Researchers today devote particular attention to the role of mass media in the life of children and adolescents, particularly because young people are the most frequent users of media and most quickly adopt the use of newly emerging (electronic) media. In recent years and decades, there have been significant changes in the forms of media. The present article examines the findings of selected Slovene research in the area of the use of Internet amongst young people in Slovenia in connection with psychosocial characteristics of young people. The final conclusions of a review of various sources indicate that the proportion of Internet users in Slovenia is above the average of the EU15 and the EU27. The use of information and communications technology does not supplant direct interpersonal communication, but is to a large extent positively linked with it. Predominantly less favourable psychosocial characteristics of young people are positively linked with the use of the computer for entertainment purposes (social networking websites, playing computer games). In summary, it can be said that the use of ICT amongst Slovene youth is linked with both positive and negative aspects of the development of adolescents and their integration into society. It is therefore not possible to view the Internet use in a one-sided (negative) way. In the future, it will above all be necessary to focus on media content, not just form.

**Key words:** youth, psychosocial aspects, Internet, Slovenia

**Introduction**

In terms of access to the Internet, Slovenia is ranked in the upper half of EU countries. Data on Internet use amongst young people from 16 to 24 years of age in EU27 countries not only show that young people in Slovenia are frequent users of the Internet, but also that, in terms of frequency, Slovene youth ranks above the average for EU27 countries, and even above the average for the socioeconomically more developed countries of the EU15, as in Slovenia 82% of young people use the Internet (almost)
every day. However, a research report of the project EU Kids Online, which systematically studies the use of online technology in 21 European countries, shows that Slovenia is amongst the countries with the least collected data concerning what children and young people do online; what kind of specific risks (of a commercial, offensive, or pornographic nature) they encounter in the role of recipients, participants and protagonists; the level and nature of informedness on the safe use of online technology; the regulatory and educational role of parents; which technologies are most at stake, etc. The lack of this kind of information in Slovenia not only prevents the creation of an effective preventive, educational and political agenda, but also restricts international comparison (concerning how Slovene children differ from those in the rest of the EU, and what kind of risk is represented by the Slovene cultural and social context).

In contemporary times, the computer and the Internet have established themselves as important instruments of socialisation. For young people, the virtual space represents a haven where they can research and experiment with taking on various identities, where they can separate and liberate themselves from their parents, where they can establish intimate relationships and experience a sense of belonging, and to which they can direct their frustrations and fears. Thus the young person also satisfies his/her psychological needs in virtual reality. In studies that deal with the influence of ICT, we can find two principal theses. With regard to the influence of these technologies on the period of growing up and on the development of young people, the research determines: 1) powerful fantasies and utopian expectations, or 2) powerful fears. The first (“fantasy”) response understands young people as the avant-garde amongst technology users, while the second (“worried”) response perceives young people who use new technologies in their everyday lives as the most at-risk group – a group that frequently needs the assistance or supervision of adults in the use of new technologies.

The first response sees positive potential in new ICT, with studies primarily emphasising the expanded possibilities in education. In this con-

2 B. Lobe, S. Muha, Internet v vsakdanjem življenju slovenskih otrok in mladostnikov [The Internet in the Everyday Lives of Slovene Children and Young People], Ljubljana 2011.
3 Ibidem, p. 3.
text, the Internet is conceived as the young person’s window on the world, as a medium that encourages the child’s intuition and desire for knowledge. In addition to the motivational effect in acquiring new knowledge, such studies ascribe new technologies an influence on open, more tolerant, democratic communication, enabling young people freedom from the pressures of parents and the demands of others. Thus Papert asserts that new communication technologies increase communication between young people, expression and participation in public life, endeavours that were not previously accessible to young people in such a simple form. Young people are liberated from the frameworks of social norms and expectations that are established by adults. Tapscott refers to young people as the “electronic generation”, a generation that knows how to behave democratically, is more responsive socially, and is better informed than previous generations. He foresees a social awakening that will surpass the traditional frameworks of learning and power. Numerous contemporary studies confirm the positive effects of ICT on the development of society and the individual. Certain studies, for instance, demonstrate that Internet users achieve a higher than average value in indicators of positive psychosocial development (Chen and Persson; Jackson), while research by Johnson shows that Internet use is positively linked with the cognitive development of the child. It is also known from research into the media habits of Slovene youth that the Internet is used more frequently by young people who have above average academic success (Dolničar and Nadoh). Ohannessian reports that use of the media can also be a safety mechanism in problematic families. Her research found that boys who come from such families and more frequently followed the media demonstrated a lower level of anxiety (although at the same time an inverse link was found amongst girls).

7 A. Žavbi, I. Brvar Vipavc, Potrebe mladih po informacijah, p. 4.
9 L.A. Jackson, Self-Concept, Self-Esteem, Gender, Race, and Information Technology Use, Cyberpsychology and Behavior, 2009, 12, p. 437-440.
The second tendency in the discussion of new technologies is based on the argumentation of the negative influences on young people. Studies of this type do not focus on educational potential but rather emphasise the marketing of entertainment, mediated with the aid of ICT. With regard to the use of computers and the Internet, when the segment of education is separated from entertainment, which is conceived negatively, the possibility of education being entertaining, or of entertainment also being educational, is excluded. In the argumentation of the negative influences of new communication technologies, studies typically emphasise the influence on behaviour, focusing particularly on the frequent imitation of violence, and of young people’s intervention in their own bodies (physical injury). There is an obvious transfer of theories about the negative influence of television to the area of new communication technologies (computer, Internet). Griffiths\(^{13}\) points out that the use of the computer and the Internet can influence the functioning of the brain and encouraging epileptic attacks, as well as fostering addiction to the Internet, having a negative influence on the imaginative world of the child and on his/her academic success, causing antisocial behaviour and destroying personal interaction and social life. Not least, within the segment of fear of the influences of new communication technologies are ethical-moral reservations (researchers have, for instance, found that heroes with negative characteristics are bolstered in computer games, while there is a stereotypical presentation of gender roles, male violence directed at women, etc.). There are particularly strong reservations with regard to access to pornographic content on the Internet (fear of the potential for online paedophile abuse, of pornomarketing directed at young people, etc.). Contemporary research of the negative influence of ICT highlights numerous indicators linked with less favourable influences on the psychosocial development of young people.\(^{14}\) Amongst other things, research particularly highlights the more frequent symptoms of depression and poor academic success (Mythily et al.)\(^{15}\) while negative influences are also linked with the more frequent use of alcohol, tobacco and other substances, as well as with the poorer state of health of young people (Sun et al., after Lavrič).\(^{16}\)


\(^{16}\) M. Lavrič (ed.), *Mladina 2010*.
Purpose of the article

In the present article, we are interested in the characteristics and psychosocial aspects of Internet use by young people in Slovenia. For this purpose, we survey selected findings of certain studies in this area. We are interested in how the use of the Internet amongst young people in Slovenia is linked with both the positive and negative psychosocial aspects of the lives of young people and their integration into society. This kind of information is important for learning about risk and for creating effective preventive and educational interventions. In the article, we rely on the results of the following research: 1) Mladina 2010, undertaken by the Faculty of Arts of the University of Maribor and Interstat, 2) a study amongst young users of Internet forums on self-esteem and the nature of social interaction in virtual and real environments (Cerar, 2007)\(^\text{17}\), as well as the first phase of a study entitled “The Internet in the Everyday Lives of Slovene Children and Young People” (Lobe and Muha, 2011).\(^\text{18}\)

Presentation and concise findings of the selected research

**Mladina 2010.** The research Mladina 2010 (Lavrič et al.)\(^\text{19}\) is amongst studies of Slovene youth and was undertaken as a conceptual and methodological continuation of the tradition of researching youth in Slovenia. The study covers various areas of the lives of young people. In the chapter about the virtualisation of everyday life, the authors analyse the relationship between personal forms of socialising and the use of ICT, as well as the frequency of individual computer activities. They also analyse sociodemographic factors and psychosocial correlates of the use of ICT for entertainment and informative purposes. The study includes a representative sample with regard to gender, age, type of settlement and region. The sample includes 1,257 young people aged from 15 to 29 years. The findings related to the psychosocial aspects of use of the Internet are as follows:

- amongst young people in Slovenia, the use of ICT does not supplant direct (interpersonal) communication, as to a large extent such use directly brings together those young people who use media more extensively,

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\(^{17}\) M. Cerar, *Vpliv mladostnikovega samovrednotenja na iskanje socialnih stikov prek spleta* [The Influence of Young Peoples’ Self-Esteem on Seeking Social Contact through the Internet], Socialna pedagogika, 2007, 11, 3, p. 287-310.

\(^{18}\) B. Lobe, S. Muha, *Internet v vsakdanjem življenju*.

\(^{19}\) M. Lavrič (ed.), *Mladina 2010*. 
the exception being those young people who frequently follow informative-political media;

– virtual communication and the use of mass media supplement direct communication, i.e., young people communicate virtually with individuals with whom they also communicate directly (of course, on other “non-virtual” occasions);

– amongst Slovene youth, one cannot speak of a negative link between the use of ICT and the frequency of direct, personal socialising and communication: the majority of direct forms of socialising experience only a minimal reduction in 2010 in comparison with 2000 (socialising with one’s partner and socialising with friends, while there is a slightly greater reduction in frequency of engagement with one’s own children/brothers/sisters);

– playing computer games was the only activity that also displayed a statistically characteristic correlate of social exclusion;

– virtual activities and following mass media largely coincide with the cultural, artistic and political-humanitarian activities of Slovene youth;

– the most frequent Internet activities coincide with the sphere of entertainment, amusement and communication;

– psychologically less stable young people spend more time occupied with ICT and, in this sense, the use of media offers a specific compensational function; this is particularly true for young people who spend more time on Internet social networks;

– various kinds of activity (Internet social networking, learning and education, acquiring information, work activities, etc.) are linked with psychological constructs in various orientations and intensities;

– young people who spend more time on social networking websites sleep more than their peers on average and demonstrate fears linked with various areas of life to a greater extent, while participating to a lesser extent in an authoritarian socialisation style;

– amongst psychosocial correlates, the following of Internet entertainment content by Slovene youth demonstrates a link with lower satisfaction with life, more frequent experience of stress, less satisfaction with one’s own figure, greater anomie, a hedonistic and fatalistic orientation towards the present, authoritarianism, narcissistic exploitation, alienation, permissive socialisation and deviance;

– amongst frequent users of the Internet for social networking, the following psychosocial correlates are statistically important: narcissistic grandiosity and exploitation, alienation, anomie, orientation towards the future, a hedonistic and fatalistic orientation towards the present and deviance;
– computer games are played more frequently by young people who have a poor understanding with their mother and father, feel to a lesser degree that their parents love them, and have to a larger extent participated in authoritarian and especially permissive socialisation styles.

**Research amongst young users of Internet forums and chat rooms.** Amongst young Slovene users of Internet forums and chat rooms Cerar\(^{20}\) determined differences in the frequency of communication with known and unknown interlocutors in the virtual environment, as well as differences in the number of friends of the same and different gender in the virtual and real environment as a consequence of various levels of self-esteem. A modified version of the Rosenberg Self-Esteem Scale was adopted to measure the level of self-esteem (Cerar, 2007).\(^{21}\) The research was undertaken via the Internet using a questionnaire prepared specifically for this purpose. It includes a sample of 806 young people with an average age of 15 years and 11 months. The findings of the research show:

– the clear tendency of a link between self-esteem and the frequency and type of contact in the virtual environment;

– the existence of numerous motivational factors for establishing new and maintaining old contacts and friends through the Internet;

– young people on the extremes (those with the lowest and the highest level of self-esteem) communicate somewhat more frequently with known and unknown collocutors in the virtual environment;

– the degree of a young person’s self-esteem has an important influence on the establishment of relationships and the number of friends of the same and the opposite gender in the real environment, while it has significantly less influence on the establishment of friendly contacts in the virtual environment, where all young people successfully establish interpersonal relationships with peers and communicate with them with a similar frequency irrespective of the level of self-esteem;

– young people with the lowest level of self-esteem have the greatest number of friends in the virtual environment, and most frequently communicate with unknown and known collocutors in the virtual environment.

**The Internet in the Everyday Lives of Slovene Children and Young People.** These are the first findings of research (Lobe, Muha, 2011)\(^{22}\) amongst children and young people aged 9–16 years in Slovenia, aimed at gaining an overall insight into the regulation of opportunities and risks on


\(^{21}\) Ibidem.

\(^{22}\) B. Lobe, S. Muha, *Internet v vsakdanjem življenju*. 
the Internet amongst Slovene children. The research, which was undertaken from May to July 2010, compares children with regard to age, gender and socioeconomic status. It presents the views of children and their parents, as well as attempting to compare Slovene children with other children in Europe. The research was undertaken within the framework of a larger international study of 25 European countries made by the EU Kids Online network, which is supported by the Safer Internet Programme of the European Commission. During the research, 691 children aged from 8 to 19 years were surveyed at home. The results show:

- almost half of children (48%) are satisfied with the quantity of useful things for children on the Internet, 45% of children agree with the assertion that there are a great number of useful things on the Internet, while 7% of children believe that there are not enough useful things for children on the Internet;
- 74% of Slovene children aged 7 to 16 years have created a profile on Internet social networking websites, which is well above the European average;
- the majority of children (89%) first got to know the people with whom they communicate through the Internet in the real environment;
- the assessment of children with regard to their own negative experience is approximately three times lower than the assessment of the potential for negative experience for their peers (14% with regard to their own experience, as opposed to a 40% assessment of danger in the Internet environment for peers);
- two out of five children judge that the Internet is not a safe environment for children of their own age, while the proportion of European children with this assessment is even greater (55%);
- the greatest number of children have been exposed to Internet harassment as victims of unpleasant and insulting messages;
- the greatest number of Slovene children who have had a negative experience on the Internet belong to age group of 15 and 16 years.

Concluding findings

Until recently, research of the understanding of Internet use amongst young people in Slovenia has been more or less undertaken with the use of statistical trends, and has less frequently had a qualitative and contextual orientation. In the present article, we have surveyed the findings of selected research that sheds light on certain psychosocial aspects of Internet use amongst Slovene young people. As was pointed out in the introduction,
there is still discussion today amongst researchers and social critics about whether the Internet improves or worsens interpersonal relationships and the quality of life of young people in the (real) community. From a survey of findings of selected research, we can summarise that the results highlight both a positive and negative experience of Internet use amongst young people in Slovenia. In all of the three selected research projects, the findings show that the use of ICT does not supplant the direct communication of young people in real environments, while the use of Internet social networks offers psychologically less stable young people a specific compensational function, as demonstrated by the findings of the research Mladina 2010. In the research by Cerar\(^{23}\) (2007), the author also highlights the compensational function of Internet social networks, as it emerges that it is precisely young people with the lowest level of self-esteem who have the highest number of friends in the virtual environment, and who most frequently communicate in the virtual environment with both known and unknown collocutors. The positive influences of Internet social networking are also shown by the results of the research “Youth and the Net”, where the authors conclude that adults are too quick to label the risk on the Internet as negative, as it is clear from the research that, with regard to young people, a great number of cases indicate a positive experience. Although in the case of the age group from 15 to 19 years as many as 55% of young people meet in the real environment with strangers whom they have got to know on the Internet, the great majority of these young people (88%) have a good or very good experience with such meetings.\(^{24}\) Thus we can conclude from the results that it is necessary to carefully differentiate between Internet risks that can end not only negatively but also positively for young people, and those that have only negative consequences.

The importance of the compensational function of social networks on the Internet is also highlighted by Moharan-Martin and Schumacher\(^{25}\) (2003), who determined that the Internet primarily attracts lonely young people, and that it is precisely the anonymity of the Internet and the absence of eye to eye communication that can reduce social anxiety, thus increasing emotional support on the Internet. By communicating through the Internet, young people with less developed social skills can regulate the negative experience of loneliness. Engelberg and Sjoeberg\(^{26}\) (2004) believe

\(^{23}\) M. Cerar, Vpliv mladostnikovega samovrednotenja, p. 287-310.
\(^{24}\) B. Lobe, S. Muha, Internet v vsakdanjem življenju.
that lonelier young people have a stronger affinity to the Internet. They presuppose that lonely young people have less developed socio-cognitive skills and difficulties in peer groups, in recognising common norms and in interpreting social innuendo, and therefore devote more time to the Internet, where they find a place that is easier to understand and master, and where they can actively participate in various activities. The anonymity of Internet users and the opportunity to take on roles represent a freedom that does not exist in communication in the real environment. Recent research has also determined that teenagers most frequently use the Internet in order to strengthen their relationship with reality, writing and creating blogs and their own web pages because they want to have a feeling that they can actually master something in reality and that they are competent (Guan and Subrahmanyam, 2009).27

In the research of McMillan and Morrison28 (2006), it is determined that young people differentiate between real communities and virtual communities on the Internet. However, real communities frequently form the basis for the emergence of virtual communities, a fact that is confirmed by the results of the selected Slovene research. The Internet enables young people to develop, manage and grow these communities; however, the experience of connection most frequently also exists in the real world. McMillan and Morrison analysed essays by 72 young people aged from 13 to 18 years, in order to determine how the Internet influences the lives of young people. They determined that the majority of young people link the positive side of the Internet with the ability to create various identities, as young people define themselves as unique individuals. This is in line with theories stating that Internet identities do not differ significantly from those in real life. Some people place importance on the ability to seek alternative dominant views of the world and life, thus providing an opportunity for them to educate themselves.

Virtual worlds enable children to build educational and emotional capabilities in various ways by helping to encourage imagination and general knowledge. Researchers (after McMillan and Morrison)29 also foresee that the generation of children and young people that has grown up with the Internet will most likely be better educated, more creative and have more social skills, as the individual can experiment with his/her identity on the

28 J.S. McMillian, M. Morrison, Coming of age of the internet: A qualitative exploration of how the internet has become an integral part of young peoples lives, New media and Society, 2006, 8, 1, p.73-95.
29 Ibidem.
Internet. They emphasise that it is precisely the Internet that educates young people and develops their creativity, as well as encouraging better cooperation. However, it is precisely the fact that the Internet enables access to everyone and everything that can also become a reason for certain negative experiences and dangers. From the findings of the research presented in the present article, it is evident that the virtual activities of young people in Slovenia largely coincide with cultural, artistic and political-humanitarian activities (Mladina)\(^30\), and that young people are largely satisfied with the usefulness of the information that they acquire on the Internet (Lobe, Muha)\(^31\). The study “Youth and the Net” also shows that the assessment of children with regard to their own negative experience is approximately three times lower than their assessment of the negative experiences of their peers (14% with regard to their own experience, as opposed to 40% assessment of danger in the Internet environment for their peers). The ENISA\(^32\) (2008) emphasises that the main areas of risk regarding Internet use amongst young people are: violence, harassment, illegal content and child abuse. A further problem can lie in unsecured environments, and in the lack of educational content on the Internet. In the Slovene study “Youth and the Net”, it emerged that the greatest number of children had been exposed to Internet harassment as victims of unpleasant and insulting messages. The authors of this research determine that in general the behaviour of older children on the Internet is more risky, while, on the other hand, these children make better use of the advantages offered by the Internet and include themselves in more activities. Amongst the negative risks, the results of the research highlight peer violence through the Internet and unwanted sexual commentary, which has been received by more than a third of children (Lobe, Muha)\(^33\).

The characteristics of the emerging Internet culture can reinforce narcissistic subject structures, enabling users to feel omnipotence and protection against the loss that is otherwise brought by interpersonal relationships (Ule et al)\(^34\). The findings regarding links between the frequency of Internet use and certain psychosocial correlates in the research Mladina 2010 confirm this thesis, demonstrating a statistically significant positive


\(^{31}\) B. Lobe, S. Muha, Internet v vsakdanjem življenju.


\(^{33}\) B. Lobe, S. Muha, Internet v vsakdanjem življenju.

link between the use of Internet social networks and the correlate of narcissistic grandiosity. As in certain other studies mentioned in the introduction to the present article, the Slovene research also showed a negative influence of frequent use of the Internet in connection with fears associated with various areas of the lives of young people. Negative experiences in the use of the Internet are primarily evident in the area of playing computer games and in more frequent use of social networks, which is also reflected in young people in greater dissatisfaction with life.

In summary, it can be stated that the use of ICT amongst Slovene young people is linked both with positive and negative aspects of the development of young people and their integration into society. We are aware that the reactions and (pedagogical) interventions that might follow from the acquired results are primarily dependent on the various understandings of, or relationships towards, new technologies. In the literature and research on ICT, one can, in general, observe a linear (unidirectional, causal, consequential) understanding of the influence of ICT on the individual and his/her behaviour, while a circular and contextual understanding of the influences is less evident. The results show that the use of the computer for entertainment purposes (Internet sites for social networking, playing computer games) is positively linked with the predominantly less favourable psychosocial characteristics of young people. In this regard, it is necessary to emphasise that the computer and the Internet have an educational function or function as means for entertainment only when they have become integrated and established in school and social contexts and in relationships, in the spending of free time, thus in concrete social relationships. We therefore believe that in the future it will be necessary to devote more attention to qualitative studies of these contexts, thus contributing to a greater understanding of the experiences that young people form in the virtual environment, and increasing the understanding of the significance of this kind of relationship for the psychosocial development of young people.

**BIBLIOGRAPHY**

Cerar M., *Vpliv mladostnikovega samovrednotenja na iskanje socialnih stikov prek spleta* [The Influence of Young Peoples’ Self-Esteem on Seeking Social Contact through the Internet], Socialna pedagogika, 2007, 11, 3.


Lobe B., Muha S., *Internet v vsakdanjem življenju slovenskih otrok in mladostnikov [The Internet in the Everyday Lives of Slovene Children and Young People]*, University of Ljubljana, Faculty of Social Sciences, Centre for Methodology and Informatics, Ljubljana, 2011.


Streszczenie

Współcześni badacze kierują szczególną uwagę na rolę mass mediów w życiu dzieci i adolescentów przede wszystkim dlatego, iż grupy te najszybciej stają się użytkownikami zmieniających się mediów elektronicznych. Szczególne zmiany w tym zakresie przyniosły ostatnie dekady. W artykule przedstawiono wybrane dane dotyczące używania Internetu przez młodych ludzi w Słowenii.

Okazuje się, że słoweńska młodzież, na podstawie zestawienia danych empirycznych, osiąga wyniki powyżej średniej, jeśli idzie o użytkowanie Internetu, ntle innych krajów Unii Europejskiej (EU15 i EU27). Komunikacja zapośredniczona nie likwiduje komunikacji twarzą w twarz – jest raczej jej wartościowym uzupełnieniem. Zjawiskiem związanym z bardziej negatywnymi psychospołecznymi charakterystykami jest używanie komputera dla rozrywki (portale społecznościowe, korzystanie z gier komputerowych).

Podsumowując, technologie informacyjno-komunikacyjne są związane zarówno z pozytywnymi, jak i negatywnymi aspektami rozwoju słoweńskich adolescentów. Nie można zatem oceniać Internetu w jeden, negatywny sposób. W przyszłości istotna będzie koncentracja na treści mediów, a nie tylko formie przekazu.

Słowa klucze: młodzież, aspekty psychospołeczne, Internet, Słowenia