in this study are examined, it can be concluded that high-school students' self-confidence levels are above the medium. Parallel to this result, high school students' intrinsic and extrinsic self-confidence levels were high (Bozgün & Akın-Kösterelioğlu, 2023). Social media usage and internet addiction levels of students are at the medium level. Moreover, approximately half of the students are addicted or in risky groups in terms of internet addiction levels. Based on the findings of the Günüç (2009), the rate of addicts was found as 10.1%.

In this study, self-confidence, social media usage and internet addiction levels of high school students were compared by gender. It was observed that there were no significant differences between males and females in terms of social media usage, self-confidence, and internet addiction. However, there were statistically significant difference between male and female students in terms of external self confidence in favor of males. When Liping (2003) examined the self-confidence levels of university students in terms of gender, it was concluded that the self-confidence scores of male students were higher than the self-confidence scores of female students. Çoknaz et al. (2018), in their study of comparisons of self-confidence levels of high school students on a similar subject in this study, stated that there was no statistically significant relationship between self-confidence levels compared to gender. Öztürk (2017) also concluded that there is no difference between the gender and self-confidence levels of students in their studies. Kanadıkırık Kılıç and Kılıç (2013) found in their study that male students' self-confidence levels were higher than female students' self-confidence levels. Therefore, it will not be possible to make a definite judgment as to whether the self-confidence levels of high school students differ by gender. It is thought that the difference in self-confidence levels with the gender variable may be related to some environmental factors. Kocaman Karoğlu and Atasoy (2018), in their study, do not differ between university students' use of social media by gender. In a similar study by Neto, Golz, and Polega (2015), it was concluded that social media use by women is higher than men. Therefore, a definite conclusion may not be reached in terms of gender variables in social media use.

In this study, the status of Internet addiction levels by gender was examined, and although it was observed that the Internet addiction levels of male students were higher than those of girls, there was no statistically significant difference. Günüç (2009) found in similar studies that the addiction levels of boys are higher than girls. In a similar study by Eva and Petra (2018), it was concluded that male students had higher Internet addiction scores than female students. Therefore, even if the Internet addiction levels of men are higher than women, a statistically significant result may not be reached with certainty.

In this study, self-confidence, social media usage and internet addiction levels of high school students were compared with respect to grade levels. it can also be said that there is no significant difference in terms of the self-confidence level of high school students according to the grade levels of the participant students. In his study, Parçal (2018) states that the self-confidence and external self-confidence sub-dimensions with the self-confidence level do not differ according to the grade level. Similar findings were found in the study of Gencer (2019). It says that there is no significant difference according to the grade levels of the students.

Moreover, when the use of social media is compared according to the grade levels, it can be concluded that the 11th-grade students show statistically significant differences to the 9th, 10th, and 12th grades when compared. In a similar study, Kocaman Karoğlu and Atasoy (2018) concluded that there was no significant difference between students' social media use and their class levels according to the findings. This contradicting result may be the result of different participants. With respect to internet addiction, there were significant differences between grade levels. Findings with significant differences between the groups were examined and it was concluded that the 9th and 11th grades have higher addiction levels. A study like this one was carried out by Günüç (2009), and it was concluded that students studying in the 9th grade have high Internet addiction levels.

Additionally, self-confidence, social media usage and internet addiction levels of high school students were compared with respect to grade levels. When the findings of this study are examined, it can be said that there is no statistically significant difference between the self-confidence levels of high school students and their duration of Internet use, although the average of those who use the Internet for 1-2 hours is higher than the others. However, there were significant differences in social media usage levels with respect to internet usage time. It can be said that as the duration of Internet use increases, the duration of social media usage increases. Similarly, Günüç (2009) stated in his study that when individuals' daily Internet use increases, their Internet addiction levels increase. Therefore, it can be said that as Internet usage increases, Internet addiction levels increase. It can be said that individuals who are not Internet addicts use the Internet less than those who are addicted to the Internet.

According to this study results, it can be concluded that there is a moderately significant positive correlation between high school students' use of social media and their Internet addiction levels. It can be said that the Internet addiction levels of individuals using social media are increasing. In addition, it can be said that there is a low-level significant negative relationship between high school students' self-confidence levels and Internet addiction. Another finding of the study is that as high school students' use of social media increases, their Internet addiction levels increase. In addition, it can be said that as the self-confidence of high school students decreases, the rate of Internet addiction increases. Moreover, Internet addiction and individuals' self-confidence levels are predicted by social media usage and age. The finding of this study shows that social media use, self-confidence levels, and age variables can be concluded to predict Internet addiction.

According to qualitative findings, it is concluded that all participants use the Internet and social media. It has been observed that there are differences according to the intended use of those who use the Internet. While most of the participants use the Internet for research, social media use, and communication purposes, it can be concluded that some of the participants use the Internet for shopping, studying, video watching, playing games, and computer programming. When the qualitative findings are examined, it can be said that half of the participants use the Internet for four hours or more. Other participants can be said to have four hours of Internet usage. Using the Internet for our purposes may affect our addiction to the Internet (Alyanak, 2016). It can be said that the participants evaluating their addiction to the Internet may be addicted because they cannot control the hours they spend on the Internet. It is concluded that individuals who use the Internet less often have medium or low Internet addiction levels (Günüç, 2009). In a similar study, Şirinov and Şengel (2019) express the relationship between pre-service teachers' time spent on the Internet and their lying to real people in social life as addiction.

When the findings obtained from the qualitative data in this study were examined, it was seen that all participants used social media. Social media usage purposes are similar to Internet usage purposes. When the findings obtained in terms of social media usage purposes were examined, it was seen that communication, shopping, and news were primarily followed. In a similar study, Stankovska, Angelkovska, and Grncarovska (2016) concluded that students who feel lonely use social media for communication purposes. Some of the participants stated that they use social media for games, entertainment, studying, and chatting. It has been observed that the benefits of social media are instant communication, obtaining information, sharing, and a discussion environment. When the qualitative findings were examined, it was seen that while antisociality was the leading harm of social media, bullying, theft of information, social media pressure, and loss of time were also harmful. Arslan and Kiper (2018) concluded in their similar studies that Internet addiction differentiates individuals from other people and causes them to exhibit asocial behaviors. Another qualitative finding was that the participants thought that the use of social media increased their self-confidence. In a similar study, Sarsar, Bařbay, and Bařbay (2015) stated that social media is efficient and necessary for the teaching and learning process. When the qualitative findings of the study are examined, it may not be possible to obtain definite information in terms of whether social media affects self-confidence.

Conclusion

The aim of this mixed-method study was examining high school student's self-confidence, social media use, and internet addiction levels. Results showed that gender has no effect on student's self-confidence, social media use and internet addiction. Moreover, we concluded that internet usage time and class level student have no effect on student's self-confidence. However, they have some effects on student's social media use and internet addiction levels.

Obviously, internet usage has beneficial and harmful aspects, and this situation may have positive and negative consequences. Internet use may also affect the quality of life of high school students. Using the Internet appropriately may help high school students create a successful student profile in their social and school life while using the Internet out of purpose will have negative consequences both socially and psychologically. Internet usage durations are one of the main effects affecting Internet addiction levels. In terms of Internet addiction, the time of using the Internet should be tailored to its purpose. The result is that many individuals using the Internet use social media. It turns out that the use of social media affects the level of self-confidence. Self-confidence levels of high school students can be examined in terms of other variables. It is concluded that the use of social media is correlated with the duration of Internet usage. Individuals who use the Internet for social media purposes should be informed about these issues. Training should be organized on the benefits and harms of Internet use.

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