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Investigation of relationship between smartphone addiction and internet addiction in working children in industry

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Abstract

Aim: The aim of the study was conducted to examine the relationship between smartphone addiction and internet addiction of working children in industry.

Material and Method: This research was carried out with 183 children working at various work places in Diyarbakır province center between January and March 2017 as a descriptive relational. Child Information Form, Young Internet Addiction Scale and Smart Phone Dependence Scale were used in the study. The data were collected by face-to-face interview technique.

Results: According to the statistical results of the study group, the average age of the students participating in the study was 14.53 ± 2.08. The average Internet and smartphone addiction scores of children whose mother were not alive (p = 0.000) or whose father (p = 0.000) were not alive and whose internet use was not supported (p = 0.000) were found to be higher. The mean scores of the groups were found to be significantly different. The mean internet and smart phone addiction scores of the children who worked well with the master at work (p = 0.000, p = 0.035) were found to be low and there was a significant difference between the groups. Children who were exposed to violence in the work environment (p=0.000) are quite high internet and smart phone addiction scores and the difference between the groups was found to be significant. It had founded that the children who use smart phone and internet for fun (p = 0.001, p = 0.002), chatting (p = 0.005) and browsing sites (p = 0.038, p = 0.001) was higher phone addiction and internet addiction scores. It was determined that there was a meaningful difference between the average scores

Conclusion: Working children showed high internet and smart phone addiction behaviors, this resulted from originated family and social environment.

Keywords: Working child; internet addiction; smart phone dependency.

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Introduction

The concept of working children is defined as the involvement of children under the age of 18 in work life to maintain their lives or to contribute to the family budget (Fidan, 2004). Although poverty and unfair income distribution are the most basic reasons for child labor, the cultural structure, education level of the family, fragmentation of family, migration and population growth, lack of educational opportunities, unemployment, cheap labor force requirements of employers, inadequate labor regulations and failure in implementation of labor laws are also among the reasons of this fact (Aksakal, 2016; Gol, 2016; Tor, 2010).

According to the ILO's records, 306 million (19.3%) of the 1,586 billion children in the world are in the employment sector and 250 million (about 70%) are child workers, which means that one in every seven children is a child worker. Of these children, 115 million undertake very dangerous tasks (ILO, 2010). According to the 2012 data of Turkey Statistical Institute, the child population in the 0-17 age range constitute 30% of the total population (Yıldırım, Beydili, & Görgülü, 2015). This negatively affects the health of children, hinder their physical, cognitive, social and emotional development prevent them continue their education, and since they are very young, they are exposed to hazards caused by mental, physical, chemical and environmental factors, suffer from inadequate and unbalanced nutrition, as well as physical, emotional and sexual abuse and neglect. Therefore, the working children become ill-tempered, withdrawn, insecure and incompatible with their surroundings; in addition, they lack social security, work with low wages, and may acquire bad habits and addictions such as smoking, alcohol and even drugs in working environments (Agbo, 2017; Gol, 2016; İşeri et al., 2005; Tor, 2010).

The use of the Internet and smartphones has recently became an essential tool for information, entertainment and social communication. It has been widely adopted as a low cost, easy to access platform for social interaction and leisure activities, especially by adolescents (Tsitsika et al., 2016). However, this has become a social problem today (Kim, Lee, Lee, Nam, & Chung, 2014; Kwon et al., 2013; Lee & Lee, 2017; Nie, Zhang, & Liu, 2017).

According to data provided by the Turkey Statistical Institute (TÜİK, 2011), Internet use in the 16-74 age group is 69.6% in Turkey, and Turkey ranks 15th among the countries with the most Internet users in the world (IWS, 2017). Internet and smartphone addiction is defined as the failure to control increased use of Internet and smartphone as to cause potential harm to individuals' life (Gunuc & Dogan, 2013; Ko, Yen, Yen, Chen, & Chen, 2012; Morahan-Martin & Schumacher, 2000; Tang et al., 2014).

The problems associated with Internet and smartphone addiction generally include mood disorders, disruptive behavior disorders, anxiety disorders, sleep disorders, nutritional disorders, anxiety disorders, attention deficit and hyperactivity disorder, depression, loneliness, tendency to violence, social isolation, decreased work performance and school achievement, low self-esteem, musculoskeletal diseases, extreme fatigue, eye diseases and mental disorders(Luparenko, 2014; Şata, Çelik, Eetürk, & Taş, 2016; Tahiroğlu, Çelik, Bahalı, & Avcı, 2010; Ülgen, 2014).

Purpose: This study was conducted to investigate the relationship between smartphone addiction and Internet addiction in working children in industry.

Method

Research Design

This research is a relational descriptive type research.

Sample of the Study

This study was carried out between January-March 2017 by obtaining the legal permissions from Diyarbakır Governorate and ethical approval from the İnönü University Health Sciences Non-Interventional Clinical Research and Publication Ethics Committee. No sampling

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method was applied. All children working in the industrial center of Diyarbakir, who met the research criteria and accepted the study were included in the study. After obtaining the necessary permits, the children working in the industry in Diyarbakır received written permission firstly. Data were collected by face-to-face interviews with each child. Data collection was completed for a period of approximately 6 months. Data from each child took 20 minutes to collect.

Research criteria

Criteria of the study consisted of the fact that the child is older than 12 years, has a smart phone and plays in the industrial zone.

Data Collection Instruments

The study data were collected with the Children Information Form, the Young Internet Addiction Scale and the Smartphone Addiction Scale using face-to-face interview method.

Children Information Form: It consists of 33 items about age, gender, education, and place of residence of the children to determine their socio-demographic characteristics.

Young Internet Addiction Scale (IAS): The 5-point Likert type YIAS-SF, developed by Young and transformed into short form by Pawlikowski et al., consists of 12 items (scored between 1=Never, 5=Always). The internal consistency reliability coefficient of the scale was calculated to be 0.85. There is no reverse-scored items in the scale. Higher scores of the scale indicate a higher level of Internet addiction (Kutlu, Savci, Demir, & Aysan, 2016).

Smartphone Addiction Scale (SAS): The smartphone addiction scale has been developed by Kwon M et al. The 6-point Likert-type scale consists of 33 items (scored as 1=Strongly disagree, 2=Disagree, 3=Weakly disagree, 4=Weakly agree, 5=Agree, 6=Strongly agree). The lowest score to be taken by marking Strongly disagree in all items is 33, and the highest score is 198, which is taken by marking Strongly yes in all items. The scale itself consists of seven factors. Factor 1 "daily-life disturbance and tolerance" consists of 8 items (1, 2, 5, 29, 30, 31, 32, 33), Factor 2 "withdrawal symptoms" consists of 7 items (10, 11, 12, 13, 14, 15, 16), Factor 3 "positive anticipation" consists of 5 items (6, 7, 8, 9, 20), Factor 4 "cyberspace-oriented relationship" consists of 4 items (21, 22, 23, 26), Factor 5 "overuse" consists of 4 items (17, 18 ,19, 28), Factor 6 "social network addiction" consists of 2 items (24, 25) and Factor 7 "physical symptoms" consists of 3 items (3, 4, 27). There is no threshold point in this scale. However, the increasing scores on the test indicate increasing risk for addiction. The Cronbach's alpha internal consistency coefficient of the scale is 0.947 (Demirci, Orhan, Demirdas, Akpinar, & Sert, 2014).

Research Analysis

SPSS 22.0 program was used for statistical analysis. The normal distribution of the data were analyzed using analytical methods (Kolmogorov-Smirnov/Shapiro-Wilk tests). Since the study data meet the parametric conditions, Student's t test was used and One-Way ANOVA was used for the comparison of three or more groups. Data were presented as arithmetic mean±standard deviation. Pearson correlation analysis test was used for correlation analysis since both variables have a normal distribution. $P<0.05$ was accepted as the level of statistical significance.

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Results

Table 1. Some Demographic Characteristics of Working Children in industry

	n	%
Gender		
Female	28	15.3
Male	155	84.7
Child's educational status		
Doesn't go to school (at the school age)	24	13.1
Primary school	21	11.5
Secondary School	98	53.6
High School	40	21.9
Use of protective equipment at work		
Yes	13	7.1
No	170	92.9
Relationship with the master at the workplace		
Good	58	31.7
Medium	79	43.2
Poor	46	25.1
Paternal vital status		
Yes	112	61.2
No	71	38.8
Maternal Vital Status		
Yes	138	75.4
No	45	24.6
Have you exposed to violence?		
Yes	97	53.0
No	86	47.0
Supervised Internet Usage Status		
Yes	35	19.1
No	148	80.9

According to the statistical analysis results of the study group, the average age of the students participating in the study was 14.53±2.08 and 84.7% of them was male and 15.3% was female. It was found that 13.1% of the children was not going to school, 92.9% was not using protective equipment at the workplace and 25.1% had bad relations with the masters at workplace. Of the children participating in the study, 38.8% had no living father, 24.6% had no living mother, 10.9% had unemployed father, and 71.6% had unemployed mother.

Of the children, 94% goes to Internet cafes regularly, 85.2% use the Internet regularly, 80.9% uses unsupervised Internet, and 95.6% use the Internet for entertainment purposes and 32.2% for education purposes.

The average weekly working hours of the children participating in the study was 36.63±14.90, their average monthly income was 550.05±305.81, the average phone price used was 726.55±420.05, average daily time spent in Internet cafe was 3.86±1.36 hours, and the average monthly income of their families was 1488.10±530.27 (Table 1).

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Table 2. Comparison of IAS, SAS Scores and Some Demographic Characteristics of Working Children in industry

		Tolerance	Withdrawal symptoms	Positive anticipation	Cyberspace-oriented relationship	Overuse	Social network addiction	Physical symptoms	Phone addiction	Internet Addiction
Paternal vital status	Yes	31.24±11.25	26.21±9.82	19.68±6.89	15.12±18.64	15.51±5.71	7.97±3.19	11.90±3.99	127.67±45.39	33.66±10.64
	No	38.21±2.91	32.94±3.01	23.49±2.46	18.64±2.26	19.60±0.93	9.90±0.83	14.11±1.60	156.91±11.50	53.92±0.64
	T value*	**5.108**	**5.599**	**4.470**	**4.747**	**5.972**	**4.980**	**4.439**	**5.315**	**14.856**
	p	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
Maternal vital status	Yes	32.65±10.53	27.25±9.17	20.20±6.32	15.52±5.51	16.29±5.31	8.36±2.96	12.33±3.77	132.63±42.13	36.97±11.84
	No	37.88±3.78	33.64±3.04	24.11±2.76	19.48±1.67	19.57±2.02	9.82±1.19	14.06±1.58	158.60±14.32	55.48±6.04
	T value*	**3.257**	**4.583**	**4.018**	**4.738**	**4.042**	**3.213**	**2.992**	**4.051**	**10.050**
	p	**0.001**	**0.000**	**0.000**	**0.000**	**0.000**	**0.002**	**0.003**	**0.000**	**0.000**
Supervised internet usage status	Yes	28.20±11.51	23.60±10.40	18.00±7.50	14.45±6.23	14.00±6.18	7.25±3.40	11.02±4.23	116.54±47.57	29.80±5.86
	No	35.30±8.58	30.06±7.58	21.91±5.20	16.98±4.75	17.83±4.27	9.06±2.40	13.16±3.11	144.33±34.63	44.30±13.12
	T value*	**4.107**	**4.196**	**3.647**	**2.658**	**4.347**	**3.668**	**3.397**	**3.953**	**6.376**
	p	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
Relationship with the master at the workplace	Good	30.96±10.60	26.36±9.27	20.18±6.57	15.72±6.01	15.31±5.16	8.13±2.98	11.84±3.86	128.53±42.94	30.20±6.01
	Medium	35.02±9.64	29.50±8.16	21.18±5.74	16.51±4.74	17.67±4.83	8.89±2.66	13.22±3.37	142.03±37.92	45.43±12.33
	Poor	35.84±7.18	30.76±7.70	22.34±5.11	17.45±4.53	18.39±4.14	9.15±2.34	13.10±2.79	147.06±32.57	49.10±12.69
	T value**	**4.356**	**3.954**	1.733	1.461	**6.292**	2.114	3.074	**3.420**	**47.925**
	p	**0.014**	**0.021**	0.180	0.235	**0.002**	0.124	0.049	**0.035**	**0.000**
Educational status	Doesn't go to school	36.45±8.10	31.12±8.25	22.37±5.49	17.62±5.04	18.12±4.39	9.00±2.50	13.79±3.12	148.50±36.04	51.83±11.00
	Primary school	36.71±6.68	31.23±5.65	23.09±4.39	18.38±3.55	18.47±3.45	9.61±1.74	13.76±2.58	151.28±27.26	41.66±11.66
	Secondary School	33.29±10.59	28.58±8.87	20.43±6.42	16.04±5.18	17.02±5.33	8.61±2.88	12.39±3.77	136.38±41.91	43.88±12.92
	High School	32.57±8.83	26.77±8.84	21.20±5.24	15.97±5.62	15.97±4.65	8.35±2.77	12.50±3.04	133.35±36.75	29.50±6.93
	T value**	1.568	1.956	1.598	1.736	1.615	1.155	1.765	1.622	**22.473**
	p	0.199	0.122	0.191	0.161	0.188	0.328	0.155	0.186	**0.000**

* Sample T Test
** One-Way ANOVA

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Table 2. Comparison of IAS, SAS Scores and Some Demographic Characteristics of Working Children in industry (continued)

		Tolerance	Withdrawal symptoms	Positive anticipation	Cyberspace-oriented relationship	Overuse	Social network addiction	Physical symptoms	Phone addiction	Internet Addiction
Education	Yes	33.06±9.63	28.01±8.50	21.44±5.96	16.79±5.39	16.38±4.93	8.40±2.93	12.69±3.22	136.81±39.15	29.89±5.84
	No	34.36±9.58	29.20±8.59	21.03±5.88	16.36±5.04	17.44±4.89	8.87±2.60	12.79±3.56	140.07±38.86	47.06±12.32
	T value*	0.853	0.881	0.437	0.532	1.356	1.082	0.175	0.529	**10.154**
	p	0.395	0.380	0.663	0.596	0.177	0.281	0.862	0.598	**0.000**
Recreation*	Yes	34.42±9.25	29.33±8.13	21.49±5.63	16.70±4.97	17.32±4.75	8.82±2.63	12.93±3.28	141.04±37.32	42.17±13.26
	No	23.50±11.63	17.75±10.56	14.00±7.36	12.00±6.96	12.25±6.34	6.37±3.54	8.87±4.76	94.75±48.26	27.37±4.98
	T value*	**3.229**	**3.886**	**3.629**	**2.569**	**2.910**	**2.537**	**3.349**	**3.387**	**3.1393.139**
	p	**0.001**	**0.000**	**0.000**	**0.011**	**0.004**	**0.012**	**0.001**	**0.001**	**0.002**
Chat	Yes	35.07±8.11	30.10±7.26	22.21±4.88	17.27±4.60	18.02±3.88	8.96±2.44	13.35±2.79	145.00±32.55	44.51±13.11
	No	32.96±10.66	27.71±9.43	20.25±6.53	15.83±5.50	16.30±5.56	8.51±2.92	12.24±3.86	133.83±43.13	38.93±13.08
	T value*	1.482	1.899	**2.264**	1.893	**2.384**	1.131	**2.191**	1.952	**2.874**
	p	0.140	0.059	**0.025**	0.060	**0.018**	0.260	**0.030**	0.052	**0.005**
Knowledge acquisition	Yes	35.45±6.43	29.77±6.95	23.02±3.68	17.95±4.24	17.42±3.77	9.02±2.31	13.55±1.51	146.20±26.94	30.20±7.50
	No	33.52±10.28	28.55±8.95	20.64±6.29	16.09±5.31	17.01±5.20	8.63±2.81	12.53±3.79	137.01±41.47	44.69±12.91
	T value*	1.123	0.793	**2.284**	**2.029**	0.466	0.800	1.648	1.324	**6.778**
	p	0.263	0.429	**0.024**	**0.044**	0.642	0.425	0.101	0.187	**0.000**
Navigating sites	Yes	35.94±7.27	30.74±7.38	22.76±4.86	17.76±4.46	18.37±4.06	9.15±2.35	13.84±2.57	148.58±31.74	46.52±13.49
	No	33.17±10.27	28.08±8.88	20.54±6.15	16.01±5.32	16.61±5.14	8.55±2.83	12.34±3.65	135.32±40.82	39.59±12.83
	T value*	1.759	1.900	**2.310**	**2.080**	**0.189**	1.352	**2.687**	**2.088**	**3.228**
	p	0.080	0.059	**0.022**	**0.039**	**0.030**	0.178	**0.008**	**0.038**	**0.001**
Exposure to violence	Yes	37.14±5.84	31.83±5.14	22.70±3.68	17.68±3.37	18.91±3.07	9.54±1.70	13.87±2.06	151.70±23.25	52.37±7.15
	No	30.33±11.56	25.43±10.24	19.43±7.30	15.17±6.36	15.05±5.76	7.79±3.29	11.50±4.19	124.72±47.28	29.30±6.22
	T value*	**5.109**	**5.435**	**3.887**	**3.380**	**5.738**	**4.603**	**4.944**	**4.982**	**23.133**
	p	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

* Sample T Test

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In our study, the Internet addiction scale scores, the smartphone addiction scale scores and their sub-scale score averages were examined. The Internet and smartphone addiction scales and their sub-scales were compared according to some demographic characteristics of the students. According to the analysis made based on paternal vital status, the average phone addiction sub-scale score and Internet addiction score was higher in children with deceased fathers, with a significant difference between the groups. The same phenomenon is seen when the mother is not alive, and it is observed that the children who have deceased mothers took higher addiction scores. According to the analysis made based on the Internet supervision, the average score was found to be higher in children whose Internet use has not been supervised, and the difference between the groups was significant.

Their addiction was investigated according to the relationship with their masters in the workplace. It was observed that the total smartphone addiction score and the mean tolerance, withdrawal symptoms, overuse, physical symptoms sub-scale scores of the smartphone addiction scale and the mean Internet addiction sub-scale score were found to differ significantly between the groups, and that the score averages of children who reported a good relationship with their masters were found to be lower.

It was determined that the education status of children was not effective on smartphone addiction and its sub-scales, but it was important in Internet addiction with a significant difference between the groups. It was found that particularly the children who do attend school have higher Internet addiction scores (Table 2).

The addiction scores of children were compared according the way the use smartphones and the Internet. Although there was no difference in the average smartphone addiction scores of children who use them for educational purposes, the Internet addiction scores of those who use Internet for educational purposes were significantly lower. Addiction scores were high in all areas in children who use them for entertainment purposes. For children using it for chatting purposes, the mean Internet addiction scores were found to be higher in positive expectation, excessive use and physical symptoms sub-scales. Positive expectations, cyberspace-oriented relationship and Internet addiction scores in children using it for information purposes were found to be significantly higher. In the use for site navigation purposes, however, cyberspace-oriented relationship, overuse, physical symptoms, smartphone addiction and Internet addiction scores were found to be significantly higher. Whether the children are exposed to violence due to their work was investigated and the effect of this on addiction scores was examined. It was found that children who had been exposed to violence have significantly higher addiction scores with a statistically significant difference (Table 2).

Table 3. Relationship between Internet Addiction Scale and Smartphone Addiction Scale

SAS		IAS
Daily-life disturbance and tolerance (tolerance)	r	**0.430****
	p	**0.000**
Withdrawal symptoms	r	**0.474****
	p	**0.000**
Positive anticipation	r	**0.373****
	p	**0.000**
Cyberspace-oriented relationship	r	**0.382****
	p	**0.000**
Overuse	r	**0.465****
	p	**0.000**
Social network addiction	r	**0.420****
	p	**0.000**
Physical symptoms	r	**0.390****
	p	**0.000**

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Phone addiction	r	**0.440****
	p	**0.000**

P<0.001 Bivariate Correlate

The relationship between smartphone addiction and Internet addiction in working children was investigated. There was a strong positive correlation between the daily-life disturbance and tolerance, withdrawal symptoms, overuse, social network addiction sub-scales of the Smartphone Addiction Scale and phone addiction scale. A positive and moderate relationship was observed between positive anticipation, physical symptoms and cyberspace-oriented relationship sub-scales of the smartphone addiction scale and phone addiction scale (Table 3).

Discussion

Today, many problems have emerged due to the increasing use and easier accessibility of the Internet and smartphones in adolescents (Nie et al., 2017). Studies reported many psycho-social problems, addiction in particular (Dhir, Chen, & Nieminen, 2015; Sasmaz et al., 2014; Stavropoulos, Alexandraki, & Motti-Stefanidi, 2013). Considering the research findings, it was determined that children whose parents are not alive have higher levels of smartphone and Internet addiction. Considering the literature review, children with poor relationships who had no support from their parents, friends, teachers and environment were found to have higher Internet addiction (Chen, Li, & Li-Liang, 2007; Lee & Lee, 2017; Tichon & Shapiro, 2003; Zhu, Zhang, Yu, & Bao, 2015).

Relationship between Internet addiction and individual, familial and environmental factors have been shown recently (Wu et al., 2016). In our study, the children who had uncontrolled Internet use found to have significantly higher addiction scores. Studies revealed that Internet addiction is related to parental control, and it is also seen in our study that adolescents controlled in a similar had lower addiction scores (Floros, Siomos, Fisoun, & Geroukalis, 2013; Grant & Kim, 2002; Wu et al., 2016).

In our study, it was observed that the children who stated better relationships with their master at the workplace had lower average scores. The masters of children at workplace is an important figure in their life, and they assume the combined roles of parents, peers and teachers. According to the relevant literature review, there are no studies that investigate children's level of addiction and relationships with their masters. Considering the level of parent-child bond, however, researchers have found that a high-level of father-child trust leads to a low level of Internet addiction in adolescents, and that mother-child alienation has a positive correlation with the problematic behavior of young people (Deng, Fang, Wu, Zhang, & Liu, 2013). It was also found that a weak parent-child bond is a risk factor contributing to the addictive online behavior of children (Li Lei & Wu, 2007; Luo & Peng, 2008). Moreover, several studies have investigated the role of peer bonds in Internet addiction in young people, and reported that the quality of peer bonds contributes to the Internet addiction of adolescents (L. Lei & Wu, 2009; Li, Garland, & Howard, 2014). In another study, a significant correlation has been found between the Internet addiction and mother-child, father-child and peer bonds (Yang, Zhu, Chen, Song, & Wang, 2016).

Studies have shown that adolescents whose school life is satisfactory are less likely to develop Internet addiction (Y.-R. Kweon & Kim, 2014; Rehbein & Baier, 2013). Kweon and Park (2012) have reported that adoption of school rules and having good relations with peers and teachers are an important protective factor against Internet addiction in children (Kweon & Park, 2012). In our study, children who don't go to school, despite being at the school age, had higher Internet addiction scores in line with the literature.

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In our study, in which children's use of smartphones and the Internet were investigated, it was found that the mean smartphone and Internet addiction scores were higher in children who use them for entertainment, chatting and site navigation purposes. Current research has shown that adolescents who are inclined to online gaming are more likely to be Internet addicts (Wu et al., 2016). Canbaz et al. (2009) found that the mostly performed activity on a computer was Internet use and that most of the online behavior was about information and conversation (Canbaz, Sunter, Peksen, & Canbaz, 2009). The reasons why children use the Internet for entertainment, chatting, and site navigation may be that the adolescents do not have adequate communication in the working environment, and that they satisfy this deficiency on the Internet environment (Byun et al., 2009; Huan, Ang, & Chye, 2014).

When we examined addiction scores according to whether children were exposed to violence in workplaces, we found that children who experienced violence had significantly higher scores in all areas of the scales. In his study, Aksakal (2016) has found that a significant number of children who work as apprentices at workplaces have experienced violence many times (Aksakal, 2016). In the same way, Bilgin (2009) found that children working in streets are exposed to sexual, physical and emotional violence and that children became increasingly prone to crime (Bilgin, 2009). There are no studies investigating the violence experienced by working children and their Internet and mobile phone addiction. However, some studies show that children experiencing social phobia, loneliness and depression are more dependent on virtual environment. This is because the children feel happier and free in the virtual environment (Yayan, Arikan, Saban, Gürarslan Baş, & Özel Özcan, 2017). For this reason, the children who exposed the violence may spend more time on the Internet and on the smartphone and exhibit addictive behavior for similar reasons such as being happy, feeling free, expressing themselves, receiving social-emotional support. The most important contribution of this study to the literature is the reporting of Internet and phone addiction behaviors of children who are exposed to violence.

In his study that investigates the year-by-year relationship between Internet addiction and smartphone addiction in adolescents between 2011 and 2014, Jun found that Internet and smartphone addiction has increased steadily mutually between 2011 and 2014 (Jun, 2015). Similarly, in our research that investigates the relationship between smartphone addiction and Internet addiction, a correlation was found between Internet addiction and smartphone addiction. In this case, it can be said that both the Internet and telephone addiction rates may have increased year by year due to the presence of Internet connections on their smartphones in recent years.

Conclusions and Recommendations

In this study, the addiction scores of children whose mothers or fathers are not alive and whose Internet use is not supervised were found to be higher. At the same time, it was also concluded that children are exposed to violence in their working environment, the number of children with good relations with their masters was low, and they use Internet and smartphones for entertainment, chatting and site navigation purposes, which in turn increases addictive behavior.

Working children in industry should be supported by their parents, families and social circles, and addictive behaviors of children should be investigated by carrying out further studies on their working environments and addiction behaviors. At the same time, it is recommended to conduct projects that support working children in psycho-social aspects.

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