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# PREVENTION OF ADOLESCENT RISK BEHAVIOR, CYBERBULLYING AND VARIOUS FORMS OF VIOLENCE AGAINST THEM THROUGH THE USE OF MODERN INTERNET TECHNOLOGIES

Профілактики ризикової поведінки підлітків, кібербулінгу та різних форм насилля по відношенню до них через застосування сучасних інтернет-технологій

# Abstract

Given the continued increase in the prevalence and «dependence» of modern society on various gadgets and messengers (especially among the younger generation), it is possible in this direction to find unrealized opportunities to influence the adolescent cohort of the population effective mechanisms for preventing risky behavior and various manifestations of cyberbullying facts of various violence.

Purpose of the study. To explore the possibilities of prevention of risky behavior of adolescents, cyberbullying and various forms of violence against them through the use of modern Internet technologies

Materials and methods. In order to achieve the goal of the study, we developed a questionnaire and conducted a social survey, which included 283 students of vocational schools, whose average age was from 15 to 17 years. In accordance with the set tasks and to achieve the goal of the research, we used a set of general scientific and special methods, interrelated and consistently applied during the research: system analysis, biblio-semantic, statistical, correlation.

Results and discussion. A cross-sectional sociological survey was conducted in a case-control type with multi-stage randomization of respondents' choice. A total of 283 vocational school students aged 15 to 17 were questioned. The teenagers were added to the orbis\_zp blog on Instagram, where they were offered a survey. Questionnaires

# Резюме

З огляду на невпинне зростання поширеності та «залежності» сучасного суспільства від різноманітних гаджетів та месенджерів (особливо серед молодого покоління), вбачається можливим саме в цьому напрямку віднайти нереалізовані можливості впливу на підліткову когорту населення ефективні механізми профілактики ризикової поведінки, різних проявів кібербулінгу і в цілому фактів різноманітного насильства.

**Мета дослідження.** Вивчення можливостей профілактики ризикової поведінки підлітків, кібербулінгу та різних форм насилля по відношенню до них через застосування сучасних інтернет-технологій.

Матеріали та методи. Для досягнення мети дослідження нами була розроблена анкета та проведено соціальне опитування, в яке включено 283 учнів професійно-технічних закладів, середній вік яких був від 15 до 17 років. Відповідно до поставлених задач та для досягнення мети дослідження використано комплекс загальнонаукових і спеціальних методів, взаємопов'язаних та послідовно застосованих у ході дослідження: системний аналіз, бібліосемантичний, статистичний, кореляційний.

Результати дослідження та їх обговорення. Соціологічне перехресне дослідження було проведено за типом «випадок-контроль» з багатоетапною рандомізацією вибору респондентів. Було проанкетовано 283 учнів професійно-технічних закладів у віці від 15 до 17 років. Під-

include questions that elucidate respondents' encouragement to social groups promoting a variety of risk-taking and suicide quest games; facts of committing cyberbullying to other peers; facts of physical, psychological and sexual violence against adolescents and the level of knowledge of rights and guarantees for protection against violence.

In order to prevent the intensification of the negative impact of Internet resources, we have developed and registered an online blog in the Instagram application, the purpose of which is a control and preventive function to reduce the negative impact of the Internet on adolescents' awareness of the spread of risky behavior, cyberbullying and different types of violence. The online blog hosted a month-long training marathon on recognizing cyberbullying, identifying the spread of risky behavior and the facts of psychological, physical and sexual abuse against adolescents. The following Internet technologies have been used to prevent the spread and correction of the effects of  $the foregoing: information \, explanatory \, publications$ (posts) on the Internet blog page, lectures through live broadcast on the orbis zp blog, communication with adolescents through personal messages and consultation with a psychologist. After completing the online marathon, a second questionnaire was conducted regarding the effectiveness of this type of educational work.

Conclusion. 1. The effectiveness of the use of Internet technologies for the prevention of teenage risk behavior, cyberbullying and various forms of violence has been established. Reduced cyberbullying and hatred on the internet by 37,09% (from 67,49% to 30,04%;  $\chi^2=79,4$ ; p<0,001) and 47% (from 81,63% to 34,63%;  $\chi^2=128,4$ ; p<0,001), respectively; as well as cyberbullying cases – a decrease of 55,47% (from 66,78% to 11,31%;  $\chi^2=182,9<0,001$ ).

2. There has been an increase in adolescents' awareness of the recognition and counteraction to various forms of violence against them (from 25,95% to 89,75%;  $\chi^2 = 237,2$ ; p < 0,001).

**Keywords**: Adolescents, risk behavior, prevention, Internet technologies.

літків долучили до інтернет-блогу «orbis\_zp» на платформі «Instagram», де запропонували пройти анкетування. До питань анкетування включено такі, що з'ясовують факти заохочення респондентів до соціальних груп, що пропагують різноманітні квест-ігри з ризиковою поведінкою та культом самогубства; факти вчинення кібербулінгу до інших однолітків; факти фізичного, психологічного й сексуального насилля по відношенню до підлітків й рівні засвоєння знань щодо прав та гарантій на захист від насилля.

Для здійснення профілактики з недопущення посилення негативного впливу інтернетресурсів нами було розроблено і зареєстровано інтернет-блог в додатку «Instagram», метою якого стала контрольно-профілактична функція щодо зменшення негативного впливу інтернет-мережі на підсвідомість підлітків щодо поширення ризикової поведінки, проявів кібербулінгу та різних видів насильств. В інтернетблозі було проведено місячний тренінг-марафон по розпізнаванню кібербулінгу, встановленню поширення ризикової поведінки та фактів психологічного, фізичного та сексуального насилля відносно підлітків. Для профілактики поширення та корекції наслідків вищезазначеного були задіяні такі інтернет-технології: інформаційні роз'яснювальні публікації (пости) на сторінці інтернет-блогу, лекції через прямі трансляція в інтернет-блозі «orbis zp», комунікація з підлітками через особисті повідомлення та консультації з психологом. Після закінчення інтернет-марафону було проведено повторне анкетування щодо ефективності даного виду просвітницької роботи.

Висновки. 1. Встановлена ефективність застосування інтернет-технологій щодо можливостей профілактики підліткової ризикової поведінки, кібербулінгу та різних форм насилля. Зменшено факти кібер-жорстокого поводження та ненависті в інтернеті серед опитаних по відношенню до себе на 37,09% (з 67,49% до 30,04%;  $\chi^2=79,4$ ; p<0,001) і на 47% (від 81,63% і до 34,63%;  $\chi^2=128,4$ ; p<0,001) відповідно; а також випадки кібер-жорстокого поводження з іншими особами — зменшення на 55,47% (з 66,78% до 11,31%;  $\chi^2=182,9<0,001$ ).

2. Зросла обізнаність підлітків про визнання та протидію різним формам насильства щодо них (з 25,95% до 89,75%;  $\gamma^2 = 237,2$ ; p < 0,001).

**Ключові слова:** підлітки, ризикова поведінка, профілактика, інтернет-технології.

## INTRODUCTION

The era of digitalization, which has become an obvious phenomenon in modern times, has covered all spheres of public relations, including such specific fields as social medicine and the health

sector as a whole. In view of the steady increase in the prevalence and «dependence» of modern society on various gadgets and messengers (especially among the young generation), when most of their time, most people «spend» on the Internet, «covering» almost all their lives on the pages of various

messengers and getting acquainted with the lives of others, «taking over» in some way other people's behavioral patterns and role social orientations; it is considered possible in this direction to find hidden unrealized opportunities to influence the adolescent cohort of the population and to introduce effective mechanisms for prevention of risk behavior, various manifestations of cyberbullying and in general the facts of various abuse [1–5].

Against this background, it is noted that a variety of Internet resources and messengers (Instagram, Facebook, Viber, Telegram, YouTube etc) play a globally important role in formation of worldview and influence of particular types of behavior that pose a significant risk to the studied category, which emphasizes the need to find methods of social and psychological control and prevention of potential encouragement to risk, asocial, delinquent and other «negative» deviant behavior [6–10].

In our view, achieving positive results in the field of prevention of risk behavior, cyberbullying and various types of adolescent abuses through Internet technologies communication can be achieved through the modeling of appropriate safe behavior in an Internet environment, which is extrapolated to the awareness of existing dangers in the social environment and behavior [11–15].

### PURPOSE OF THE STUDY

The possibilities of prevention of risk behaviour of adolescents, cyberbullying and various forms of abuse against them through the use of modern Internet technology are studding

# MATERIALS AND METHODS

In order to achieve the purpose of the study, we developed a questionnaire and conducted a social survey, which included 283 students of vocational schools, the average age of whom was from 15 to 17 years. In accordance with the set objectives and to achieve the purpose of the research, we used a set of general scientific and special methods, interrelated and consistently applied during the research: system analysis, biblio-semantic, statistical, and correlation.

# RESULTS AND DISCUSSION

A cross-sectional sociological survey was conducted by a «case-control» type with multi-stage randomization of respondents' choice 283 students of vocational schools aged 15 to 17 were questioned (150 persons (53%) male and 133 (47%) – female, including at the age of 15-183 (64,7%) adolescents; 16-65 (23%) and 17-35 (12,4%). The adolescents were added to the «orbis\_zp» Internetblog on «Instagram», where they were offered a survey.

Questionnaires include questions finding out about the respondents' encouragement to social groups that promote a variety of quest games with risk behavior and the cult of suicide; the facts of committing cyberbullying to other peers; the facts of physical, psychological and sexual abuse against adolescents and the levels of knowledge of rights and guarantees for protection against abuse.

The Internet blog contained videos of adolescents' awareness of their rights and guarantees; as well as preventing cyberbullying, risk behavior and various types of abuse against adolescents.

In order to prevent the intensification of the negative impact of Internet resources, we have developed and registered an Internet blog in the «Instagram» application, the purpose of which is a control and preventive function to reduce the negative impact of the Internet on adolescents' awareness of the spread of risk behavior, cyberbullying and different types of abuse.

A series of videos were presented consistently on the Internet blog by the following units: awareness of adolescents about their rights and guarantees; the use by adolescents of their rights and guarantees to prevent and counteract various forms of abuses; overcoming the negative impact of Internet mechanisms related to risks to life and health, cyberbullying and abuses.

The Internet blog posted Internet open source photos showing traumatized adolescents falling out of house windows and falling from trees and power poles while trying to take selfie photos or «stand out» from peers by imitating other manifestations of risk behavior.

Also, we posted short by the contents comments from classmates in which they sadly remembered their friends who had been killed while taking pictures and risk activities on the rail and subway. There were short videos about the punishments of persons who committed various acts of abuse and bullying manifestations in relation to others.

The Internet blog hosted a month-long training marathon on cyberbullying recognition, establishmentofthe spread of risk behavior, and factsof psychological, physical and sexual abuse of adolescents.

The following Internet technologies have been used to prevent the spread and correction of the consequences of the foregoing: information explanatory publications (posts) on the Internet blog page, lectures through live broadcast on the «orbis\_zp» Internet blog, communication with adolescents through personal messages and consultation with a psychologist.

After completing the Internet marathon, a survey was conducted on the effectiveness of this type of educational work.

At the end of the Internet marathon, an appropriate survey was conducted and it was

determined that the first block of the Internet blog was visited by 185 adolescents, or 65,40%; and the

second block – by 190 students, which is 67,10% according to the results of survey (Table 1).

 $Table\ 1$  Frequency of visits to individual blocks of Internet blogs among adolescent respondents

Information content of Internet blogs	*	espondents who viewed Internet blogs (n = 283)	
	Abs.	%	
Adolescents' awareness of their rights and guarantees	185	65,40	
Preventing and countering various types of abuses	190	67,10	

The main purpose of using these Internet blogs was to increase the legal education of adolescents regarding their rights and guarantees against physical and psychological abuse. In order to find out the level of assimilation and the possibility of counteracting the various types of abuse, adolescents were surveyed according to specific groups of questions after browsing the Internet blogs.

When asked whether it is clear what laws prohibit the use of abuse and physical punishment to

children and adolescents 124 (43,8%) persons of the total number of respondents out of 283 respondents confirmed the facts that they were aware of such a prohibition against them.

Among the surveyed respondents (124 persons), 75 (60,5%) adolescents said that they should be protected first by law enforcement agencies; 27 (21,8%) persons – by social protection bodies; and 22 (17,7%) students indicated that by the family (table 2).

 $Table\ 2$  Digestion of knowledge of rights and guarantees for protection against physical abuse among adolescent respondents

Institutions for protection against	Number of respondents who viewed Internet blogs (n = 124)		
physical abuse of adolescents	Abs.	%	
Law enforcement agencies	75	60,5	
Social protection bodies	27	21,8	
Family	22	17,7	

The dynamics of raising the legal awareness of the interviewed adolescents, especially in the context of the role of law enforcement agencies, which are the primary response bodies and which ensure that they are brought to appropriate responsibility, proved to be legitimate. The Internet blogs we have used have clearly demonstrated the protocols of various interrogations and court rulings on physical abuse against adolescents, which has created a strong conviction in the latter of the highest functional efficiency of the law enforcement system in this area.

When asked what to do if the facts of psychological humiliation were found, 62,9% of persons answered that they knew the procedure for their actions (11,3% higher than the previous questionnaire indicator).

When asked by the questionnaire which institution is most important in protecting adolescents from psychological humiliation, 45 (25,3%) respondents out of 178 identified a family; 29 (16,3%) – teachers; 58 (32,6%) – law-enforcement agencies and 46 (25,8%) named social services (table 3).

Table3
Acquiring know ledge about the right sandguarantees for protection again st psychologica labuseamon gadolescent respondents

Institutions for protection against	Number of respondents who viewed Internet blogs (n = 178)		
psychological abuse of adolescents	Abs.	%	
Parents	45	25,30	
Teachers	29	16,30	
Law enforcement agencies	58	32,60	
Social services	46	25,80	

In our view, a significant increase of indicators in adolescents' awareness of their rights and quarantees against various types of abuses has been facilitated by video materials of the Internet blog on counteracting cyberbullying in different countries and demonstrating the facts of prosecution of adolescents and older persons for psychological abuse. In this context, it should be noted that the proportion of the role of lawenforcement agencies has increased compared to other institutions, especially those as teachers who have been least trusted by respondents when seeking protection.

In our opinion, the reason for this is the impression of the video material posting in the Internet blog about the responsibility for cyberbullying.

Particularly noticeable was the result in raising awareness of the need to counteract external and internal «encouragements» in the direction of risk behavior and various manifestations of cyberbullying and the convenience of influencing adolescent consciousness through Internet blogs.

Thus, after reviewing the relevant Internet blogs, the respondents noted the convenience of this form of preventive work on the «orbis\_zp» Instagram platform in 256 (90,46%) cases.

At the same time, among all respondents, only  $34 \ (12,01\%)$  adolescentsout of all (283 persons) persons answered positively (a decrease of 56,19%) the questions about the facts of effectiveness of their provocation to involve groups promoting various Internet technology that are related to risk behavior, cyberbullying and abuse. Among them: provoking calls for risk behavior – in  $16 \ (47,06\%)$  adolescents (decrease of 24,74%); addictive behavior –  $9 \ (26,47\%)$  persons (decrease of 19,79%); call to join the groups with the cult of suicide –  $6 \ (17,65\%)$  adolescents (decrease of 8,83%) and cyberbullying –  $3 \ (8,82\%)$  persons (decrease of 2,83%) (table 4, figure 1).

Table 4
Internet technology promotion effectiveness cases related to risk behavior, cyberbullying and abuse among adolescent respondents after the Internet marathon

Internet technology related to risk	Internet technology promotion objects $(n=34)$		
behavior, cyberbullying and abuse	Abs.	%	
Risk behavior	16	47,06	
Addictive behavior	9	26,47	
Groups with the cult of suicide	6	17,65	
Cyberbullying	3	8,82	

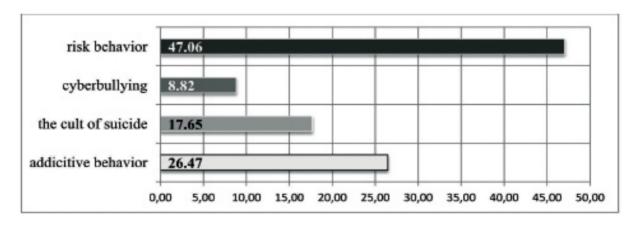


Figure 1. Structural characteristics of the effectiveness of provoking of Internet technology related to risk behavior, cyberbullying, and abuse among adolescent respondents after the Internet marathon (%)

In addition, after a month-long Internet marathon, we have identified a decrease of the facts of cyberbullying among adolescents against other persons.

There was a decrease in such factsamong all respondents (283 persons) out of 189 (66,78%) to 32 (11,31%) respondents (decrease of 55,47%).

There was also a decrease in the facts of unpleasant cyberbullying and hatering experiences on the Internet among those polled in relation to themselves by 37,09% (from 67,49% and to 30,04%;  $\chi^2 = 79,4$ ; p < 0,001) and by 47% (from 81,63% and to 34,63%;  $\chi^2 = 128,4$ ; p < 0,001) respectively; as well as cases of cyberbullying to

other persons – a decrease of 55,47% (from 66,78% to 11,31%;  $\chi^2$  = 182,9; p < 0,001).

At the same time, after viewing the relevant Internet blogs, there was a significant increase in the awareness of adolescents as a whole about their possession of comprehensive information about recognition and counteraction to various types of violence against them (254 (89,75%) respondents answered positively) by 63,95% (from 25,95% and to 89,75%;  $\chi^2 = 237,2$ ; p < 0,001), (table 5).

Table 5
The effectiveness of Internet blogs among adolescent respondents
after a month-long Internet marathon

	Internet blog effectiveness				
Internet technoloy and information support	Before review		After review		n = 283
	Abs.	%	Abs.	%	
Cyberbullying against respondents	191	67,49	85	30,04	$\chi^2 = 79,4;$ $p < 0,001$
Hating	231	81,63	98	34,63	$\chi^2 = 128,4;$ $p < 0,001$
Cyberbullying against other persons	189	66,78	32	11,31	$\chi^2 = 182,9;$ $p < 0,001$
Possession of information on recognition and counteraction to violence	73	25,80	254	89,75	$\chi^2 = 237,2;$ $p < 0,001$

Thus, summarizing the above, it should be noted that the use of the Internet blog as a tool to prevent risk behavior, various manifestations of cyberbullying and in general the facts of the various violence among the adolescent contingent should be considered effective in view of the following:

- first, adolescents in a relatively straightforward way (access to the «Instagram» resource) received the necessary information regarding awareness of their rights and guarantees and their use to prevent and counter various forms of violence and «encouragement» to various manifestations of risk and suicidal behavior on the Internet;
- second, adolescents have learned to identify law enforcement and social institutions as a tool to protect against violence against them and to prevent deviant and risk behavior in general;
- third, the results of the use of the Internet blogs have shown a change in adolescents' legal

awareness and their legal behavior as a whole, which has created favorable foundations for generating positive social behavior in general.

# CONCLUSIONS

- 1. The effectiveness of the use of Internet technologies for the prevention of teenage risk behavior, cyberbullying and various forms of violence has been established. Reduced cyberbullying and hatred on the internet by 37,09% (from 67,49% to 30,04%;  $\chi^2=79,4$ ; p < 0,001) and 47% (from 81,63% to 34,63%;  $\chi^2=128,4$ ; p < 0,001), respectively; as well as cyberbullying cases a decrease of 55,47% (from 66,78% to 11,31%;  $\chi^2=182,9$ ; p < 0,001).
- 2. There has been an increase in adolescents' awareness of the recognition and counteraction to various forms of violence against them (from 25,95% to 89,75%;  $\chi^2 = 237,2$ ; p < 0,001).

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