

Suicidal ideation, tendencies, attempts and self-injuries in adolescents who are at risk of Internet addiction and who are addicted to the mobile phone

Myśli, tendencje i próby samobójcze oraz dokonywanie samouszkodzeń
u młodzieży zagrożonej uzależnieniem od Internetu i telefonu komórkowego

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Abstract

The aim of the work was the verification of the hypothesis assuming that adolescents who are at risk of Internet addiction and mobile phone addiction more often report suicidal ideation, plan suicide, attempt suicide and self-injure as compared to the adolescents who are not at risk of these behavioural addictions.

Material and methods: The group consisting of 291 junior high school students and high school students (188 girls and 103 boys) was examined using the Questionnaire designed by the authors, the Internet Addiction Test by Young and Mobile Phone Addiction Assessment Questionnaire by Potembska and Pawłowska.

Results and conclusions: Based on the obtained results the following conclusions were formulated:

1. Significantly more adolescents at risk of Internet addiction thought of committing suicide or planned suicide as compared to those who were not at risk of Internet addiction
2. Significantly more adolescents at risk of Internet addiction self-injure as compared to those adolescents who are not at risk of Internet addiction.
3. Significantly more adolescents at risk of mobile phone addiction showed suicidal ideation and planned suicide as compared to those adolescents who are not at risk of this addiction.
4. Significantly more adolescents at risk of mobile phone addiction carried out self-harm as compared to those adolescents who are not at risk of this addiction.

Keywords: suicide, self-injury, Internet addiction, mobile phone addiction, adolescents

Streszczenie

Celem pracy była weryfikacja hipotezy zakładającej, że młodzież zagrożona uzależnieniem od Internetu i telefonu komórkowego częściej zgłasza myśli samobójcze, planuje samobójstwo, podejmuje próby samobójcze i dokonuje samouszkodzeń niż młodzież niezagrożona tymi uzależnieniami behawioralnymi.

Materiał i metody: Grupę 291 uczniów gimnazjów i liceów (188 dziewcząt i 103 chłopców) przebadano: Ankietą własnej konstrukcji, Internet Addiction Test autorstwa Young oraz Kwestionariuszem do Badania Uzależnienia od Telefonu Komórkowego, autorstwa Potembskiej i Pawłowskiej.

Wyniki i wnioski:

Na podstawie uzyskanych wyników sformułowano następujące wnioski:

1. Istotnie więcej młodzieży zagrożonej niż niezagrożonej uzależnieniem od Internetu myślało o dokonaniu samobójstwa oraz planowało samobójstwo.
2. Istotnie więcej młodzieży zagrożonej niż niezagrożonej uzależnieniem od Internetu dokonuje samouszkodzeń.
3. Młodzież zagrożona uzależnieniem od telefonu komórkowego istotnie częściej, niż młodzież niezagrożona tym uzależnieniem, myślała o dokonaniu samobójstwa oraz planowała samobójstwo.
4. Młodzież zagrożona uzależnieniem od telefonu komórkowego istotnie częściej, niż młodzież niezagrożona tym uzależnieniem dokonuje samouszkodzeń.

Słowa kluczowe: samobójstwo, samouszkodzenia, uzależnienie od Internetu, uzależnienie od telefonu komórkowego, młodzież

Introduction

The few existing empirical studies of the Internet addiction and mobile phone addiction point to the coexistence with these so called "behavioural addictions" anxiety disorders, depressive disorders as well as somatiza-

tion, obsessive-compulsive disorders and also suicidal ideation and self-harm [1,2,3,4,5,6,7].

According to Yen et al. [8]:

- psychopathological symptoms can lead to the development of the Internet addiction or support it,

- Internet addiction can lead to developing psychopathological symptoms,
- psychopathological symptoms and the Internet addiction can mutually intensify.

It can be assumed that analogical dependencies will occur between various disorders and mobile phone addiction.

Ryu et al. [9], Kim et al. [10] and Bakken et al. [11] point to the dependence between the intensification of the Internet addiction symptoms and the occurrence of depression symptoms and suicidal ideation. The results of the research by Bakken et al. [11] indicate that more individuals addicted to the Internet report depression, suicidal ideation, anxiety and obsessive-compulsive disorders as compared who are not at risk of the Internet addiction.

According to Yang et al. [12] the adolescents addicted to the Internet report suicidal ideation, tendencies and they attempt suicide more often than the adolescent who are not at risk of Internet addiction. Messias et al. [13] found a significantly higher suicidal ideation and tendencies in adolescents characterised by a pathological Internet and excessive video game use as compared to those who are not at risk of this addiction.

Durkee et al. [14] show positive dependencies between suicidal ideation, tendencies and adolescent addiction to the Internet. Similar findings are presented by Lam et al. [5], who stress that adolescents who are at risk of Internet addiction show a higher risk of self-injuries as compared to their peers who are not at risk of developing this addiction. Yang and Tung [15] claim that the adolescents addicted to the Internet get higher scores as regards the intensification of depression symptoms as compared to those who are not at risk of developing this addiction, they also show a greater sadness intensity, more negative self-esteem and a greater tendency to be isolated from other people.

The few existing empirical studies [16] point to the relationship between adolescents' pathological use of the mobile phone and increased social anxiety, extroversion, negative self-esteem, and impulsivity. In the opinion of Billieux et al. [17], impulsivity is one of the strongest predictors of problematic use of the mobile phone.

Impulsivity and low, negative self-esteem are two personality traits which add to self-harm and suicide attempts.

No research has been found in the subject literature showing the dependencies between mobile phone addiction and reporting suicidal ideation, tendencies and self-harm by adolescents.

The aim of the work was the verification of the hypothesis assuming that adolescents who are at risk of Internet addiction and mobile phone addiction more often report suicidal ideation, plan suicide, attempt suicide and self-injure as compared to the adolescents who are not at risk of these behavioural addictions.

Material and methods

The group consisting of 291 junior high school students and high school students (188 girls and 103 boys) was examined using the Questionnaire designed by the authors, the Internet Addiction Test by Young [18] and Mobile Phone Addiction Assessment Questionnaire by Potembska and Pawłowska [19,20].

Results

In the first stage of the analyses, based on IAT Young a group of 150 adolescents (100 girls and 50 boys) at risk of Internet addiction was singled out.

Table 1 presents the results of the chi-square test that was used to compare the number of adolescents

Table 1. Comparison of adolescents from the clinical and control group reporting suicidal ideation, tendencies as well as suicidal attempts and self-injuries

Data	Control group		Clinical group		Chi-square	p
	N	%	N	%		
Whole group						
Suicidal ideation	38	23.17	53	44.54	14.43	0.001
Suicidal tendencies	26	15.85	43	36.13	15.38	0.001
Suicidal attempts	5	3.05	7	5.88	1.36	n.s.
Self-injury	26	15.85	47	39.50	20.14	0.001
Girls						
Suicidal ideation	26	24.76	36	45.00	8.35	0.004
Suicidal tendencies	19	18.10	30	37.50	8.78	0.003
Suicidal attempts	4	3.81	3	3.75	0.14	n.s.
Self-injury	18	17.14	31	38.75	10.89	0.001
Boys						
Suicidal ideation	12	20.34	17	43.59	6,09	0.01
Suicidal tendencies	7	11.86	13	33.33	6,66	0.01
Suicidal attempts	1	1.69	4	10.26	2,01	n.s.
Self-iniurv	8	13.56	16	41.03	9.58	0.002

Remark: In case of a small size of groups, chi-square was calculated using the Yates' correction

Table 2. Comparison of average results obtained by the adolescents who are at risk of developing mobile phone addiction and those who are at risk of developing this addiction as regards the frequency of reporting suicidal ideation, tendencies as well as suicidal attempts and self-injuries

Survey items	No risk of mobile phone addiction		Risk of mobile phone addiction		t	p
	M	SD	M	SD		
Whole group						
Suicidal ideation	0.35	0.77	0.99	1.28	-4.71	0.001
Self-harm	0.20	0.56	0.76	1.11	-4.89	0.001
Suicidal planning	0.22	0.60	0.78	1.16	-4.63	0.001
Girls						
Suicidal ideation	0.36	0.75	1.49	1.54	-4.14	0.001
Self-harm	0.23	0.60	1.14	1.38	-3.81	0.001
Suicidal planning	0.22	0.60	1.40	1.46	-4.66	0.001
Boys						
Suicidal ideation	0.30	0.77	0.97	1.15	-3.06	0.003
Self-harm	0.15	0.45	0.71	0.93	-3.37	0.002
Suicidal planning	0.20	0.59	0.60	0.95	-2.21	0.031

being at risk of Internet addiction (clinical group) and not at risk (control group) of developing this addiction, reporting suicidal ideation, tendencies as well as suicidal attempts and self-injuries. The calculations reflect the gender division of the examined adolescents.

The results of statistical analyses show that significantly more adolescents who are at risk of Internet addiction report suicidal ideation, tendencies as compared to the adolescents who are not at risk of Internet addiction. Significantly more adolescents who are at risk of addiction show self-harming behaviour.

In the following stage, based on the Mobile Phone Addiction Assessment Questionnaire by Potembska and Pałowska [19,20], a group of 80 girls and 35 boys at risk of mobile phone addiction was singled out as well as a group of 100 girls and 54 boys, who were not at risk of developing this addiction.

Based on the t- test a comparison was made of average results obtained by the adolescents at risk of mobile phone addiction as compared to those are not at risk of developing this addiction, as regards the frequency of suicidal ideation and tendencies and self-harm taking into account the gender division (Table 2).

The results of the study indicated that the adolescents at risk of mobile phone addiction reported suicidal ideation, planning and self-harm significantly more frequently as compared to those not at risk of developing this addiction.

Discussion

The obtained results support the research hypothesis formulated in the work. They showed that significantly more adolescents at risk of Internet addiction report suicidal ideation and planning and self-injuries as compared to those who are not at risk. No significant

differences were found between the number of adolescents from the clinical group and the control group who attempted suicide. The obtained results correspond to the pathological Internet use by adolescents and suicidal ideation and self-injuries [5,12,13,14].

The results presented in this work correspond to the results obtained by Potembska [21], who showed that reacting to stress with self-aggression and aggression to others is the strongest predictor of Internet addiction in adolescents. Intensified aggression and self-aggression shown by individuals who are at risk of Internet addiction can cause self-harm.

It was demonstrated as well that the adolescents at risk of mobile phone addiction significantly more often do self-harm and report suicidal ideation and planning as compared to those who are not at risk of developing this addiction.

To summarise, the results reported in this work show that the risk of mobile phone addiction, similarly to the risk of Internet addiction and addiction to psychoactive agents, co-occurs with auto-aggressive behaviour [5].

Based on the tests carried out the following conclusions were formulated:

Conclusions:

1. Significantly more adolescents at risk of Internet addiction thought of committing suicide or planned suicide as compared to those were not at risk of Internet addiction
2. Significantly more adolescents at risk of Internet addiction self-injure as compared to those adolescents who are not at risk of Internet addiction
3. Significantly more adolescents at risk of mobile phone addiction showed suicidal ideation and planned sui-

cide as compared to those adolescents who are not at risk of this addiction.

4. Significantly more adolescents at risk of mobile phone addiction carried out self-harm as compared to those adolescents who are not at risk of this addiction.

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