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LOG ON  
BACK  
TO  
LIFE

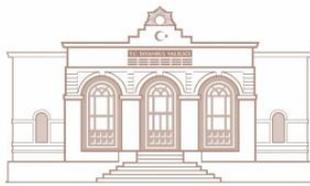
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IO2 / A1  
COMPREHENSIVE ANALYSIS

2017-1-TR01-KA201-046632

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**Analysis of the student's internet addiction disorder phenomenon in the countries of the partners.**

<b>COUNTRY</b>	<b>ROMANIA</b>
<b>OVERVIEW</b>	<p>Four country-specific and one European comparative study (with Romania included) are hereby provided on the topic of Internet addiction, with a focus on:</p> <ul style="list-style-type: none"> <li>✓ Risk factors associated with long-term computer / Internet use;</li> <li>✓ The association between the internet addiction, the loneliness feeling and the perceived social support among adolescents;</li> <li>✓ Internet addictive behaviour patterns;</li> <li>✓ Network identity and Internet addiction.</li> </ul> <p>The studies carried out in Romania are both general studies (they focus on the whole student population in the country), as well as specific studies (target groups made of students in Iasi county).</p>

<b>STUDY/REPORT N1</b>	
<b>TITLE of the STUDY/REPORT</b>	<i>Utilizarea îndelungată a calculatorului la copii și adolescenți: factor de risc sau condiție premorbidă</i> (Long-term computer usage by children and teenagers: risk factors or premorbid condition)
<b>NAME of the RESEARCHER (S)</b>	Gabriela Elena Chele
<b>YEAR of ISSUE</b>	2010
<b>TARGET GROUP of the STUDY/REPORT</b>	Students
<b>RESEARCH METHOD</b>	<p><b>Quantitative method</b></p> <ul style="list-style-type: none"> <li>○ Questionnaires (543 students in Iași county)</li> </ul> <p><b>Qualitative method</b> (psychiatric interview, lab investigation, social and familial anamnesis)</p>
<b>LEVEL of the STUDY/REPORT</b>	Doctoral thesis
<b>AUTHORITY</b>	“Grigore T. Popa” University of Medicine and Pharmacy, Iași, Romania

<b>URL</b>	<a href="http://www.umfiasi.ro/ScoalaDoctorala/TezeDoctorat/Teze%20Doctorat/Rezumat_Gabriela_Elena_Chele.pdf">http://www.umfiasi.ro/ScoalaDoctorala/TezeDoctorat/Teze%20Doctorat/Rezumat_Gabriela_Elena_Chele.pdf</a>
<b>ABSTRACT &amp; CONCLUSIONS</b>	

The stated aim of the doctoral thesis was to conceive a clinical and therapeutic support programme for students who display computer addiction behaviour, based on a complex research involving psychiatrists, psychologists, psycho-pedagogues, computer engineers and statisticians.

The research aimed to:

- ✓ identify the frequency of students' computer usage;
- ✓ research the impact of excessive computer usage on school results, family relationships and social life;
- ✓ identify possible cases of computer addiction.

A questionnaire was applied to 543 teenage students from 16 schools in Iași county, using 35 questions focused on their computer usage behaviour. Out of the total number of respondents, 46,8% were males and 53,2% females, belonging to two age groups, 12-14 and 15-18.

## **CONCLUSIONS**

The following conclusions could be drawn on the basis of the questionnaire results:

- ✓ Male students ages 12-14 tend to spend a larger amount of time using the computer. Overall, male students have a higher computer usage frequency than female students.
- ✓ Over 50% of the students own a computer connected to the Internet (as of 2007). Parents buy electronic devices connected to the Internet, while recognizing their usefulness and importance, as well as their children's need to benefit from everything that defines today's society.
- ✓ At the time the research was carried out, the largest number of students were those who stated that, on average, they spent 1-3 hours / day in front of the computer (44%), while the smallest percentage was represented by those who stated that they spent more than 5 hours / day (8,8%).
- ✓ Students aged 15-18 mainly use the Internet to search for information, while the 12-14 age group primarily uses the Internet for entertainment (games).
- ✓ Students mostly use their computers in the evening, between 18.00-23.00, and some of them past 23.00. While doing so, they admit to feeling fatigued, they lack concentration at school, feel irritable. Moreover, the time they spend surfing the Internet negatively impacts their school results.

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In order to detect Internet addiction symptoms, the DSM-IV diagnostic criteria for gambling were used:

1. the feeling of being permanently preoccupied by one's Internet activity.
2. they feel that they must spend a larger amount of time in front of the computer to reach a state of "wellbeing"
3. inability to control the amount of time spent in front of the computer
4. a sense of irritability and sadness when they do not use the computer
5. they use the computer to get rid of problems and acquire a sense of wellbeing
6. they lie to their family and friends in order to extend the time spent in front of the computer
7. they risk losing social relationships / job / career or academic opportunities
8. they become agitated when their on line activity is interrupted and think about their next opportunity to log on back again
9. they stay connected longer than intended

- ✓ Out of the total number of 543 students, 43 were associated with Internet addiction, with at least 5 "often" and "very often" answers for the set of 9 questions.
- ✓ Out of the 43 students, 31 belonged to the 12-14 age group, while the remaining 12 were associated with the 15-18 age group.
- ✓ Out of the 43 students, 69,8% were male and 30,2% female students.
- ✓ 32 of the 43 students diagnosed with addiction underwent a complex therapeutic programme involving psychotherapy and psycho-pharmacological measures.

The study also discusses the parents' involvement and communication with their children regarding their computer use. In this regard, the research reveal that 62% of the parents never discuss with their children about how they use the computer, while 47% of the student admit that their parents try to reduce the amount of time they spend in this way. The study reveals that, regardless of the students' gender and age, their parents rarely or never try to control their behaviour regarding their computer use. In conclusion, the family's involvement is often vague and insignificant.

<b>STUDY/REPORT N2</b>	
<b>TITLE of the STUDY/REPORT</b>	<i>Internetul și mediile de socializare virtuale în viața liceenilor</i> (The Internet and the virtual social networks in students' life)
<b>NAME of the RESEARCHER (S)</b>	The Institute of Educational Sciences (Romania)
<b>YEAR of ISSUE</b>	2018
<b>TARGET GROUP of the STUDY/REPORT</b>	Students
<b>RESEARCH METHOD</b>	<ul style="list-style-type: none"> <li>• Qualitative method               <ul style="list-style-type: none"> <li>○ Documentary research on the development policies / measures of the digital infrastructure and digital competences;</li> <li>○ Documentary research of relevant studies and reports;</li> <li>○ Secondary analysis of the statistical and research data from official reports and other relevant studies;</li> <li>○ Qualitative research using the deep interview method. Quantitative method</li> </ul> </li> <li>○ Questionnaires (how many and who was questioned)               <ul style="list-style-type: none"> <li>○ 30 students(5 x 6 development regions in Romania)</li> <li>○ 18 teachers (3 x 6 development regions in Romania)</li> </ul> </li> </ul>
<b>LEVEL of the STUDY/REPORT</b>	Official state study
<b>AUTHORITY</b>	The Institute of Educational Sciences (Romania) is the national research authority having the status of an autonomous body, within the Ministry of Education and Research.
<b>URL</b>	<a href="http://www.ise.ro/internetul-si-mediile-de-socializare-virtuale-in-viata-liceenilor">http://www.ise.ro/internetul-si-mediile-de-socializare-virtuale-in-viata-liceenilor</a>
<b>ABSTRACT &amp; CONCLUSIONS</b>	

**Research aims:**

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- ✓ To describe the Internet and social media usage habits and analyse their effect on students' education;
  - ✓ To research the students' and teachers' attitude towards using the Internet and the social networks;
  - ✓ To describe the students' behaviour and habits related to the use of Internet and social networks (usage length, frequency and context, devices they use, Internet activity, dangerous practices), and well as to identify the associated effects.

### **Conclusions:**

The students' online and offline worlds are interconnected and bi-directional. As any social environment, the digital world impacts the young people's development as far as peer relationship, friendship, parent-child / school-child relationship, their sexuality, identity, health and ethics are concerned.

The social construct of the online risks. There are five main sources that shape the students' perception about what is problematic on the Internet:

- (1) the online experiences – when they face a problematic situation and subsequently adjust their definition of risk;
- (2) second hand or indirect experiences – sometimes even mediated – an experience which is part of their peer environment – when they define risks according to experiences shared by their friends;
- (3) the parents' worries, expressed as advice / restrictions;
- (4) the awareness campaigns on the dangers of the Internet they experienced in their schools – for example, online safety campaigns initiated by the Police or by other organizations;
- (5) the mass media sensationalist representations of the negative consequences deriving from online exposure, which influence their attitude and knowledge both directly and indirectly (through their colleagues or parents).

The students' perception on risks is shaped at the junction of knowledge / information, opinions and judgement. For instance, the teenage students seem to develop a discourse where the sexual content is part of a larger unwanted content series they are exposed to on the Internet that one has to bear with and manage. On the one hand, this perception derives from precarious on line search competence, while on the other hand, from the fact that they use on line platforms like game and video streaming sites that are prone to containing pop up ads, viruses, as well as incorporated videos with sexual content. The students who were interviewed resort to a discourse where they

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project their worries on the younger children, who are more vulnerable to unwanted content. This may lead to the conclusion that the teenage students' resilience towards unwanted on line content is higher.

The results regarding the students' acknowledgement of the risks show that the age and gender differences matter in the way the negative on line experiences are socially constructed as being problematic. As younger children tend to rely on their parents' representations of risks, teenagers, however, have developed an awareness based on their own or their peers' experience. Moreover, some risks are clearly gender-related and socially constructed, as they affect female students more than male students.

The sexual content and unwanted content in general are also perceived differently, according to the respondents' age. On younger students, sexual content had a more serious impact and was perceived as shocking, while with teenage students, the presence of unwanted sexual content is normalized and becomes part of their regular on line experience.

The youth perception of the on line risks is, generally speaking, closely connected with their digital competence and their age. Once they got older, they have developed a better knowledge of the digital environment and, sometimes, they are able to distinguish between the various risks, although this is not a guarantee that they will be able to escape from them altogether.

Managing problematic on line situations has a preventive and a reactive (coping) aspect. The young often learn from their negative experiences and start adopting preventive measures. After testing the efficiency of some reactive strategies, the young have learned to avoid the recurrence of some problematic situations in the future. Therefore, reactive coping and preventive behaviour are sometimes interrelated.

The preventive measures are closely connected to the awareness level of the problematic on line situations. This awareness motivates the young to think of ways of avoiding negative experiences and facilitates their informed decision-making on the preventive measures they need to adopt.

Last but not least, considering that the awareness level regarding problematic on line situations informs the choices and practices the young people adopt in order to prevent them from occurring, the way in which the young perceive some specific risks has relevant policy implications: the task of creating a framework aiming to develop their digital competence and risk awareness should be based on how the young problematize on line situations, and should also aim to develop their ability to adopt efficient preventive measures.

STUDY/REPORT N3	
<b>TITLE of the STUDY/REPORT</b>	<i>Relația dintre dependența de internet, sentimentul de singurătate și suportul social perceput în rândul adolescenților</i> (The association between the internet addiction, the loneliness feeling and the perceived social support among adolescents)
<b>NAME of the RESEARCHER (S)</b>	Viorel Robu ("Petre Andrei" University of Iasi, Romania), Elena Tcaciuc ("Socola" Psychiatric Clinical Hospital, Iasi, Romania)
<b>YEAR of ISSUE</b>	2010
<b>TARGET GROUP of the STUDY/REPORT</b>	Students
<b>RESEARCH METHOD</b>	<ul style="list-style-type: none"> <li>• Quantitative method               <ul style="list-style-type: none"> <li>○ Questionnaires (257 students from Campulung Moldovenesc, Suceava County, Romania)</li> </ul> </li> </ul>
<b>LEVEL of the STUDY/REPORT</b>	Research article published in <i>Romanian Journal of Applied Psychology</i> , 2010, Vol.12, No.2, 62-72
<b>AUTHORITY</b>	West University of Timisoara, The Euroregional Centre for Applied Psychology
<b>URL</b>	<a href="http://www.rjap.psihologietm.ro/Download/rjap122_3.pdf">http://www.rjap.psihologietm.ro/Download/rjap122_3.pdf</a>
ABSTRACT & CONCLUSIONS	

### ABSTRACT

The current "digital generation" of youngsters seems to dictate the future game rules on the international market of telecommunications. Among adolescents, the passion for computer and Internet can oscillate from a balanced and healthy involvement until the addiction implying multiple negative consequences on the physical, psychological and social functioning. This aspect was of interest in our work. From a total of 257 high school students, whose responses protocols have represented the selection basis, 6.2 % were qualified as Internet-addicted. Compared with the rational Internet users, the Internet addiction group has obtained a higher level of loneliness,

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although the difference was not statistically significant. In contrast, the level of involvement in the Internet activities had a significant effect on level of the social support perceived by students. Compared with the Internet addiction group, the rational Internet users, as those who used it excessively have obtained a significant higher level of the perceived social support.

## CONCLUSIONS

According to the authors, there are two trends that try to account for the connection between Internet addiction and loneliness in teenagers (Erdoğan, 2008; Hardie and Tee, 2007; Kim, La Rose and Peng, 2009):

- ✓ One points that excessive Internet use leads to a feeling of loneliness. The time spent on line reduces the quality and quantity of social relationships in the real world, isolating individuals and associating them with a sense of alienation;
- ✓ The other current starts from the assumption that the feeling of loneliness leads to a growth in the frequency of Internet use, as this communication environment provides a series of opportunities for interaction for the lonely individuals, such as: an extended and easily developed social network, control over the anxiety one feels in face-to-face situations.

The study is based on the first trend of thought. The general hypothesis the study relies on is that Internet activity impacts teenagers' sense of loneliness and its frequency.

6.2% were qualified as Internet-addicted, with almost equal shares for female and male students;

The students qualified as Internet-addicted prove a higher level of loneliness, compared to the students who used the Internet rationally; however, the difference between the two groups is insignificant, which eliminates the first work hypotheses.

In turn, the level of involvement in Internet activity had a significant statistical effect on the social support perceived by the students; those who used the Internet rationally had a higher perception of the social support they benefited from.

The research results point towards a possible vicious circle between Internet addiction and the level of social support the students perceive: lack of satisfaction towards the social support that is provided by ace-to-face social networks encourage students to rely on the Internet in order to find new friends and support. But this may be misleading as it can lead to the student's decreasing motivation and skills to engage in real social interaction – an aspect which determines a growing reliance on compulsive use of the Internet.

### *Measures to rationalize computer use among teenagers*

The technological progress of the last 50 years has dramatically increased the number of people who engage in virtual activity. Apart from being a natural expression of the technological progress, this behaviour is also the consequence of a globalized world, of the keen competition on the labour market, of the diversity if services, as well as an expression of consumerism. The young generation (dubbed as the "digital generation") has grown while immersed in communication technology, and will dictate the rules on the international communications market.

Most teenagers know how to use the facilities offered by computers and the Internet, and they use

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them for a variety of purposes: searching for information, social networks and entertainment. However, their engagement can vary from a balanced approach up to excessive use and pathological addiction. From a strictly clinical point of view, the latter cumulates a series of physical, cognitive emotional, and social symptoms that severely interfere with the young people's daily activity.

As compulsive Internet use from an ever young age is becoming one of the emerging problems of our society, a series of policies must be developed in order to diminish the phenomenon.

The study puts forward some principles that should underlie the parents' educational efforts while they work towards rationalizing their children's use of the communication technologies:

A. Some work techniques need to be applied while working with their children / teenagers. These have to aim at rationalizing their computer & Internet use so as to develop correct behaviour patterns in this respect. If this kind of education starts from an early age, the likelihood of developing compulsive behaviours decreases.

B. Children and teenagers need to be educated to use the information on the Internet rationally and practically. Therefore, the vast information available on the Internet should support their education, rather than becoming a substitute for entertainment and face-to-face communication.

C. Parents should set an example for their children as far as the time they spend in front of the computer is concerned. For example, a child who will see his father spending a lot of time engaging in virtual activity will be prone to adopting the same kind of activity in the future and thus develop an addictive behaviour.



<b>STUDY/REPORT N4</b>	
<b>TITLE of the STUDY/REPORT</b>	Internet Addictive Behavior in Adolescence: A Cross-Sectional Study in Seven European Countries
<b>NAME of the RESEARCHER (S)</b>	Artemis Tsitsika, MD, PhD, Mari Janikian, PhD, Tim M. Schoenmakers, PhD, Eleni C. Tzavela, MS, Kjartan O'lafsson, PhD, Szymon Wo'jcik, MS, George Florian Macarie, PhD, Chara Tzavara, PhD, The EU NET ADB Consortium, and Clive Richardson, PhD
<b>YEAR of ISSUE</b>	2014
<b>TARGET GROUP of the STUDY/REPORT</b>	Students
<b>RESEARCH METHOD</b>	<p>A cross-sectional study was conducted by the EU NET ADB consortium in seven European countries: Spain, Poland, Germany, the Netherlands, Romania, Iceland, and Greece. Data were collected from October 2011 to May 2012.</p> <p>Self-report anonymous questionnaires were self-completed by participating adolescents in class during school hours. The questionnaire included items pertaining to personal characteristics, family status, and Internet use. A total of 13,708 adolescents completed the survey. A total sample of 13,284 adolescents (F/M: 7,000/6,284; mean age 15.8 – 0.7) included in the analyses, out of which 1,021 in Romania</p>
<b>LEVEL of the STUDY/REPORT</b>	EU NET ADB Consortium Report , under the Safer Internet plus program (SIP-KEP-4101007), a European multiannual community programme on promoting safer use of the Internet and new online technologies.
<b>AUTHORITY</b>	CYBERPSYCHOLOGY, BEHAVIOR, AND SOCIAL NETWORKING, Volume 17, Number 8, 2014
<b>URL</b>	<a href="https://www.liebertpub.com/doi/pdf/10.1089/cyber.2013.0382">https://www.liebertpub.com/doi/pdf/10.1089/cyber.2013.0382</a>
<b>ABSTRACT &amp; CONCLUSIONS</b>	

## ABSTRACT

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A cross-sectional school-based survey study (N= 13,284; 53% females; mean age 15.8 – 0.7) of 14–17-year-old adolescents was conducted in seven European countries (Greece, Spain, Poland, Germany, Romania, the Netherlands, and Iceland). The aim of the study was to investigate the prevalence of Internet addictive behaviour (IAB) and related psychosocial characteristics among adolescents in the participating countries. In the study, we distinguish two problematic groups: adolescents with IAB, characterized by a loss of control over their Internet use, and adolescents “at risk for IAB,” showing fewer or weaker symptoms of IAB. The two groups combined form a group of adolescents with dysfunctional Internet behaviour (DIB). About 1% of adolescents exhibited IAB and an additional 12.7% were at risk for IAB; thus, in total, 13.9% displayed DIB. The prevalence of DIB was significantly higher among boys than among girls (15.2% vs. 12.7%,  $p < 0.001$ ) and varied widely between countries, from 7.9% in Iceland to 22.8% in Spain. Frequent use of specific online activities (e.g., gambling, social networking, gaming) at least 6 days/week was associated with greater probability of displaying DIB.

Multiple logistic regression analysis indicated that DIB was more frequent among adolescents with a lower educational level of the parents, earlier age at first use of the Internet, and greater use of social networking sites and gaming sites. Multiple linear regression analysis showed that externalizing (i.e., behavioural) and internalizing (i.e., emotional) problems were associated with the presence of DIB.

## CONCLUSIONS

In the current study, Internet addictive behaviour (IAB) is defined as a behavioural pattern characterized by loss of control over Internet use. This behaviour potentially leads to isolation and neglect of social, academic, and recreational activities, and personal health.

A total of 13 284 adolescents aged 14-17 (a representative sample from each country) was surveyed. Additionally, 124 qualitative in-depth interviews were conducted. The study took place in Greece, Germany, the Netherlands, Iceland, Poland, Romania and Spain.

The basic findings of the study that describes Internet addiction among adolescents in Europe nowadays show the following:

*About Internet Addictive Behaviour (IAB):* 1.2% of the total sample presents with IAB, while 12.7% are at risk of developing IAB (13.9% have Dysfunctional Internet Behaviour (DIB)). Spain, Romania, and Poland show a higher prevalence of DIB, while Germany and Iceland the lowest in the study. Boys, older adolescents and those whose parents have lower educational levels are more likely to exhibit DIB. The group with DIB has lower psychosocial well-being. Gambling, social networking and gaming are strongly associated with DIB, while watching videos/movies was not related to DIB and doing homework/research was negatively associated with DIB, indicating that the more adolescents use the Internet for homework/research the less they show signs of DIB.

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*With regard to high-risk behaviour:* the research showed that one dangerous form of behaviour is communication with strangers. Specifically, 63% of the total sample communicate with strangers online; 9.3% of those communicating with strangers online state that this experience was perceived as harmful for them (5.4% of total sample); and 45.7% of those communicating with strangers online have gone on to meet someone face-to-face that they first met on the Internet (28.4% of total sample). The risk of grooming is higher in Romania, Germany and Poland, and lowest in Greece.

*Exposure to sexual images:* the percentage of the total sample exposed to sexual images is 58.8% and 32.8% of these state that this experience was harmful (18.4% of total sample). More boys than girls have been exposed to sexual images.

*Cyber bullying:* 21.9% of the total samples have experienced bullying online; 53.5% of those bullied state that this experience was harmful (11.2% of total sample). More girls than boys experience bullying. Romania and Greece have the highest percentages, while Iceland and Spain the lowest.

It is remarkable that although a significant number of adolescents may be exposed to Internet risks, a much lower number experiences harm. This indicates the importance of education and prevention among young people: educate young people to deal with risks, so that they do not experience harm.

*With regard to Internet activities:* social networking comes first and is followed by gambling and gaming. Specifically, 92% of the total sample are members of at least one social networking site (SNS). Some 39.4% of adolescents spend at least two hours on SNS on a normal school day. Using SNS for more than two hours daily is associated with DIB. More girls than boys use SNS, while having more than 500 online friends is associated with DIB.

*Gambling:* 5.9% of the total sample gamble online, while 10.6% gamble in real life. Romania and Greece have the highest gambling percentages (online and in real life, and adolescents who gamble have three times the risk of exhibiting DIB).

*Gaming:* 61.8% of the total sample are gamers, and adolescents who play games have twice as high a risk of exhibiting DIB. Gaming more than 2.6 hours a day is associated with DIB. Boys are more likely to abuse or become addicted to gaming.

In the same research, the qualitative components (Dreier et al. 2012) indicated the important role of the Internet in adolescence and specifically that adolescents are especially attracted to the Internet because of their developmental characteristics and their thirst and curiosity for:

- ✓ getting answers to a wide range of questions;
- ✓ attaining fast and the most up-to-date information;

- ✓ keeping in touch with existing and new contacts;
- ✓ having fun.

The Internet eases (facilitates) everyday life in adolescence. However, some teenagers need to feel boosted (empowerment). Empowerment comes through positive online encounters (being liked, gaining excellence in games, feeling equal and filling empty time). In addition, empowerment may fill a void when it comes to adolescents with deficient offline social skills.

It is important to mention that adolescents with underdeveloped offline skills may experience a high degree of empowerment through the Internet and thus are more vulnerable to the development of Dysfunctional Internet Behaviour.

With regard to the adolescents' behaviour of being "always online", the research showed that adolescents, following their personal online journeys of exploration (digital pathways), develop various strategies in order to handle the phenomenon of being always online; for example, "adaptive strategies"(efforts to balance online and offline engagements like self-monitoring, prioritising, exploring offline alternatives), and "maladaptive strategies"(efforts to maintain increased online engagement like bypassing parental control, normalisation, legitimising use). The properties that determine the strategies are self-regulation and readiness for change (motivation in changing behaviours that cause objective difficulties).

PERCENTAGE OF ADOLESCENTS WITH FUNCTIONAL AND DYSFUNCTIONAL INTERNET BEHAVIOR BY GENDER, AGE, PARENTAL EDUCATIONAL LEVEL, AND COUNTRY

	<i>Functional Internet behavior</i> (N = 11,029)		<i>Dysfunctional Internet behavior<sup>a</sup></i> (N = 1,778)		<i>% Total dysfunctional Internet behavior</i> (95% CI)
	<i>% No signs of IAB</i> (95% CI)	<i>% Mild signs of IAB</i> (95% CI)	<i>% At risk for IAB</i> (95% CI)	<i>% IAB</i> (95% CI)	
All adolescents	47.2 (46.1–48.3)	38.9 (37.9–39.9)	12.7 (12.0–13.4)	1.2 (1.0–1.5)	13.9 (13.1–14.7)
Gender					
Female	48.5 (47.1–50.0)	38.8 (37.4–40.1)	11.8 (11.0–12.7)	0.9 (0.7–1.2)	12.7 (11.8–13.6)
Male	45.7 (44.3–47.2)	39.0 (37.7–40.3)	13.6 (12.7–14.6)	1.6 (1.3–2.0)	15.2 (14.2–16.3)
Age					
14–15 years	48.0 (46.7–49.4)	39 (37.7–40.2)	12 (11.2–12.8)	1.1 (0.8–1.4)	13.0 (12.2–14.0)
16–17 years	46.0 (44.3–47.6)	38.8 (37.3–40.3)	13.8 (12.7–14.9)	1.5 (1.2–1.9)	15.2 (14.2–16.4)
Parental education					
Low/middle	45.3 (43.4–47.1)	38.4 (36.7–40.1)	14.9 (13.6–16.3)	1.4 (1.1–1.9)	16.3 (14.9–17.8)
High	47.4 (46.0–48.9)	39.9 (38.6–41.3)	11.6 (10.8–12.5)	1.0 (0.8–1.4)	12.6 (11.8–13.5)
Spain	19.3 (17.2–21.6)	57.9 (55.4–60.5)	21.3 (19.2–23.5)	1.5 (0.9–2.3)	22.8 (20.6–25.1)
Romania	45.5 (42.6–48.5)	36.8 (34.3–39.3)	16.0 (13.9–18.4)	1.7 (1.1–2.4)	17.7 (15.5–20.1)
Poland	50.3 (47.9–52.8)	36.4 (34.3–38.7)	12.0 (10.5–13.7)	1.3 (0.8–1.9)	13.2 (11.6–15.0)
Greece	59.0 (56.2–61.7)	28.3 (26.0–30.8)	11.0 (9.4–12.9)	1.7 (1.1–2.5)	12.7 (10.9–14.8)
The Netherlands	45.3 (42.1–48.5)	42.5 (39.5–45.6)	11.4 (9.3–13.9)	0.8 (0.4–1.5)	12.2 (10.0–14.7)
Germany	53.9 (51.1–56.7)	35.4 (33.0–38.0)	9.7 (8.2–11.5)	0.9 (0.6–1.4)	10.6 (9.0–12.5)
Iceland	56.2 (53.5–58.9)	35.9 (33.3–38.5)	7.2 (5.9–8.7)	0.8 (0.4–1.6)	7.9 (6.4–9.7)

<sup>a</sup>Differences in % of DIB by gender, age, parental education, and country are all statistically significant at  $p < 0.001$ . CI, confidence interval; DIB, dysfunctional Internet behavior; IAB, Internet addictive behavior.

ODDS RATIOS AND 95% CONFIDENCE INTERVALS  
FOR RELATIONSHIPS BETWEEN ONLINE ACTIVITIES  
AND DYSFUNCTIONAL INTERNET BEHAVIOR

	% <sup>a</sup>	OR <sup>b</sup>	95% CI
Gambling	8.4	2.97	2.52–3.49
Social networking sites (e.g., Facebook)	92.5	2.62	1.95–3.51
Monetary prize games	15.5	2.58	2.26–2.95
Chat rooms	60.0	2.45	2.16–2.79
Internet forums	50.4	2.44	2.18–2.74
Searching for sexual information	35.4	2.40	2.16–2.67
Making personal Web sites or blogging	28.6	2.31	2.07–2.59
Instant messaging (e.g., MSN)	85.6	2.29	1.86–2.81
Downloading movies	66.9	2.16	1.87–2.50
Downloading music	87.8	2.15	1.72–2.70
Real-time strategy games	33.8	2.11	1.89–2.36
Downloading games	51.3	2.00	1.79–2.24
Downloading software	61.2	2.00	1.78–2.25
Multiplayer role-playing games	44.8	1.82	1.63–2.04
Searching for medical information	43.2	1.80	1.62–2.00
Shooter games	48.0	1.66	1.49–1.86
E-mail	84.3	1.57	1.31–1.87
News sites	74.5	1.48	1.31–1.69
Hobbies	82.7	1.42	1.22–1.66
Purchasing goods	53.1	1.31	1.17–1.47
Single-player games (e.g., solitaire, backgammon)	64.2	1.26	1.13–1.41
Watching videos or movies	97.5	1.01	0.68–1.48
Doing homework or research	93.3	0.68	0.57–0.83

<sup>a</sup>Proportion of adolescents reporting the specific activity at least weekly.

<sup>b</sup>All ORs are statistically highly significant ( $p < 0.001$ ) except for “watching videos or movies” ( $p = 0.98$ ).  
ORs, odds ratios.

<b>STUDY/REPORT N5</b>	
<b>TITLE of the STUDY/REPORT</b>	Network identity, the Internet addiction and Romanian teenagers
<b>NAME of the RESEARCHER (S)</b>	Cristinel Stefanescu, Vasile Chirita, Roxana Chirita, Gabriela Chele - University Hospital of Socola Iasi and the University of Medicine "Gr. T. Popa"
<b>YEAR of ISSUE</b>	2007
<b>TARGET GROUP of the STUDY/REPORT</b>	Students
<b>RESEARCH METHOD</b>	For collecting the data concerning this issue we used a questionnaire for the students with 28 items. These were aimed at highlighting: (a) the identification of a possible Internet addiction, (b) perceived realism of the Internet, and (c) construction of network identity. The data were processed using the SPSS statistics software, 13.0 versions.  The survey included a representative sample of 250 high school students. All the students come from 7 high schools in Iasi, Romania, aged between 15 to 18 years old and included 48.7% girls.
<b>LEVEL of the STUDY/REPORT</b>	Scientific report
<b>AUTHORITY</b>	4th WSEAS/IASME International Conference on Engineering Education, Agios Nikolaos, Crete Island, Greece, July 24-26, 2007
<b>URL</b>	<a href="http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.583.1300&amp;rep=rep1&amp;type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.583.1300&amp;rep=rep1&amp;type=pdf</a>
<b>ABSTRACT &amp; CONCLUSIONS</b>	

### **ABSTRACT**

We investigated factors that influence teenagers' engagement in risky Internet behavior, in particular the factors relating to development identity. All the students, aged between 15 to 18 years old, come from 7 high schools of Iasi, Romania. The studied group of samples comprised 250 teenagers who answered to a questionnaire comprising 28 questions related to online computer activities. The authors examined the online construction of identity at 250 teenagers, who had been involved in an online relationship and (a) the identification of a possible Internet addiction, (b) perceived realism of the Internet, and (c) construction of network identity. The survey reveal that amount of time spent online for the Internet are positively related to more favorable

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perceptions of online relationships. We find that approximately 3.5% of cases with possible pathological Internet use. Results indicated the predictor's factors when the adolescents search for their own identity or relationships. Having an identity and having a network identity are different subjects.

## **CONCLUSIONS**

Both the boys and the girls think that the computers are absolutely essential in today's society. All adolescents included in this study reported having online activities on the Internet. Results show a high tendency of students to spend more time online, giving up their social or family duties. 45% of teenagers report that often and very often it happens to stay longer in front of the computer than initially expected. The results within the groups show a tendency of the 15-18 years old students to lose control more often of the time spent on online. Concerning the time spent in using the computer, the results show that children spend a considerable amount of time online, on average more than five hours per day.

All students prefer to use the computer very late, after 11 pm. Participants were queried whether parents talk to them about what they do on the Internet, and whether they would tell their parents about receiving pornographic junk mail. More than 79% of the subjects admit they do not or only occasionally discuss online behavior with their parents.

We could not say that the family is not present when 15 to 18 year-olds use their computers, but this is rather a passive presence and lacking involvement. We used questions to assess the disinhibitory effects of the Internet. For example, items included "I prefer communicating online to face-to-face communication.", "I know most of my friends from online," and "My online friends understand me better than other people." and used a four-point Likert scale. Results indicated that the following factors were found to be predictors of adolescent's engagement in such face-to-face meetings: frequency of Internet use, frequency of chatting and gaming behavior, parental rules, the inappropriate messages received, websites have been visited, and type of internet advice heard. Favorite online activities are chat for both groups girls and boys.

Wolak et al. also speculated that online relationships may "amplify alienation among troubled youth by encouraging racism, fascination with violence, and other antisocial attitudes." Not is there any evidence from this data. Perceived realism of the Internet was measured using a Likert-type scale (the scale has a four-item). We find that a positive relationship between perceived realism of the Internet and perception online relationships. A total of 39 adolescents (15.6% of Internet users) reported having met someone in real life that they first encountered online. One very fundamental way in which participants express their identities in chat rooms is via their screen names, called nicknames or nicks. In a chat room, there is no physical embodiment of gender or other physical markers of identity. We found a high concordance between stated gender identity and the more

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implicit message conveyed by the nicknames. Both sexuality and personal identity are key adolescent issues. Consequently we see that adolescents spend a lot of time talking about sex, exchanging sexual jokes and sex-oriented literature as well as using sex slang. They are also sexually active. Boys were significantly more likely than girls to be pathological internet users (3.7% vs. 3.5%;  $p < 0.01$ ) and girls were more likely than boys to have no symptoms (34.5% vs. 26.2%;  $p < 0.01$ ). Teenagers who have become addicted to the computer will require increasing amounts of time in order to feel satisfied. When they do not have access to the computer, they may have symptoms of withdrawal, including anxiety, depression, irritability, trembling hands, restlessness and obsessive thinking, compulsive behavior or fantasizing about the Internet. Relationships in the real world may be neglected as those in the virtual world increase in importance. Academic performance is likely to suffer.



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<b>SAFER INTERNET CENTER for KIDS</b>	
<b>TITLE of the CENTER</b>	Romanian Safer Internet Centre
<b>URL</b>	<a href="http://www.oradenet.ro">http://www.oradenet.ro</a>
<b>ADDRESS</b>	Bucharest, Romania
<b>TELEPHONE</b>	+40 21 224 24 52
<b>E-MAIL</b>	<a href="mailto:contact@oradenet.ro">contact@oradenet.ro</a>
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