

The Analysis of Risk Behaviour Tendencies of Teenagers According to the Use of Wattpad and Some Socio-Demographic Variables*

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Abstract

This research aims to explore the risk behaviour tendencies of teenagers in relation to the use of Wattpad and some socio-demographic variables. The research employs correlational research model and was conducted with 572 students (237 female students and 335 male students) studying at science, Anatolia and vocational high school. Risk Behaviours Scale and Demographic form were used to collect data. Descriptive statistics (arithmetic mean, standard deviation), t test for independent samples, one-way variance analysis (ANOVA) and Pearson correlation were used in the analyzes. Findings show that teenagers have the highest mean scores of nutrition habits and suicide tendency. It has been found that males generally have higher risk behaviors and the rate of risk behaviors increases as age progresses. Lastly, risk behaviors showed a significant difference according to the use of Wattpad application and psychological problems. Therefore, preventive measures and studies should be taken to create awareness about the conscious use technology.

Keywords: Wattpad, Risk Behaviours, Social Media, Teenager, Technological Addiction

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INTRODUCTION

Addiction, which is considered as an important public health problem, has been mostly studied in relation chemical dependencies. Today, it is seen as a behavioural addiction that is common among teenagers, due to the multi-faceted changes and new inventions brought by technology. The low level of awareness of the conscious use of technological and communication tools confronts young people with individual and environmental risks. In addition, increasing accessibility with the widespread use of smart phones is a facilitator of everyday life, but its impact on social relations is an important issue. Many disciplines work on the impact of communication technologies on individuals' self and identity processes, daily life and social relations (Binark, 2016). Wattpad, a social networking platform is one of the applications that influence our daily life.

Each new technology brings a problem with it. According to Marshall McLuhan who claims that every new means of communication functions as an organ of the body and replaces a sense organ. The tools that become part of any sense organ naturally affect the individual's patterns of thinking, and changes interpersonal communication and thus social organization (Binark, 2016). However, each new mass media did not try to eradicate one another, but also supported each other, and changed their form. The emergence of many new industries has caused the culture to become a determinant factor of economy and led to popular culture and its uncontrolled progress (Doğan, 2016). Today, the individual and environmental impacts of new communication technologies are discussed within the context of new media concept, internet, social media environment and applications and digital games (Binark, 2016).

Allen Lau, one of Wattpad's earliest founders, has developed the application to meet his reading needs. He then produced the Wattpad in 2006 by combining his works with Ivan Yuen, who developed a book-reading project via technology (Öktem, 2015). Lau states that there are over 40 million users and that he wants to bring the number of users to 1 billion with the expansion of internet and smart phones. His future plan is to create a method that can allow stories to be connected with one another (Öktem, 2015). In particular, allowing smartphones to integrate social media accounts and profiles and enabling various applications to be downloaded from the store can meet users' desire to be in a permanent network and invite them to produce their own content. The Wattpad application, one of the applications that provide this content production, allows you to create a story or to interpret the story of someone else. Mobile technology provides permanent connection to the users and users generate voluntary data as a free labour force for the new media industry. This means that smartphones become increasingly indispensable tools for people. According to McLuhan, it becomes a tactile-audio-visual new body extension for individuals (Binark, 2016).

The literature shows that Wattpad has been considered as technological addiction (Ağır, 2016) and it has been defined as transmedia storytelling and presented in multiple platforms in literary terms (Güran Yiğitbaşı, 2018; Sarı, 2017). On the other hand, young Wattpad writers and readers in Turkey show an immense interest in Wattpad. This has been instrumental in the emergence of a new wave among the youth literature in Turkey (İskender, 2017). This application allows users to read and write new stories wherever they have internet access. The application can be used by anyone and anyone can produce stories using this application. Although it has no literary content, it meets the pleasures and desires of the individuals as an online platform. This unrestricted, non-editorial posture of social media is used by many people who want to be writers and want to reveal their self in a virtual sense rather than in a real sense (Doğan, 2016).

The use of social media and the means of technological communication facilitates the communication of individuals. It is emphasized that the fact that timid individuals who feel alone and who cannot communicate using face-to-face communication prefer such networks and this increases their psychological well-being (Magsamen-Conrad and Greene, 2014). However, the internet and mobile phones have become widespread even among very young people, which will lead to some problems such as technology addiction (Çelik and Şahin, 2013). Although individuals tend to use social media to escape from the stress and problems they face in everyday life, it is known that the

time spent in virtual environment is not a healthy coping strategy and creates other risks (Tekinarslan and Güner, 2010). This is because the individual adapts a procrastination behaviour by escaping from real problems. In a sense, it is seen that new media environments, which have become a part of young people's eco system, deeply affect our daily lives and eliminates online-offline world distinction. Especially younger generations use smartphones, digital games and social media applications as a normal part of their daily life routines (Binark, 2016).

With the increasing use of technology, excessive use of social media applications has caused significant changes in the behaviour of individuals. Although the use of the Internet has made it possible to exchange information globally, it has brought uncontrolled use and excessive use (Eryaman, 2010). The fact that people spend most of their free time on virtual world has an important role in the emergence of physical, psychological and social problems (Ilgaz, 2015). The Wattpad application is mostly used among the age range of 11 and 18 (Kuşcu Kıyak, 2015), and it directs individuals towards risk behaviours as a way of solving the problems they face (Alikasıfoğlu and Ercan, 2009). These risk factors cause teenagers to display violent and aggressive behaviours (Özcebe et al., 2005). The fact that fiction characters in Wattpad books display risk behaviours mean that there is a possible risk (Ağır, 2016) and highlights the importance of identifying risk behaviours among teenagers. It is important to investigate the risk behaviours Wattpad could promote and identify preventive measures.

Allen Lau's 2015 statistics with regard to use of Wattpad in Turkey reports that around two million people logged in this application in a month's time. These people spent around fourteen million minutes on the application and uploaded around seven million stories in Turkish. Other developing countries also showed similar interest in the application (Öktem, 2015). Turkey is the third country that most uses Wattpad after the US and Philippines (Kuşcu Kıyak, 2015; Öktem, 2015). However, there are so few studies conducted in Turkey on the use of Wattpad and majority of these limited research focus on content analysis. There is no research that investigates the relationship between Wattpad and risk behaviours of teenagers. Therefore, this research aims to explore the use of Wattpad in relation to risk behaviours, risk behaviour tendencies and socio-demographic variables.

METHOD

Research Design

This study aims to identify teenagers' risk behaviours and to explore whether these risk behaviours tend to differ according to socio-demographic variables such as gender, age, type of school, class level, and psychological problems. Therefore, it is a correlational research that aims to examine the existence and degree of interchange between two or more variables (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz and Demirel, 2017).

Participants

The participants of the study consisted of 572 students who were enrolled in a science, two Anatolian and two vocational high schools in the centre of Van during 2018-2019 academic year. 58.6% (n:335) of the participants were male whereas 41.4 % (n:237) of the participants were female. The required permissions were taken from Van Provincial Directorate of National Education. Table 1 shows the distribution of participants according to socio-demographic characteristics whereas Table 2 shows the use of Wattpad application.

Table 1. Distribution of participants according to socio-demographic characteristics

Demographic characteristics	Groups	n	%
Gender	Woman	237	41.4
	Man	335	58.6
Age	14	77	13.5
	15	159	27.8
	16	214	37.4
	17	122	21.3
School Type	Science School	168	29.4
	Anatolian High School	218	38.1
	Vocational School	186	32.5
Grade	9	170	29.7
	10	219	38.3
	11	183	32.0
Psychological problems in the past	Yes	222	38.8
	No	350	61.2
Psychological Help	Yes	68	11.9
	No	504	88.1

13.5% of the participants were 14 years old; 27.8% were 15; 37.4% were 16; and 21.3% were 17 years old. 29.4% were science high school; 38.1% were Anatolian high school; 32.5% were vocational high school students. 29.7% were 9th grade, 38.3% were 10th grade and 32% were 11th grade students. 38.8% of the participants stated that they experienced psychological problems in the past and 11.9% of them received psychological help (Table 1).

Table 2. Distribution of participants according to the use of Wattpad application

Use of Wattpad Application	Groups	n	%
Do you know what Wattpad application is?	Yes	223	39.0
	No	265	46.3
	Partially	84	14.7
Have you ever used it?	Yes	171	29.9
	No	401	70.1
How often do you use it? (N=171)	Sometimes	125	73.1
	Often	46	26.9
Would you recommend it to another person?	Yes	155	27.1
	No	417	72.9
Do you think it is a technological addiction?	Yes	75	13.1
	No	159	27.8
	Partially	338	59.1

As seen in Table 2, 39% of the participants know what Wattpad is, 14.7% partially know, 46.3% do not have an idea about Wattpad. 29.9% of the participants stated that they used Wattpad application, and 26.9% of students out of 73.1% of the students who used the Wattpad application (n = 171) stated that they frequently used it. 27.1% of the participants would recommend Wattpad application. 13.1% of respondents consider Wattpad application as a technological addiction, 59.1% think it is partly addictive and 27.8% do not see it as a technological addiction.

Data Collection Tools

Demographic Information Form. This form has two sections. The first section includes questions about socio-demographic data such as gender, age, type of school, class, psychological problems and psychological support. The second part asks questions about Wattpad such as the use of Wattpad social media application, the frequency of use, technological addiction, etc.

Risk Behaviours Scale (RBS). This scale was developed by Gençtanırım and Ergene (2014) to evaluate the risk behaviours of teenagers using five-point Likert Scale. The scale has 36 items and 6 subscales. The subscales are antisocial behaviours, use of alcohol, use of tobacco, suicide tendency, nutrition habits, school dropout. There is only one item which is reverse coded (item 21). The higher

scores indicate risk behaviours. Cronbach alpha co-efficient score calculated for this research is .91. As for the subscales, scores are .80 (antisocial behaviours), .95 (use of alcohol), .90 (use of tobacco), .60 (suicide tendency), .72 (nutrition habits) and .80 (school dropout).

Data Analysis

SPSS 15.0 package program was used for statistical analysis. The socio-demographic data of the students are presented with frequency and percentage table whereas descriptive statistics was used to show the mean, standard deviation and skewness scores of the scale and its sub-scales. Skewness coefficient was used for the normality test. The skewness coefficient (\pm Skewness) within ± 1 limits shows that there is no significant deviation from the normal distribution. The points that do not show normal distribution are firstly tried to be adapted to normal distribution by inverse methods such as square root and logarithmic transformation. Non-parametric tests can be used for points that cannot be adapted to normal distribution (Büyüköztürk, 2011, p. 40). Since the total score of the scale and alcohol use, tobacco use, and school dropout subscale scores did not show a normal distribution, conversion methods were used. The normal distribution of alcohol use scores could not be obtained; therefore Mann Whitney U, Kruskal Wallis H and Spearman Brown correlation tests were used to compare the scores according to demographic variables.

Two independent t test was used whereas one-way analysis of variance (ANOVA) test was utilised to compare school type, age, class, and Wattpad application according to variables. In the ANOVA test, LSD post hoc test was used to determine the difference between the groups. Pearson correlation analysis was used to analyse the relationship between the subscales. The level of significance was expressed as $p < .05$.

FINDINGS

Descriptive Statistics of Risk Behaviours Scale Scores

Table 3. Descriptive statistics of risk behaviours scale

Scale and Subscales	Min.	Max.	\bar{X}	SS	Skewness
Antisocial Behaviours	1.00	5.00	2.11	.82	.95
Alcohol Use	1.00	5.00	1.22	64	3,75 ¹
Tobacco Use	1.00	5.00	1.66	1.01	.60
Suicide Tendency	1.00	5.00	2.64	.92	.22
Nutrition Habits	1.00	5.00	2.91	.94	.03
School Dropout	1.00	5.00	1.58	.76	.98 ¹
Total Score	36.00	170.00	69.48	20.57	.62 ¹

1: After logarithmic transformation

Table 3 shows that the mean total scale score of the teenagers participating in the research is 69.48 ± 20.57 . Considering the lowest (36) and highest (180) scores that can be taken from the scale, students' risk behaviours are low. When the risk behaviours of the students were examined in terms of sub-scales, the highest mean scores were taken from nutrition habits (2.91 ± 0.94) and suicidal tendency (2.64 ± 0.92) sub-scales. It was determined that these risk behaviours were moderate and other risk behaviours were low.

Comparing The Risk Behaviour Trends of Teenagers According to the Use of Wattpad

Table 4. Risky behaviour trends of teenagers according to the use of Wattpad application

Subscales	Do you know what Wattpad application is?	n	\bar{X}	SS	F	p	Significant Difference
Antisocial Behaviours	1-Yes	223	2.18	.89	1.12	.326	
	2-No	265	2.07	.78			
	3-Partially	84	2.07	.76			
Use of Alcohol	1-Yes	223	1.29	.77	1.83 ¹	.400	
	2-No	265	1.19	.56			
	3-Partially	84	1.14	.45			
Use of Tobacco	1-Yes	223	1.72	1.12	1.81	.164	
	2-No	265	1.67	.95			
	3-Partially	84	1.49	.84			
Suicide tendency	1-Yes	223	2.70	.95	3.96	.020	A,C>B
	2-No	265	2.53	.92			
	3-Partially	84	2.81	.82			
Nutrition Habits	1-Yes	223	3.10	.94	9.56	.000	A,C>B
	2-No	265	2.73	.93			
	3-Partially	84	2.99	.89			
School Dropout	1-Yes	223	1.55	.77	1.65	.193	
	2-No	265	1.64	.80			
	3-Partially	84	1.48	.59			
Total Score of the Scale	1-Yes	223	71.70	22.66	1.93	.146	
	2-No	265	68.09	20.08			
	3-Partially	84	67.95	15.30			

1: Kruskal Wallis H test X2 score

Table 4 shows that there is a significant difference in suicide tendency ($F = 4.20$; $p < .05$) and nutritional habits ($F = 6.49$; $p < .05$) sub-scales. According to the results of LSD post hoc test conducted to determine the difference between the groups, suicide tendencies and nutrition habits scores of the students who know Wattpad application are significantly higher than the students who do not know Wattpad application. Antisocial behaviours, alcohol use, tobacco use, school drop and risk behaviours are not found to be significantly different ($p > .05$).

Table 5. Risk behaviour tendencies according to the use of Wattpad application

Subscales	Have you ever used it?	n	\bar{X}	SS	t	p
Antisocial behaviours	Yes	171	2.21	.86	1.94	.052
	No	401	2.07	.80		
Use of Alcohol	Yes	171	1.31	.79	-0.94 ¹	.347
	No	401	1.19	.56		
Use of tobacco	Yes	171	1.78	1.12	1.29	.197
	No	401	1.62	.95		
Suicide tendency	Yes	171	2.80	.90	2.88	.004
	No	401	2.56	.92		
Nutrition Habits	Yes	171	3.04	.97	2.16	.031
	No	401	2.86	.93		
School Drop out	Yes	171	1.53	.73	-1.18	.237
	No	401	1.60	.77		
Total Scores	yes	171	72.42	22.09	2.33	.020
	no	401	68.22	19.79		

1: Mann Whitney U test Z score

Table 5 shows that the suicide tendency ($t = 2.88$; $p < .05$) and dietary habits ($t = 2.16$; $p < .05$) subscale scores and risk behaviours scale total score ($t = 2.33$; $p < .05$) of students who use Wattpad are significantly higher than those who do not use. Antisocial behaviours, use of alcohol, use of tobacco and school dropout scores did not differ significantly according to the use of Wattpad application ($p > .05$).

Comparison of Scores of Risk Behaviours by Demographic Variables

Table 6. Risk behaviours tendency according to gender

Subscales	Gender	n	\bar{X}	SS	t	p
Anti-Social Behaviours	Female	237	1.90	.71	-5.43	.000
	Male	335	2.26	.86		
Use of Alcohol	Female	237	1.11	.38	-3.95 ¹	.000
	Male	335	1.30	.76		
Use of Tobacco	Female	237	1.40	.76	-6.14	.000
	Male	335	1.86	1.11		
Suicide Tendency	Female	237	2.73	.90	2.15	.032
	Male	335	2.57	.93		
Nutrition Habits	Female	237	3.05	.93	2.84	.005
	Male	335	2.82	.95		
School Dropout	Female	237	1.32	.50	-7.09	.000
	Male	335	1.76	.85		
Score	Female	237	64.80	15.37	4.47	.000
	Male	335	72.79	23.02		

¹: Mann Whitney U test Z score

Table shows that there is significant difference between gender and anti-social behaviours ($t=-5.43$; $p<.05$), use of alcohol ($Z=-3.95$; $p<.05$), use of tobacco ($t=-6.14$; $p<.05$), suicide tendency ($t=2.15$; $p<.05$), nutrition habits ($t=2.84$; $p<.05$) and school dropout ($t=-7.09$; $p<.05$) and total score of risk behaviour scale ($t=-4.47$; $p<.05$). Male students' antisocial behaviours, use of alcohol, use of tobacco, school dropout and general risk behaviour scores are significantly higher than the scores of female students. Female students' suicide tendency and nutrition habit scores are significantly higher than male students' scores.

Table 7 presents the ANOVA results to explore whether risk behaviour tendencies differed significantly according to the age.

Table 7. Risk behaviour tendencies according to the age

Scale and Subscales	Age	n	\bar{X}	SS	F	p	Significant Difference
Antisocial Behaviours	A-14	77	2.05	.74	2.29	.078	
	B-15	159	1.99	.72			
	C-16	214	2.19	.91			
	D-17	122	2.18	.82			
Use of Alcohol	A-14	77	1.10	.53	24.91 ¹	.000	C,D>A,B
	B-15	159	1.10	.32			
	C-16	214	1.30	.73			
	D-17	122	1.33	.79			
Use of Tobacco	A-14	77	1.28	.66	22.91	.000	C,D>A,B
	B-15	159	1.36	.67			
	C-16	214	1.83	1.11			
	D-17	122	2.02	1.18			
Suicide Tendency	A-14	77	2.52	.91	1.03	.377	
	B-15	159	2.61	.85			
	C-16	214	2.71	.94			
	D-17	122	2.60	.98			
Nutrition Habits	A-14	77	3.09	.91	1.86	.135	
	B-15	159	2.82	.85			
	C-16	214	2.87	.98			
	D-17	122	2.99	1.01			

School Dropout	A-14	77	1.40	.71	8.23	.000	C,D>A,B
	B-15	159	1.45	.67			
	C-16	214	1.62	.74			
	D-17	122	1.78	.88			
Risk Behaviours Total Score	A-14	77	65.09	18.58	7.61	.000	C,D>A,B
	B-15	159	64.40	14.55			
	C-16	214	71.97	22.00			
	D-17	122	74.48	23.87			

¹: Kruskal Wallis H test X^2 score

Table 7 indicates that use of alcohol ($X^2=24.91$; $p<.05$), tobacco use ($F=22.91$; $p<.05$), school dropout ($F=8.23$; $p<.05$) and the total score of the scale ($F=7.61$; $p<.05$) shows significant difference according to the age. LSD post hoc results show that alcohol and tobacco use, drop out and risk behaviour scores of 16 and 17 year old teenagers are significantly higher than those of 14 and 15 year old students. Antisocial behaviors, suicide tendency and nutrition habits were not significantly different in terms of age ($p>.05$).

The results of one-way analysis of variance (ANOVA) on whether teenagers exhibited a significant difference according to school type are presented in Table 8.

Table 8. Risk behaviour tendencies according to the type of school

Scale and Subscale	School Type	n	\bar{X}	SS	F	p	Significant difference
Antisocial behaviours	A-Science high School	168	2.29	.83	5.87	.003	A>B,C
	B-Anatolian high school	218	2.04	.83			
	C-Vocational High school	186	2.03	.77			
Use of Alcohol	A-Science high School	168	1.16	.59	26.47 ¹	.000	C>A
	B-Anatolian high school	218	1.20	.62			
	C-Vocational High school	186	1.31	.70			
Use of tobacco	A-Science high School	168	1.53	.89	10.78	.000	C>A,B
	B-Anatolian high school	218	1.60	1.02			
	C-Vocational High school	186	1.86	1.07			
Suicide tendency	A-Science high School	168	2.75	.94	4.69	.010	A,B>C
	B-Anatolian high school	218	2.69	.94			
	C-Vocational High school	186	2.47	.87			
Nutrition Habits	A-Science high School	168	3.03	.83	10.94	.000	A,B>C
	B-Anatolian high school	218	3.04	.94			
	C-Vocational High school	186	2.65	.99			
School Dropout	A-Science high School	168	1.60	.76	2.70	.068	
	B-Anatolian high school	218	1.49	.75			
	C-Vocational High school	186	1.66	.76			
Risk Behaviour Total Scores	A-Science high School	168	70.67	18.78	.95	.385	
	B-Anatolian high school	218	68.67	20.77			
	C-Vocational High school	186	69.34	21.91			

¹: Kruskal Wallis H test X^2 score

When the risk behaviors were examined according to the type of school, antisocial behaviors ($F = 5.87$; $p<.05$), alcohol use ($X^2 = 26.47$; $p<.05$), tobacco use ($F = 10.78$; $p<.05$), suicide tendency ($F = 4.69$; $p<.05$) and nutritional habits ($F = 10.94$; $p<.05$) were found to be significantly different. LSD post hoc test results showed that antisocial scores of science high schools were significantly higher than Anatolian and Vocational high school students. The alcohol use scores of vocational high school students are significantly higher than those of science high schools. The tobacco use of vocational high school students are significantly higher than Anatolian high school students. Another significant difference was obtained from suicide tendencies and nutrition habits sub-scales. According to this, the mean scores of science and Anatolian high school students are significantly higher than those of vocational high school students. There was no significant difference in the risk behaviors scale score and school dropout scores according to the school type ($p>.05$).

ANOVA test was used to determine whether the risk behaviors of adolescents show a difference according to grade variable. The results of this analysis are shown in Table 9.

Table 9. Risk behaviour tendencies according to the grade

Scale and Subscales	Grade	n	\bar{X}	SS	F	p	Significant Difference
Antisocial behaviours	A-9 th grade	170	2.01	.73	4.20	.015	C>A,B
	B-10 th grade	219	2.07	.83			
	C-11 th grade	183	2.25	.86			
Alcohol Use	A-9 th grade	170	1.17	.54	.73 ¹	.697	
	B-10 th grade	219	1.21	.60			
	C-11 th grade	183	1.29	.76			
Tobacco use	A-9 th grade	170	1.37	.74	15.53	.000	B,C>A
	B-10 th grade	219	1.73	1.04			
	C-11 th grade	183	1.86	1.13			
Suicide Tendency	A-9 th grade	170	2.44	.88	5.84	.003	B,C>A
	B-10 th grade	219	2.70	.87			
	C-11 th grade	183	2.74	1.00			
Nutrition Habits	A-9 th grade	170	2.86	.95	1.22	.295	
	B-10 th grade	219	2.88	.92			
	C-11 th grade	183	3.00	.97			
School Dropout	A-9 th grade	170	1.48	.77	6.49	.002	B,C>A
	B-10 th grade	219	1.55	.72			
	C-11 th grade	183	1.71	.79			
Risk Behaviour Total Score	A-9 th grade	170	64.89	18.67	9.68	.000	B,C>A
	B-10 th grade	219	69.40	19.95			
	C-11 th grade	183	73.83	22.11			

¹: Kruskal Wallis H test X^2 score

The antisocial behaviours ($F=4.20$; $p<.05$), tobacco use ($F=15.53$; $p<.05$), suicide tendency ($F=5.84$; $p<.05$) and school dropout ($F=6.49$; $p<.05$) and total score of risk behaviours scale ($F=9.68$; $p<.05$) show significant difference according to the grade of students. LSD post hoc results display that antisocial scores of 11th grade students are significantly higher than 9th and 10th grade students. The tobacco use, suicide tendency and risk behaviour scores of 10th and 11th grade students are significantly higher than 9th grade students. There was no significant difference in alcohol use and nutritional habits subscales ($p>.05$).

Table 10. Risk behaviour tendencies according to the experience of psychological problem

Scale and Subscale	Psychological Problem in the Past	N	\bar{X}	SS	t	p
Antisocial behaviours	Yes	222	2.25	.89	3.29	.001
	No	350	2.02	.76		
Alcohol use	Yes	222	1.33	.84	-1.43 ¹	.152
	No	350	1.16	.46		
Tobacco use	Yes	222	1.95	1.23	4.77	.000
	No	350	1.49	.79		
Suicide Tendency	Yes	222	2.92	.93	6.17	.000
	No	350	2.45	.87		
Nutrition Habits	Yes	222	3.10	.96	3.74	.000
	No	350	2.80	.92		
School Dropout	Yes	222	1.76	.88	4.80	.000
	No	350	1.46	.65		
Risk Behaviours Total Score	Yes	222	76.26	24.04	6.47	.000
	No	350	65.18	16.70		

¹: Mann Whitney U test Z score

The antisocial behaviours ($t=3.29$; $p<.05$), tobacco use ($t=4.77$; $p<.05$), suicide tendency ($t=6.17$; $p<.05$), nutrition habits ($t=3.74$; $p<.05$), school dropout scores ($t=4.80$; $p<.05$) and risk behaviours scores ($t=6.47$; $p<.05$) do not show significant difference according to the prior experience of psychological problem (Table 10). Thus, the antisocial behaviours, tobacco use, suicide tendencies,

nutrition habits, school dropout and risk behaviours scores of students who have experienced psychological problem in the past are significantly higher than those who have not experienced. No significant difference was found between the use of alcohol and experience of psychological problem ($p > .05$).

Results with regard to the relationship between the variables

The results of the correlation analysis revealing the relationships between the Risk Behaviors Scale sub-scales are presented in Table 11.

Table 11. The relationship between the risk behaviour tendencies

Subscales	2 ¹	3	4	5	6
1-Anti-social behaviours	.26**	.45**	.28**	.37**	.45**
2-Alcohol use ¹	1	.51**	.04	.15**	.36**
3-Tobacco Use		1	.18**	.22**	.53**
4-Suicide Tendency			1	.30***	.28**
5-Nutrition Habits				1	.21**
6-School Drop out					1

*: $p < .05$ **: $p < .01$ ¹: Spearman Correlation

As seen in Table 11, the correlation analysis conducted to determine the relationship between risk behaviors of teenagers showed that there were statistically significant relationships between the sub-scales of the scale. There is a positive and significant relationship between antisocial behaviours and alcohol use ($r = .26$; $p < .05$), tobacco use ($r = .45$; $p < .05$), suicide tendency ($r = .28$; $p < .05$), nutrition habits ($r = .37$; $p < .05$) and school dropout ($r = .45$; $p < .05$). There is also a positive relationship between alcohol use and tobacco use ($r = .51$; $p < .05$), nutrition habits ($r = .15$; $p < .05$) and school dropout ($r = .36$; $p < .05$). A positive relationship between tobacco use and suicide tendency ($r = .18$; $p < .05$), nutrition habits ($r = .22$; $p < .05$) and school dropout ($r = .53$; $p < .05$) was found. Lastly, there was a problem positive and significant relationship between suicide tendency and nutrition habits ($r = .30$; $p < .05$) and school dropout ($r = .28$; $p < .05$); and nutrition habit and school dropout ($r = .21$; $p < .05$).

DISCUSSION AND CONCLUSION

The informatics tools facilitate our lives, and especially the unconscious use of the internet threatens many aspects of social life, including leading to several problems for teenagers (Kaya, İkiz and Asıcı, 2016). The use of new media tools has brought about changes in our consumption practices, education, friendship and social relations and started to transform the reading and writing habits of the young people. Wattpad application is one of the media tools playing a role in our changing daily habits (Güran-Yiğitbaşı, 2018).

This research aims to identify risk behaviours of teenagers based on Wattpad usage status and argues that such behaviour can be mediated through appropriate and effective intervention studies. Findings revealed that 38.8% of teenagers had a psychological problem in the past, but only 11.9% received psychological support. Despite the high rate of experiencing psychological problems, the low incidence of getting help shows that teenagers can overcome their problems. However, it is concluded that teenagers should be supported in terms of psychological resilience and strengthening.

Teenagers face multi-faceted changes throughout their transition to adulthood such as finding their identities. Therefore, teenager years is a period in which an individual is exposed to risk behaviours and these behaviours may lead to negative consequences (Kaya, 2016). It is mostly the teenagers and youth whose use the social media (Ayaz and Kayhan, 2016). The problems related to risk behaviours and technology addiction necessitate to examine the specific problems teenagers encounter to take preventive measures.

The study showed that 53.7% of the teenagers know Wattpad and 29.9% of the students stated that they use the application and 26.9% of the students use it quite frequently. Wattpad has millions of users in Turkey; however, the percentage of the users of the application is quite low in this research. This may be because this study was conducted in an eastern province. According to statistics, most users are based in Istanbul, Turkey, Ankara, Izmir, Adana, Bursa, Antalya, Konya, Kayseri, Samsun (Kuşçu Kıyak, 2015; Öktem, 2015). Again, the majority of students do not recommend Wattpad, which suggests that they are aware of the risks of the application. The research of Güran Yiğitbaşı (2013) found that there was a positive correlation between the time they allocate for reading and recommending books to their friends. Students who use Wattpad for 5 hours or more per week recommends Wattpad more than other students. According to the study of Güran Yiğitbaşı (2018), a significant number of university students (75%), high school (57%) and secondary school students (41%) think that Wattpad books include violent elements. The reason why majority of students do not recommend Wattpad to other students may be explained with an awareness of the violence. Most students (72.2 %) regard Wattpad as a technology addiction, which means students are aware of the negative effects of the application.

When risk behaviours of teenagers are examined, one can see that the risk behaviours are low in general and only nutrition habits and suicide tendencies are moderate. Considering that the majority of the participants are students of Science and Anatolian high schools (67.5%), academic success is an important preventive factor. The school type has both protective and risk factors and may have an impact on mental health and problem behaviours; therefore, academic achievement, positive attitude towards school and high self-esteem can play a positive role for science high school students' mental well-being (Karaduman, 1997).

When the risk behaviours of teenagers are compared with the use of Wattpad, the suicide tendencies and nutrition habits of the students who know Wattpad application are significantly higher than the students who do not know the application. The total scores of suicide tendency, nutrition habits subscale scores and risk behaviours scores of the students using Wattpad application were significantly higher than the scores of the students who did not use Wattpad application. The use of Wattpad was associated with suicidal tendencies and nutrition habits, and overall risk behaviours. This result may be related to the fact that teenagers have long-term nutritional problems and the depressive effects of the contents encountered on the Internet make them vulnerable to risky situations. Within the context of technology addiction, the results of the research (Berber, Karadibak ve Günay Uçurum, 2014) revealed that the risk of obesity is very high among young people who play online games more than five hours a day. In general, it is emphasized that the time spent with technological tools is a significant threat against the health among young people. A research (Ayaz and Kayhan, 2016) that investigated the relationship between individuals' social media preferences and basic needs found a negative significant relationship between social media use and survival need. It has been observed that the level of meeting the survival needs decreased as individuals' social media usage rates increased. The research of Ağır (2016) on the effect Wattpad novels on identity development of teenagers between 11 and 18 years found out that the protagonist characters of the books exhibited risky behaviours. It was found that there was not much of the risky behaviours at the beginning of the relationship but being in risky environments increased such behaviours. Considering that Wattpad users are predominantly women (Güran Yiğitbaşı, 2018; Kuşçu Kıyak, 2015), the findings of female characters in the analysis of Wattpad books show that the negative self-perception in women leads to the tendency to behave in accordance with the demands and expectations of the male character to be able to be valued and loved. In male characters, the feeling of anger towards both family and environment is higher whereas depressive feelings are more intensely seen among female characters (Ağır, 2016). It can be said that teenagers' identification with these characters can negatively affect them.

When teenagers' risk behaviours were examined in terms of gender variable, males had higher scores on antisocial behaviours, alcohol and tobacco use, school drop-out and overall risk behaviours while females had higher scores in the subscales of suicide tendency and nutrition habits. In general, risky behaviours are higher in males. For instance, the research of Üner et al. (2007) found that male

students are more likely to use alcohol and other substances. In another study conducted with high school students (Körük and Aypay, 2017), use of alcohol and Tabaco scores were higher among males and suicide tendency was higher among females, which echoes the results of this research. In the study conducted by Arıkan, Yavuz, Yiğit and Ece (2017), it was found that men's scores were significantly higher in the sub-scales of antisocial behaviour, alcohol and tobacco use, unhealthy eating habits and school drop-out, whereas women were likely to show suicidal tendency. The reason why alcohol and cigarette use rate are higher in male adolescents is that such behaviours are often supported by male peer groups, or can be a norm to be accepted to a male-dominated gang, and gender roles and supporting social structure may also reinforce such behaviours (Körük and Aypay, 2017). Girls are restricted socially whereas men are allowed to be free. These different patterns of socialisation can make men more susceptible to substance abuse (Brook et al., 2003). Likewise, the social structure in Turkey approves men's the use of alcohol and smoking, and women's use of alcohol and smoking behaviours are not so much tolerated (Altındağ, Yanık, Yengil and Karazeybek, 2005). Numerous studies (Chen, Yeh, Huang and Lin, 2014; Springer, Selwyn and Kelder, 2006; Telef, 2014) found that suicide tendency was higher in women than men. Research (Körük and Aypay, 2017) have indicated that high suicidal tendencies in women may be explained by the fact that women are more affected by psychosocial factors, and that they face more hormonal and biological factors affecting their moods, and experience more with familial and social pressures. The research of Vançelik, Önal, Güraksın and Beyhun (2007) also supports the findings of this research and indicates that girls have higher scores of nutrition habits.

When the risk behaviours of teenagers were examined according to age variables, it was found that the alcohol and tobacco use of 16 and 17 year old students were significantly higher than those of 14 and 15 age group. Telef (2014) found that teenagers' antisocial behaviours, suicide tendency and nutrition habits did not show a significant difference according to the age variable, yet age shows a significant difference in tobacco and alcohol use and school drop scores. It can be said that tendency to smoke, drink, and drop out increases as the student gets older. In schools, age is considered to be an important factor related to consumption of substances such as cigarettes, alcohol and drugs (Farmer and Hanratty, 2012) and elder students tend to show more risky behaviours (Zimmermann, 2010). The research in the literature (Güler, Güler, Ulusoy and Bekar, 2009; Özyurt and Dinç, 2006; Sarı, 2006) also support these findings and argue that students in higher grades are more likely to show risky behaviours. Accordingly, 11th grade students' antisocial behaviour scores, 10th and 11th grade students' smoking behaviours, suicide tendency, school drop-out, and risky behaviour total scores are higher than the 9th grade students. The 9th grade students has the lowest mean. In the study conducted to investigate the tendency of drop out (Şimşek, 2011), it was found that drop out was higher in 11th grade.

When the risk behaviours of teenagers were examined in terms of school type, the antisocial behaviour tendencies of the students of science high schools were higher. As expected, students in science high schools can be explained in connection with the low rate of participation in social activities and activities because they work more in terms of lessons and projects. It was found that the averages of vocational high school students were higher in alcohol and tobacco use subscales. It can be said that science and Anatolian high school students are success-oriented, which protects them from risky situations. The fact that academic achievement is related to healthy behaviours (He, Kramer, Houser, Chomitz and Hacker, 2004) and positive attitudes towards school serve as a protective factor against psychological problems (Jessor et al., 2003; Siyez, 2007). The research of Siyez and Aysan (2007) also found similar results. Accordingly, the problem behaviours decrease as the academic achievement level increases. The suicide tendency and nutrition habits of the students of Science and Anatolian high schools were higher than the average of students studying at vocational high schools. Although the students in vocational schools have less academic success rate and less problematic behaviours, science high schools students can also experience and display problematic behaviours. Considering that science high schools are boarding schools, students are most likely to show psychological symptoms as well as developmental difficulties because of being away from their families (Kaya, İkiz and Asıcı, 2016) and their eating habits may also be affected by these factors.

When the risk behaviours of teenagers are examined according to their psychological problems, teenagers who have experienced psychological problems in the past have significantly higher total score of antisocial behaviour, tobacco use, suicide tendency, nutrition habits, school dropout and risk behaviours than those who have not had psychological problems in the past. Psychological problems indicate the presence of risk factors. Siyez and Aysan (2007) found that risk factors were positively related to problem behaviours and protective factors were negatively related to problematic behaviours. Similarly, Telef (2014) found negative correlation between positive experiences of risky behaviour, but indicated positive correlations with negative experiences and risky behaviours.

Many disciplines ask the question of “What are the factors that push people to use Wattpad?” Wattpad author Ashleigh Gardner responds to this question by comparing it with another social media application. According Gardner, people upload photos on Instagram to share their moments but not to be a professional photographer, and likewise, people use Wattpad to share their own stories and express themselves (International Publishers Association, 2015). The application serves well to the needs of teenagers who want to be recognised and develop belonging to a group (Pişkin and Eldelekoğlu, 2013). The antisocial behaviours, tobacco use, suicide tendency, nutrition habits and risk behaviours score of teenagers who received psychological help in the past are significantly higher than those who have not received psychological support and help. The teenagers with psychological problems are less likely to take healthy decision and therefore they are more lastly to display risk behaviours (Körük and Aypay, 2017). In a study by Arıkan et al. (2017), it was found that students with a history of depression had significantly higher scores in all subscales of the risk behaviour scale.

When the correlation results were examined, it was seen that there were positive relationships between risk behaviours. This means risk behaviours increase other risk behaviours and teenagers with a risk behaviour is also prone to other risk behaviours. (National Library of Medicine cited in. Aras, Günay, Özcan and Orçın, 2007).

The results of this research show that the risk behaviours were more intense among teenagers who stated that they had psychological problems and received psychological help. This result is supported by a large number of studies that argue psychological problems make individuals prone to risks. Another important finding is that risk behaviours are more common among teenagers who know and use Wattpad application. Considering both social media and technological addiction, it is possible that teenagers may be adversely affected by the contents of these practices due to the fact that they are at the stage where they are most vulnerable to environmental risks due to the characteristics of their developmental period. It is considered that it is important to conduct preventive studies on conscious use of technology systematically. There is also a need for further research to explore the effects of Wattpad. The participants of our research were 9th, 10th and 11th grade science, Anatolian and vocational high school students in Eastern Turkey. Therefore, the findings of the research cannot be generalised for different age groups and Turkey.

REFERENCES

- Ağır, M. (2016). Teknolojinin yeni bağımlılık uygulaması ve riskleri: Wattpad. Dinç, M. Olaş, A. Z. Oymacı, H., & Deniz, R. (Eds.), 3. Uluslararası Teknoloji Bağımlılığı Kongresi Tam Metin Kitabı (s. 313-333). İstanbul. http://technologyaddiction.org/wp-content/uploads/2017/05/teknoloji_sempozyum_bildiriler_kitabi_2016.pdf
- Alikaşifoğlu, M., & Ercan, O. (2009). Ergenlerde riskli davranışlar. *Turkish Pediatrics Archive/Türk Pediatri Arsivi*, 44(1).
- Altındağ, A., Yanık, M., Yengil, E., & Karazeybek, A. H. (2005). Şanlıurfa'da üniversite öğrencilerinde madde kullanımı. *Bağımlılık Dergisi*, 6(2), 60-64.
- Aras, S., Günay, T., Özcan, S., & Orçın, E. (2007). İzmir ilinde lise öğrencilerinin riskli davranışları/Risky behaviors among high school students in İzmir. *Anadolu Psikiyatri Dergisi*, 8(3), 186.
- Arikan, I., Yavuz, B., Yigit, D., & Ece, E. (2017). Investigation of risky behaviors and some socio-demographic factors in university students: Sample from a state university. *Çağdaş Tıp Dergisi*, 7(4), 348-354.
- Ayaz, A., & Kayhan, N. (2016). Üniversite öğrencilerinde sosyal medya kullanım tercihleri ve temel yaşam ihtiyaçları arasındaki ilişki. Dinç, M. Olaş, A. Z. Oymacı, H., & Deniz, R. (Eds.), 3. Uluslararası Teknoloji Bağımlılığı Kongresi Tam Metin Kitabı (s. 239). İstanbul. http://technologyaddiction.org/wpcontent/uploads/2017/05/teknoloji_sempozyum_bildiriler_kitabi_2016.pdf
- Berber, M., Karadibak, D., & Uçurum, S. G. (2014). Adolesan dönemde ekrana bağlı aktivitelerin hamstring kas uzunluğu, reaksiyon zamanı ve vücut kitle indeksi üzerine etkisi. *Dokuz Eylül Üniversitesi Tıp Fakültesi Dergisi*, 28(1), 1-6.
- Binark, M. (2016). "Akıllı telefonlarla bağlantılı olma hâli ve yeni kültür/lenme ve deney/im/lerimiz...", *Hece*, Sayı. 234-235-236, 131-137.
- Brook, D. W., Brook, J. S., Rosen, Z., De la Rosa, M., Montoya, I. D., & Whiteman, M. (2003). Early risk factors for violence in Colombian adolescents. *American Journal of Psychiatry*, 160(8), 1470-1478.
- Büyüköztürk, Ş. (2011). *Sosyal bilimler için veri analizi el kitabı*. Ankara: Pegem Akademi.
- Çelik, A., & Şahin, M. (2013). Spor ve çocuk gelişimi. *The Journal of Academic Social Science Studies JASSS-International Journal of Social Science*, 6(1), 467-478.
- Chen, C. Y., Yeh, H. H., Huang, N., & Lin, Y. C. (2014). Socioeconomic and clinical characteristics associated with repeat suicide attempts among young people. *Journal of Adolescent Health*, 54(5), 550-557.
- Doğan, R. S. (2016). *Edebiyat siteleri çerçevesinde sosyal medya edebiyatı*. Yüksek Lisans Tezi, Fatih Sultan Mehmet Vakıf Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul/Türkiye
- Eryaman, M. Y. (2010). Deconstructing the politics of identity and representation in cyberspace: Implications for online education. In G. Kurubacak & V. Yuzer (Eds.). *Handbook of research on transformative online education and liberation: Models for social equality*. Hershey, PA: ICI Global Publications.

- Farmer, S., & Hanratty, B. (2012). The relationship between subjective wellbeing, low income and substance use among schoolchildren in the north west of England: A cross-sectional study. *Journal of Public Health*, 34, 512-522.
- Gençtanırım, D., & Ergene, T. (2014). Riskli davranışlar ölçeğinin geliştirilmesi: Geçerlik ve güvenilirlik çalışmaları. *International Journal of Social Science*, 25(1), 125-138.
- Güler, N., Güler, G., Ulusoy, H., & Bekar, M. (2009). Lise öğrencileri arasında sigara, alkol kullanımı ve intihar düşüncesi sıklığı. *Cumhuriyet Tıp Dergisi*, 31, 340-345.
- Güran Yiğitbaşı, K. (2018). Transmedya hikayeciliği'nde wattpad örneği ve okur tercihlerine yönelik bir araştırma. *AJIT-E: Online Academic Journal of Information Technology*, 9(30), 21-42.
- He, K., Kramer, E., Houser, R. F., Chomitz, V. R., & Hacker, K. A. (2004). Defining and understanding healthy lifestyles choices for adolescents. *Journal of Adolescent Health*, 35(1), 26-33.
- İlgaz, H. (2015). Adaptation of game addiction scale for adolescents into Turkish. *Elementary Education Online*, 14(3), 874-884.
- International Publishers Association. (2015). Wattpad's 40 million readers create opportunities for publishers. 24. 12. 2018 tarihinde alındı. <https://www.internationalpublishers.org/market-insights/trends-and-innovation/286-wattpad-s-40-million-readers-creates-big-opportunities-for-publishers>
- İskender, H. (2017). Distopik romanların gençlik edebiyatındaki yeri üzerine bir değerlendirme. *Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*, 15(1), 431-448.
- Jessor, R., Turbin, M. S., Costa, F. M., Dong, Q., Zhang, H., & Wang, C. (2003). Adolescent problem behavior in China and the United States: A cross-national study of psychosocial protective factors. *Journal of Research on Adolescence*, 13(3), 329-360.
- Karaduman, B. D. (1997). *Ankara fen lisesi öğrencilerinin kendini kabul düzeylerinin bazı değişkenler açısından incelenmesi*. Yüksek Lisans Tezi, Ankara Üniversitesi, Ankara/Türkiye.
- Kaya, Z. (2016). Investigation of personality traits and self-esteem levels of substance user and non user adolescents based on certain socio-demographic variables (Madde kullanan ve kullanmayan ergenlerin kişilik özellikleri ve benlik saygısı düzeylerinin sosyo-demografik değişkenlere göre incelenmesi). *Journal of Human Sciences*, 13(3), 4100-4116.
- Kaya, Z., İkiz, F. E., & Asıcı, E. (2016). Investigation of the relationship between problematic internet use and psychological symptoms of science high school students (Fen lisesi öğrencilerinin problemleri internet kullanımı ile psikolojik semptomları arasındaki ilişkinin incelenmesi). *Journal of Human Sciences*, 13(1), 451-465.
- Körük, S., & Aypay, A. (2017). Ergenlerde riskli davranışların güvensiz bağlanma ve algılanan sosyal destek tarafından yordanmasında psikolojik belirtilerin aracı rolü. *Uluslararası Hakemli Psikiyatri ve Psikoloji Araştırmaları Dergisi*, (8), 23-51.
- Kuşçu Kıyak, Y. (2015). Dijital fırtına: Wattpad. 24.12.2018 tarihinde alındı. <http://www.teknolojigundem.com/haber/dijital-firtina-wattpad/1027461>
- Magsamen-Conrad K., & Greene K. (2014). Technology addiction's contribution to mental wellbeing: The positive effect of online social capital. *Computers in Human Behavior*. (40), 23-30.

- Öktem, G. (2015). Wamppad hikayeleri dizilere de uyarlanıyor. 24.12.2018 tarihinde alındı. <http://www.milliyetsanat.com/haberler/edebiyat/-wamppad-hikayeleri...-/5926>
- Özcebe, H., Üner, S., Uysal, D., Soysal, S., Polat, B., & Şeker, A. (2006). Ankara’da bir ilköğretim okulu’nda erken ve orta dönem adolesanlarda şiddet algısı ve şiddet davranışının sıklığının değerlendirilmesi. Proceeding of the 1. Uluslararası Şiddet ve Okul: Okul ve Çevresinde Çocuğa Yönelik Şiddet ve Alınabilecek Tedbirler Sempozyumu, İstanbul.
- Özyurt, B., & Dinç, G. (2006). Manisa’da okul çağı çocuklarda alkol kullanım sıklığı ve alkol kullanımı ile ilişkili faktörler. *TSK Koruyucu Hekimlik Bülteni*, (5), 61-71.
- Pişkin, M., & Eldelekoğlu, J. (2013). Genç bireyi anlamak. (M. Pişkin, Çev. Ed.), Ergenler ve gençlerle psikolojik danışma proaktif yaklaşım. (s. 3-51). İstanbul: Nobel Yayıncılık.
- Sarı, C. (2006). *Lise öğrencilerinde riskli sağlık davranışları*. Yüksek Lisans Tezi, Marmara Üniversitesi, İstanbul/Türkiye.
- Sarı, G. (2017). Transmedya hikâye anlatıcılığı: Kötü çocuk örneği. *Abant Kültürel Araştırmalar Dergisi*, 2(4), 245-253.
- Şimşek, H. (2011). Lise öğrencilerinde okulu bırakma eğilimi ve nedenleri. *Eğitim Bilimleri Araştırmaları Dergisi*, (1), 1-21.
- Siyez, D. M., & Aysan, F. (2007). Ergenlerde görülen problem davranışların psiko-sosyal risk faktörleri ve koruyucu faktörler açısından yordanması. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi*, 20(1).
- Siyez, D. M. (2007). Lise öğrencilerinde problem davranışların görülme sıklığı: İzmir örneklemini. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 3(28), 15- 31.
- Springer, A. E., Selwyn, B. J., & Kelder, S. H. (2006). A descriptive study of youth risk behavior in urban and rural secondary school students in El Salvador. *BMC International Health And Human Rights*, 6(1), 3.
- Tekinarslan, E., & Gürer, M. D. (2011). Problematic Internet use among Turkish university students: A multidimensional investigation based on demographics and Internet activities. *Journal of Human Sciences*, 8(1), 1028-1051.
- Telef, B. B. (2014). Ergenlerde olumlu ve olumsuz duygular ile riskli davranışlar arasındaki ilişkinin incelenmesi. *Kastamonu Eğitim Dergisi*, 22(2), 591-604.
- Üner, S., Bosi, B., Velipaşaoğlu, M., Üre, İ., Topbaşı, Z.H., Varol, R.S., Sungur, M.A., & Sanhal, C.Y. (2007). Ankara’da bulunan iki lisenin öğrencilerinin ruhsal durumlarının GSA-12 ile değerlendirilmesi. *Toplum Hekimliği Bülteni*, 26(1), 25-31.
- Vançelik, S., Önal, S. G., Güraksın, A., & Beyhun, E. (2007). Üniversite öğrencilerinin beslenme bilgi ve alışkanlıkları ile ilişkili faktörler. *TSK Koruyucu Hekimlik Bülteni*, 6(4), 242-248.
- Zimmermann, G. (2010). Risk perception, emotion regulation and impulsivity as predictors of risk behaviours among adolescents in Switzerland. *Journal of Youth Studies*, 13, 83-99.