Abstract—This article deals with the questions of social networks use by Czech contemporary adolescent young people. Adolescence is defined as a quite long period of changes in physical, psychical and social spheres of humans’ personality. And according to this conception this term can be differentiated as early, middle and late adolescence. In the period of adolescence we can behold the process of searching of one’s own identity as the important virtue. This process is also significantly influenced by social environment where an individual moves along. Nowadays internet social networks interlope with the lives of the young adolescents considerably. Adolescents have the possibility to extend their social experience, to establish new contacts, to communicate with their peers and in this way to form their own identity there. The aim of the research was to report social networks use by contemporary Czech adolescents, about motives and reasons why they use those networks. Another aim was to find out if the connection between online friendship and the real relations among adolescents exists and if there are any distinctions in social networks use among boys and girls. It follows from the results that most of our respondents use social networks regularly, especially because they need to be in contact with somebody, in this way to have the possibility to keep the contacts with their friends and their peers or because of lack of another kind of amusement. The differences appeared between genders. Girls use social networks mainly to meet friends and to be in contact with somebody. On the other hand, boys reported that except their need to be in contact with somebody another important motive is boredom. Czech adolescents mostly use Facebook and Youtube social networks.

Keywords—Adolescence, communication, identity, social networks.

I. INTRODUCTION

Young people, especially basic schools pupils, have their place in the generations that grow up in information society and using of modern communication technologies belongs to them from their babyhood. Computerization and introduction of the new and burgeoning information and communication technologies to the society belong to the process of informatization of the society. Sak and Saková [9] point out that transformation of living area and its component parts label contemporary adolescents significantly. Young generation social field is changed by mass media in the most radical way. The share of virtual reality increases in the living area of the young generation while the share of natural reality decreases. Some authors (f. e. Prensky, 2001, Palfrey, 2008) use the term “digital natives” for those people who move in the environment equipped with modern computer technologies without problems. [7], [5]. A digital native is a person for whom digital technologies already existed when they were born, and hence has grown up with digital technology such as computers, the Internet, mobile phones and MP3s. A digital immigrant is an individual who grew up without digital technology and adopted it later. Contemporary generations of children and adolescents are absolutely familiar with modern information and communication means and they cope with them spontaneously and without troubles. Communication rapidity and access to the large amount of information are positives that children gain from the new living environment. On the contrary virtualization of human relations and digitalization of the needs belong to the weak points of this development. Sak and Saková [9] point that through digitalization of the human being and “through interaction in cyberspace those component parts of a man’s personality that are functional, active and needful in this interaction are developed”. That is why the young generation communicates and lives its social relations in another way than the previous generations.

In this text we result from the project Specific research realized under the name “Construction of Identity and Contemporary Adolescent’s Identity Experiments within the Framework of social networks” at the Faculty of Education at the University Hradec Králové in 2010. The research topic asks questions connected with the need to form individual identity, eventually to experiment with it as well. Integral part of this analysis is the effort to disclose the task of social networks in the area of contemporary adolescents´ identity construction. Within the frame of processing we took advantage of inquiry technique, semantic maps analysis and social networks content analysis. This elaborated topic in the context with the phenomenon of social networks has not been in the Czech children and young people research often worked out so far and it should contribute to deeper analysis of the period of adolescence in the contemporary society promoted in the media.

II. THEORETICAL BACKGROUND

The definition of adolescence as puberty and youth respects the fact that some processes making prolongation of the period of adolescence – secular acceleration, lengthening of preparation for adulthood, adolescent culture or adolescent life style - run in advanced industrial countries concurrently. In this conception adolescence is inwards differentiated in the stages of early, middle and late puberty. The significant values for adolescents are self-concept, self-reflection and self-fulfillment. The process of self-reflection and one’s own identity searching in the period of adolescence takes place in the particular cultural and social environment. The process of one’s identity formation in the teenage period is multilayered. Except answering the question “Who am I?” for adolescents it is important to know the sense of their own stability, (self)
competence and well-being. Mainly in the period of the late adolescence there are present not only questions about one’s own place and direction but also questions aimed to satisfaction with one’s own life. [2]

Differentiation of adolescence brings the following characteristics in the particular separate stages [2]:

- The early adolescence includes the period from the age of ten to thirteen and it is typical for its physical transition. Psychical and social changes happen as a result of adolescent transition. An increased interest in peers of the opposite sex can be a good example among others. To their interest in contemporaries the early adolescents of this day can add online friendship with peers from various world cultures. Eventually virtual space of social networks offers them possibility to become friends with those people who they know only from online environment.

- The middle adolescence begins at the age of fourteen and finishes at the age of sixteen. It is the period of one’s own thinking and evaluation of other adolescents. In this stage to a great extend we can watch so called specific life-style of adolescents who try to differ, f. e. with clothing, they prefer specific kind of music. Nowadays evaluation and self-evaluation can run and it mostly runs via social networks. It happens within various “sections”, for example voting, chats, shared topics, blogs, statuses, profiles.

- The late adolescence starts from the age of seventeen and it finishes at about twenty years of age. This stage is explicitly directed toward adulthood; social aspect of one’s identity is accentuated there – the need to belong somewhere, to share something with the others. Together with it in this stage adolescent thinks about his or her own future life in relation with his or her future career but also with a view to his or her partnership.

One of our important development task is to form one’s own identity – so called ego – identity. [2]

Each age stage in the period of adolescence brings specific features in the process of connecting social relations, identity formation and needs to be integrated into peer groups. However, nowadays informal social groups formation does not interfere only to the real environment of children and young people but it also takes place in virtual cyberspace. For those young individuals who involve in the society worse internet social networks can bring opportunity to connect to the chosen social (peer) group more easily.

Nowadays more and more often we meet the fact that identity formation in the group of adolescents does not take place only in the real environment. With the development of ICT more and more often many adolescents become the part of the virtual space voluntarily and at times they rather prefer self-presentation, communication and interpersonal relations in cyberspace. Frequently it is combination of online and offline friendships – adolescents make real friendships with those whom they met in cyberspace.

Contemporary adolescents can test their competences just through social networks. For example, lonely adolescents use online communication indirectly to improve their social competences with their identity experiments. [11] The other adolescents compensate their shyness with online identity experiments; they try reaction of the others and they facilitate connecting with friends. [6] Online environment is very popular for contemporary adolescents. Adolescents find a space there where they can present themselves and study their identity. [4]

More and more often an individual reviews his inner processes in the context with his environment, especially when the Internet is one of communication media.

Outside we commonly meet things and we can describe them with words and thoughts in more or less exact way – we can describe the surrounding reality truly or untruly. Virtual sphere represents the basic spreading of reality sphere and it influences living conditions more than other technical innovations. [8]

The Internet has brought an absolutely new method of self-presentation within the framework of social networks, f. e. MySpace, where each personality can form his profile which reflects his identity. MySpace offers opportunity to assert traditional ways identity formation but in different environment [3].

Recent researches have referred to the relation between extroversion and introversion and adolescent online communication technologies use. It results from the researches that extrovert adolescents communicate online more often and they are more open which makes online friendship formation easy. Introvert adolescents are more motivated to communicate online in order to compensate insufficient social experience. It increases their opportunity to make online friendship. Introverts presented their true identity and made online friendships more often than extroverts. However, the model showed that opportunity to open oneself in the nameless environment did not automatically lead introverts to be open. Introversion does not have the direct influence on online friendship formation. [6]

Further researches show that lonely adolescents use cyberspace as a possibility to meet online friends, as emotional support and thus they improve their social behaviour. Online environment makes them easy to increase their social competence safely. At the same time respondents indicated that their online friends understand them better and that they have a good time with them. [3]. At this point opinions of specialists who claim that online environment brings some positive features portable to the real environment are confirmed.

In the environment of face-to-face interactions reducing of uncertainty is established in notable aspects of self – such as physical attractiveness or non-verbal behaviour. Decreasing of uncertainty online is better reduced in terms of information - it means to be open. [8] If we apply mainly verbal communication in online environment it is easier to force the others to perceive us as we wish. We can modify and influence verbal communication better, for example if we want to present things that we consider to be attractive, positive and that we think our neighbourhood can accept positively. On the other hand, in face-to-face communication we work with both types of communication necessarily and to such an extent we are not able to present ourselves in such a way we want the others to perceive us.

In the face-to-face environment at first we meet people and then we know them; in cyberspace we can know people and
then we can choose if we want to meet them. Friendship that began online can be from its beginning more intimate in comparison with friendship that began offline at the same time. Possibility to form friendship online is useful for those individuals who are lonely, shy, without physical attractiveness. [10]

III. EMPIRICAL INVESTIGATIONS

The area of internet social networks use in the Czech environment has not been mapped out too well so far. Regular surveys of internet social networks use are realized by the company Microsoft; the other interesting projects are practised by the Center of Prevention of Hazard Virtual Communication at Palacký University in Olomouc. Results of our survey start from the project Specific research realized under the name "Identity Construction and Adolescent's Identity Experiments on Social Networks" at the Faculty of Education at the University Hradec Králové in 2010. Within the framework of this survey we mapped young generation internet social networks use, the most often ways and reasons of using them. The aim of this part of survey was to find out which particular internet social networks are used by young people and how often, why and how. We also asked the question how intense the circle of internet friends of the young respondents is and how it is possible to evaluate it in comparison with the circle of friends from the immediate social vicinity of a person. We presupposed that internet social networks use is a part of subculture of the contemporary young generation. That is why motives for using them are not only accessibility and attractiveness but also the pressure of a peer group which demands this way of communication.

Basic research questions were focused on:

- What social networks are used by contemporary adolescents.
- How often do they use them.
- What does adolescents motivate to use social networks.
- What kinds of communication within social networks are chosen by adolescents.
- What is the relation among real relations and relation in virtual space by contemporary adolescents.
- If there are any differences in of social networks use between girls and boys or with a view to one's age.

Our research survey was running in the first half of the year 2010 with the form of questionnaire among respondents from 11 to 19 years old attending basic and secondary schools. It was casual selection and it was made in the Hradec Králové region. Among secondary schools there were grammar schools, secondary vocational schools and secondary training colleges as well. In our questionnaire survey 708 respondents participated - 312 girls and 396 boys. The addressed respondents filled the questionnaire containing 32 items; partly formed with closed questions, partly with open questions with possibility to answer them without restraints.

Our survey displayed that internet social networks have really marked interest. 98% of respondents answered positively the question if they sometimes use internet social networks. Our survey results fully correspond to Krejčí and Kopecký findings who pointed in their survey that 99,5 % children know at least one social network. [1] This matter of fact confirmed a marked interest and considerable socialization reach of internet social environment for a young generation. Mainly boys (85 %) are those respondents who never use social networks. From the general view girls use social networks a little bit more.

During surveying chosen internet social networks used by respondents it was possible to observe tendency to divide networks into two groups. The first one could include the YouTube a Facebook networks, which could be labelled as well - known and used very often. On the other hand, in the second group there are less wide-spread networks with regard to knowledge and using by the young generation. We speak about MySpace and Twitter networks. The results are shown in the fig. 1.

Fig. 1 respondents chosen networks use

![Respondents chosen networks use](image1)

Our survey results correspond to Krejčí and Kopecký 2009 research where they found that the most used social networks are YouTube and Facebook [1]. Boys used social networks approximately as often as girls; however, girls used Facebook a little bit more often than boys.

Fig. 2 selected social networks use frequency

![Selected social networks use frequency](image2)
We considered frequent network use as any network use at least once a day. In this way Facebook and YouTube are used by more than 50% of respondents that have opened an account there. Therefore we can say that internet social networks are daily friends for more than half of contemporary children. It was proved that 80% of respondents use internet social networks really every day.

The main reasons of using were “the need to be in contact with somebody”, “there are all my friends” and “boredom” (table 1). The different power of reasons for networks use came out between genders. While the important stimulus of using for girls was the fact they want to be in contact with somebody and there are all their friends there; the important role for boys was boredom. The other factors are for respondents much less radical. Therefore we can consider that internet social networks use fills primarily the need of social communication, even if need to satisfy peer group demands is not irrelevant, mainly by girls. The influence of boredom is also an interesting factor. The need to know new people is obvious in the period of adolescence and it enables them to widen their social field.

### Table 1

<table>
<thead>
<tr>
<th>Reasons of using ISN/ Gender</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need to be in contact with somebody</td>
<td>30,0</td>
<td>37,3</td>
<td>33,1</td>
</tr>
<tr>
<td>All my friends are there</td>
<td>16,7</td>
<td>24,0</td>
<td>19,9</td>
</tr>
<tr>
<td>Boredom</td>
<td>25,5</td>
<td>11,5</td>
<td>19,2</td>
</tr>
<tr>
<td>I want to meet new people</td>
<td>11,0</td>
<td>11,0</td>
<td>11,0</td>
</tr>
<tr>
<td>I want to have information about people</td>
<td>7,2</td>
<td>9,2</td>
<td>8,1</td>
</tr>
<tr>
<td>I want to be “in”</td>
<td>2,0</td>
<td>0,7</td>
<td>1,6</td>
</tr>
<tr>
<td>Anything else</td>
<td>6,8</td>
<td>6,3</td>
<td>7,1</td>
</tr>
<tr>
<td>Total</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
</tr>
</tbody>
</table>

In regard to the research results the main profit of internet social networks use for young people is “contact with the others” and “knowledge what happens”. In this sense the matter of question is purely social reasons. The most experienced loss in connection with ISN use is waste of time (75,4%). More than one quarter of respondents also think that in this way they loose face-to-face contacts with people from their environment. 21% of respondents are aware of losing their privacy what they accept negatively. Bigger differences in answering those questions in regard to gender were not found. It appears that young people are able to review positive and negative sides of social networks use.

Within the framework of survey we also tried to contextualize internet social networks use to the contemporary young generation free-time activities. That is why one question for young respondents was about their free-time activities and what the role of communication via social networks in free-time activities is. Interesting differences appeared among boys and girls. The most mentioned free-time activities there was face-to-face communication with friends, meeting, story telling, experience sharing either individually or in various hobby groups, gangs etc. At the second place it was work with the Internet and orientation in cyberspace. Usually 18% of adolescents devote their leisure time to the communication via social networks. In their free time boys watch television, work with PC and use the Internet much more often. On the contrary girls communicate with the others via internet social network, read books or magazines and listen to music more often. They also spend their free time with personal communication with their friends more often than boys. It results that girls are more interested in social contacts formation and maintaining both in the real environment and via social networks.

That is why we were interested in the fact if in its immediate vicinity the contemporary young generation finds people considered to be friends. 5% of our young respondents admitted that in their real environment they do not have any friend, ¾ have more such friends, and 20% have one friend. 69% think that they have many friends, on the contrary 28% think the number is lower. To be specific the mentioned numbers of friends were up to 500. We can speculate what the contemporary young generation considers to be friendship and how the number of friends is influenced by internet social networks.

Those respondents having only one or none friend and they assessed their situation that they have rather few friends, in their free time they mentioned watching television, reading and the Internet use more often but they did not talk about social networks use. In the internet environment there can also be seen various activities that we can differ as social and dissocial. There is the less number of introvert individuals with the minor impact of their social fields. They also differed in using social networks. They share photos with their friends less commonly than individuals with more friends, they also use networks to communicate with friends not so often. Otherwise they play online games on social networks and they watch videos there.

### Table 2

<table>
<thead>
<tr>
<th>Question/ Number of contacts (friends)</th>
<th>1-9</th>
<th>10-99</th>
<th>100 and more</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many contacts do you have on your account?</td>
<td>2,5</td>
<td>28,8</td>
<td>68,7</td>
<td>100,0</td>
</tr>
<tr>
<td>How many of these contacts do you consider to be your friends?</td>
<td>10,1</td>
<td>57,7</td>
<td>42,3</td>
<td>100,0</td>
</tr>
<tr>
<td>How many of these online friends do you know personally?</td>
<td>5,1</td>
<td>46,8</td>
<td>53,2</td>
<td>100,0</td>
</tr>
</tbody>
</table>

The amount of contacts that young people have in social networks vary among different ranges, from units (fewer than 4% of social networks users have up to 10 contacts) to
thousands (the maximum mentioned number was 2080). Answer to the question “How many of these contacts do you consider to be your friends?” also showed an interesting dispersion, from units to hundreds and in two cases to thousands. The big extent appeared during finding out how many of these friends from social networks the respondents know personally. The reports are shown in the table 2.

From the general view young people use internet social networks mainly to meet, gain friends and to maintain contacts (table 3). The most common way of internet social networks use is to mix in and to maintain friendships (64%). In these ways the young generation seek via modern technologies similar and close individuals who they want to enter social contacts with. The other frequent ways of using it are to meet people, to maintain contacts and communication; another orientated group of activities at networks is sharing videos, photos and playing games. The interesting matter of fact is finding out that using social networks to play online games and sharing videos is much often typical for boys; otherwise questioned girls prefer sharing photos. In this way it is possible to observe virtual space formation of internet social networks. The basic parts of this space are relations among people and sharing information about each other. The question remains to which extent the young generation takes the connected contacts and shared information as a part of the real life or of its virtual dimension. As the interesting aspect of this virtual reality is also mentioned game as its part. Data proved that using games at social networks is mainly domain of younger adolescents, it means to the age of thirteen.

<table>
<thead>
<tr>
<th>Way of social networks use</th>
<th>Number of respondents (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>64.4</td>
</tr>
<tr>
<td>Meeting people</td>
<td>29.5</td>
</tr>
<tr>
<td>Maintaining of existing contacts</td>
<td>28.7</td>
</tr>
<tr>
<td>Photos</td>
<td>27.3</td>
</tr>
<tr>
<td>Games</td>
<td>26.8</td>
</tr>
<tr>
<td>Videos</td>
<td>25.8</td>
</tr>
<tr>
<td>Communication</td>
<td>25.0</td>
</tr>
<tr>
<td>Getting feedback of oneself</td>
<td>16.7</td>
</tr>
<tr>
<td>Self-presentation</td>
<td>6.1</td>
</tr>
<tr>
<td>Another way</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Respondents security at network showed that almost half of them are visible only for friends (52%), 11% only for selected friends and 9% for friends’ friends. Quite alarming is that almost a quarter of the respondents are visible for everybody. At network 15.3% accepts everybody who asks for it and 11.4% accepts almost everybody, 69% accepts only friends. In spite of the fact it is clear that almost a quarter of respondents are willing to accept unknown people as well. The possibility to abuse information at social networks is quite big. In our survey differences among girls and boys and among single age categories in terms of security at network, searching friends and accepting friends have not been confirmed. In this sense we can say that all groups of adolescents using social networks are threatened with the comparable risk.

IV. DISCUSSION

If our survey proved that Czech adolescents use social networks like Facebook and Youtube most often, we can give reasons for it that Facebook is in the Czech language. This matter of fact can make easier for adolescents to communicate with their friends or to connect online contacts with other people. It is possible to point language barrier there what can limit adolescents in using f. e. social network MySpace which exists in the English language.

Then quite bigger need of girls to communicate with their friends was proved as well. We can assert that for girls this need is given in a bigger extent not only in the framework of social networks but also in the real environment. Obviously it was proved that girls spend their free time with communication with friends at social networks more often in comparison with boys who rather use the Internet as it is or out of free-time activities they watch television more often than girls.

The similar results we made in our pilot study mapping strategies how the late adolescents cope with attack of cyber aggressors. Unambiguously there was proved a bigger need to communicate, eventually to require social support, either face-to-face or in the internet environment by girls. Boys had bigger tendency to react in more passive way and not to speak about the problem.

Interesting conclusions come out from finding out positive and negative factors of contemporary adolescents social networks use. If we sum up the survey results then adolescents often use social networks and usually regularly once a day at least. There adolescents fulfill their need to be in contact with somebody and to have overview. By contrast as a negative feature of social networks use adolescents speak about loss of face-to-face contact in the real environment. These findings indicate that often and abnormal social networks use can cause loss of contacts in the real environment by adolescents. Except this fact the respondents mentioned that the next negative factor for them is loss of privacy. However, it is possible to argue about the fact what often leads adolescents to accept unknown people among their contacts as well. Entering profile, f. e. at Facebook, an applicant is warned to give true data.

It is proved that adolescents with a bigger circle of friends in the real environment and probably with bigger sociability they also use social networks more often and they make relations and friendships there. On the contrary who are more introvert and have rather problems in the area of relations in their environment, they do not compensate this handicap through the social networks more significantly. However, the differences among social groups of contemporary adolescents and later social differentiation of society can deepen. The question remains how much young people are really able to maintain their relations with friends in their environment and at social networks if the number of those relations is so large.

V. CONCLUSION

Internet social networks influence on the contemporary adolescents’ life can be defined as very strong and formative. Social networks use is the usual part of young generation life-style, the usual way of communication and the
sign of subculture of the contemporary young people as well. It has not been possible to estimate socialization impact on this generation which in the period of adolescence passes through daily experience with new technologies so far. We can assume that its social field will be spread due to new communication technologies, however quality of interpersonal relations and communication will not be assured with it. It is possible that contemporary adolescents will be rather able to connect impersonal mediated relations than permanent, personal and proportional coupling. Their identity can be formed under the influence of the significant others from the virtual space rather than those from the direct social environment. Through internet social networks global world society becomes their living area. In this society adolescents find and live their interpersonal relations. The characteristics of this generation entering adulthood and other stages of life-cycle under the immediate influence of the modern technologies will be an interesting topic for the further cross-disciplinary research.

APPENDIX

The paper is based on the project of Specific Research of UHK no. 2145/2010 – Construction of Identity and Contemporary Adolescent’s Identity Experiments within the Framework of Social Networks

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BIography

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