Decision Making and Behaviour Patterns in Network Relations

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ABSTRACT

The present study offers an insight into a specific tendency emerging in the young generations, that is, development of specific characteristics of relations and self-images in the world of interrelatedness by being connected via internet. Individuals as social beings need to develop new characteristic features due to living in a world of network systems and hubs. Thus, they feel a kind of force on themselves of contacting to prevent themselves from being deprived of information vital to being visible in the society. Their purpose is to be familiar with the context of the network by adapting existing behaviour patterns, often ignoring their negative effects and consequences. The study tries to find proper answers to the following questions: What are individuals involved in networks really interested in when checking others' profiles? What behaviour patterns do they acquire and imitate? How does the network system motivate, honour or sanction the involved individuals? The research method is based on semi-structured interviews involving university students who attempt to reveal what images young people living in the world of internet have about themselves and their special world. The research results can contribute both to making everyday communication and education in academic institutions more efficient. The present cross-sectional study presents current state of a long-term research into the drafted topic.

Key words: network, hubs, self-esteem, interviews, values

1. Introduction

A most interesting field in empirical social research is the character of human relations and communication in an ever fast changing society. Individuals adapt new characteristic features in the current modern communication environment and their behaviour and habits constantly change. Their personalities are affected by interpersonal relations and also, mass media has a tremendous influence on them. They use the most updated technologies to attain a great amount of knowledge about events, acquaintance and unknown people, and their aim is to find their ways in life by adapting behaviour patterns (Szőke 2014). In the present paper we raise and try to answer the following questions:

What is the basic typicality of the accelerated communication transformation processes? What are the current topics in communities and global tasks to solve?

How consciously are individuals approaching these topics? Do they see themselves as autonomous or directed beings? What changes can they identify in their lifestyles and behaviour?

We intend to get answers to these questions based on responses from interviews conducted with university students using the latest communication technologies. The

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results can contribute both to making everyday communication and university education much more effective.

2. Literature review

In this subchapter we are synthetizing basic literature background for the study. To have a clear insight into previous researches and theories which support the current research issue we will highlight the most important resources in a thematic arrangement.

2.1 Relation between communication theory and social communication in the 21st century

In the 21st century there is a great demand for building a tight relation between theory and everyday practice in all scientific disciplines, especially in the field of education. The process to reach this aim is defined as praxis-transfer, where the basic aim is to transform social communication and at the same time, a conscious reformulation and ameliorating of society (C4SC – Communication for Social Change) (Unger, 2013; Wilkins, Tufte, Obregon, 2014). The latest information technology allows interpersonal communication and mass media to merge, thus, social communication is reformulating and improving faster than ever before. Since the 1950's there is a common strive for triggering social, economic and political changes enhanced by communication and media (Waisbord 2011). According to former modernization theories underdevelopment is rooted in prevailing traditions and culture, so it is required to adapt western cultural traits to close the gaps. It has been a widely accepted concept since the 1980's that the process of catching up should be of participative character, following the bottom-up principle and the involved parties should not perceive it as cultural imperialism. Lennie and Tacchi (2012) claim that effective communication is a vital component of participatory forms of development which needs to be appreciated by decision makers. In the 1990's in Hungary there was a strong intention to catch up with western societies, which was a motivating factor for social changes. There are definitely a lot of traditions but the main aims keep prevailing.

In the 21st century some global topics got into centre of social talk, such as social justice, sustainability, right to study, operating transnational networks, migration, social diversity, unemployment, environment, gender, health and poverty. There is a demand both in developed and underdeveloped countries for a social transformation to find solutions to the problems. This is a key program since the UN summit in 2015 (https://sustainabledevelopment.un.org). Realization is only possible on consensus between the involved parties and no way by orders or enforcement, where the aim is to convince people on macro, meso and micro levels. On individual level the social changes can be traced as behaviour-change or health communication, on settlement level it is detectable as social mobilization, community mobilization, and in advocacy or political level empowered leaders are to be convinced the same way described above (Greiner 2018). For this, from technological aspect it is necessary to strengthen media capacity (Gumucio-Dagron and Tufte 2006).

To have a more effective knowledge transfer, advocacy, communication and mentality completely changes. According to Tufte (2006) power sharing must be more

sensitive to those living in a marginal social group. Thus, it is not definitely the experts who control social changes but the members of society themselves, while social cohesion will strengthen. There is the potential in involving excluded groups of society to cooperate with experts which may lead to empowerment of peripheral social groups (Unger 2017).

In the framework of a development project the Széchenyi István University is planning to set up international research centres and include new interdisciplinary fields into research work. Extern cooperation with other organisations are of key importance as well as knowledge transfer to them, while theory, practice and implementation are combined. To invite students into the research work improvement of digitalisation and studying materials is inevitable. Like in the USA, more and more European universities start project seminars on C4SC focusing on international communication and aiming at C4SC expert education for various institutions (Universität Leipzig 2018). In the 21st century communication is not merely a descriptive science but has found ways to implementation and synthetizes achievements of completed processes.

2.2 Individuals in C4SC networks

In the 20th century, it was mathematicians who started to emphasize that complex systems available in nature, are organized in a network; they include hubs and their connections, like the human brain, traffic systems, workplace communities or the internet. The mathematicians' aim was to model complex systems as they wished to understand and map the static structure and functioning in time (2013). The starting point was the random graph model by Erdős-Rényi (1959). Since it was impossible to get a great amount of data on biological systems like cells or a metabolic system, scientists tried to find a system consisting of countable hubs and wires. They found internet and e-mailing system in a company to be of this character (Barabási – Pósfai 2016). Scientists and experts in different fields of social sciences can use these models efficiently for examining and interpreting the behaviour of individuals and communities.

Small and big human communities have been structured and operated in a network form for ages; Georg Simmel (1908) established his famous theory and created the term 'Vergesellschaftlichung' (formulation of societies) about a hundred years ago, but it is only possible to attain so much data and process them at the required speed only by using the up-to-date digital technology which enables us to reveal these patterns. A new discipline of science has been developed, the science of network (Barabási 2013), and many other disciplines can use its findings.

Individuals communicating in the network have got unique identities independent of their context. Students take an active part in several teams simultaneously which results in a horizontal connection system, rather than a vertical one. Interconnectedness ends up in a complete mixture of private and working spheres which is a typically new tendency rooted in opportunities given by networks. This way it is almost impossible to be a stable member of an expert community in long term as it is easy to switch from one community to the other one depending on private and social demands and fashions.

According to Bala (2014) networking causes substantial and pervasive changes to communication between organizations, communities, and individuals. It is getting even harder for the younger generation to make the right decisions about which platform or team to join as there are no authentic people who can show the right directions for them.

The so called influencers (who have enough power and credibility to affect others by media) (https://www.dictionary.com/browse/influencer) occupying wider and wider surface in online space are not really the credible people they are expected to be. So it still remains hard to distinguish between relevant and irrelevant information. It is also a key issue how to handle information concerning ethics and legal approaches. According to Turkle's (2011) researches on online and personal interactions, online and personal life are merged and individuals live the same life in both scenes. These seemingly equal lifestyles confuse decision making when you have to select the right solution and take the advice from virtual or digital sources.

2.3 Networked individualism

The concept of networked individualism is rooted in the science of mathematics at the beginning of the 20th century. The aim was to model the complex systems as they wished to understand and map the static structure and functioning in time. Erdős-Rényi was the first scientist to model the formulation of random networks and realised that complex systems consisted of hubs and random connections between them. According to this model the most hubs have got approximately the same number of connections, and just a few of them have got really few or plenty of connections. Further researches revealed that networks in the nature, such as the neuron system of the human brain, traffic networks, the structure of cells, airports, workplace relationships, the internet and lifestyle of city dwellers, do not show any resemblance (Fushe 2013). In these networks there are just few hubs with many connections because newcomers connect to the best-known hubs and this way they can get to any other, really distant hubs; the Google structure is a good example for this. These networks are very stable, even if they lose a lot of hubs, the system prevails – provided the hubs disappear randomly. By the conscious destruction of hubs networks can be eliminated, so we can presume that the results of network related researches can contribute to eliminating dangerous networks, such as terrorist networks or epidemics (Barabási 2013).

To map the operation of complex systems you need a great amount of measurable data from natural networks, which is impossible to get by current technology. There are human-made systems of which expansion can be traced in time and store an extremely huge amount of information, like the internet; intranet networks that trace and record the employees' connection systems can also be utilized for research purposes. Network models are appropriate for describing many fields of life, like traffic, services, households, networking families, civil initiatives, workplaces and other communities (Friedman 2007).

3. Self-image and self-esteem

If we examine the behaviour of individuals and communities compiled of these individuals, the positive self-image is a core issue. The concept of personality, its self-image and self-esteem have always been subjects of researches in social sciences. How do individuals see themselves and what do they think about how others see them? Feedback from the environment is a basic element of any moment of human existence (Mruk 2013; Csányi 2006). Maintaining the positive self-image is the most motivating factor for individuals. Positive self-image serves as an effective defence system against prevailing

discomfort and acute stress, thus it can be regarded as a health-psychological factor by having a positive effect on our mental and physical state. The global self-esteem represents the cognitive, affective and somatic characteristics of individuals' general functioning which can be relevant in a subarea or the constant satisfaction in life (Urbán 2014).

Different grades of low self-esteem are typical of individuals of today's communities to a great extent. These individuals are a big threat to their environment while destroying themselves at the same time (Christakis – Fawler 2010). This symptom is the most crucial challenge in our age, serving as a subject for research in several disciplines because it is hard to identify, dangerous for each generation and there are no effective treatment methods available. We expect the interview to provide us with information about if the digital network can strengthen or, contrarily, unsure one's self-esteem. In the following paragraphs, we are listing some opinions about the issue, in a thematic arrangement.

On social websites, it is the most frequent and automatic activity to 'share everything' because being a member of a community gives us the impression of sudden comforting if one feels uncertain or thinks to have committed a mistake. The individuals do not need to take their burden alone and do not feel embarrassed since they do not have to face their deficiency and default alone (others are not any better at all). It happens from time to time that we blame others or our own mistakes and we are inclined to get rid of stress this way. In this respect, there is no difference between online and offline communication. These reactions are obvious indicators of low self-esteem. Blaming others is a typical defence mechanism because its real purpose is delegating to and sharing responsibility with others (Csányi 2006).

Another important indicator is the issue of self-loving. This is the most crucial thesis of cultural tradition and religions; in the western Christian cultures we say: You shall love your neighbour as yourself. It is impossible for the individuals unless they love themselves. On social websites the opportunity is always given to compare yourself to others and individuals can keep proving that they are not worse than others. It is like a game, you always send like messages, praise other participants and expect them to praise you even if you do not deserve.

Reserved behaviour can be experienced, as well, face-to-face communication/talk has got more risks than commenting after careful consideration. In the virtual environment you can show off, attack others, laugh at others which are typical signs of low self-esteem. Many participants would never dare to act in face-to-face communication as they do online. It is not even deterrent for them to know that in the online network system their actions are obvious for plenty of people in a moment.

Collecting and sharing valuable events, showing off too often with exaggeration show that the individuals' self-esteem has fallen. This state is the pre-phase of net addiction. The most important motivating factor for individuals is the feeling of well-being, and the awareness that everything is alright with them. In a virtual environment this experience is easier to achieve than in the real life where one has to fight for well-being hard. Many of them know that it is an illusion and they destroy themselves by becoming addicts, and still, they do not want to abandon easy success. Those who suffer from self-evaluation problems, as a consequence, will adopt false values, too.

4. Metacommunication on networked individualism

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Further researches revealed that networks in the nature, such as the neuron system of the human brain, traffic networks, the structure of cells, airports, workplace relationships, the internet and lifestyle of city dwellers, do not show any resemblance. In these networks there are just few hubs with many connections because newcomers connect to the best-known hubs and this way they can get to any other, really distant hubs; the Google structure is a good example for this. These networks are very stable, even if they lose a lot of hubs, the system prevails – provided the hubs disappear randomly. By the conscious destruction of hubs networks can be eliminated, so we can presume that the results of network related researches can contribute to eliminating dangerous networks, such as terrorist networks or epidemics (Barabási 2013). Recent researches (Wellman 2002; Chua 2012) claim that the 21 century is the era of individuals and their networks and not of groups, which can be experienced at individual and organizational levels, too.

To map the operation of complex systems you need a great amount of measurable data from natural networks, which is impossible to get by current technology. There are human-made systems of which expansion can be traced in time and store an extremely huge amount of information, like the internet; intranet networks that trace and record the employees' connection systems can also be utilized for research purposes. Network models are appropriate for describing many fields of life, like traffic, services, households, networking families, civil initiatives, workplaces and other communities (Friedman 2007). In the following chapter we are highlighting the most typical statements from the interviews, in a thematic arrangement.

5. Methodology of research

The aim of the present study is to get data on the communication habits of the younger generation, about their self-images and self-evaluation in the network environment supported by digital technology. We have to ask the question if the already existing statements about communication of human communities are still relevant for people communicating in networks or they are developing new characteristic features. Do the social networks contribute to strengthening self-esteem or, contrarily, they make individuals uncertain and enforce them to take specific behaviours? What is typical of the new behaviours? How much do individuals behave differently in online and traditional offline environments?

My other aim was to make interviews with university students from various cultural backgrounds and put the main emphasis on contents appropriate for preparing a survey to be conducted in the future.   In order to explore the importance of

interconnectedness and hubs we considered semi structured interviews the best method for this. In the interviews the respondents can share their ideas in a relatively free framework and can add any remarks they find important. Convenience sampling was selected to obtain qualitative data and the respondents were invited by the Author to be part of the research. The respondents are students of International Relations from various countries, studying at Széchenyi István University in Győr (Hungary). They are from Laos, Kenya, Lebanon, Spain, the Ukraine and also some Hungarian students were involved. The variability of the countries makes us assume that the students should have a very different sociocultural background which could affect their perception of reality and give merely different responses. The present research is not aiming to examine the respondents' cultural background in detail but we set some criteria for the basis of involvement in the interviews – which are also related to sociocultural factors.

Each student studies International Relations and so, are committed to studying social sciences (political sciences, intercultural issues, negotiations and law). They all conduct their studies in at least two foreign languages (English and French or German) together with students form different countries in Hungary; the latter showing the presence of their intercultural sensitivity. Factors like norms, values, beliefs, attitudes to various phenomena and economic background were not examined concerning the students. One may presume based on a huge amount of research results on the topic (Hofstede 2010) that all these factors provide a major distinction between the interviewees, which should serve as a ground for the extended research in the future

For our research we selected 32 interviewees, 19 of them female and 13 male students. We did not intend to involve a great number of students in our research as originally it was meant to a be a pilot research where we aimed to reveal how much the interview questions are applicable for an extended research on a higher sample number. Besides, students are hardly willing to take part in interviews, so it was a challenge to reach an optimum number of interviewees. Each student is between the age of 19 and 27 which can be regarded as a single age group (generation Z) according to the categories used in generation focused researches (Shaw – Fairhurst, 2008).

The results of the present pilot research give us a hint and some insight into the role of hubs and interconnectedness for the selected age group, and also, will serve as a starting point for a wider scale research. The interviews were conducted with single respondents and not in groups and anonymity was guaranteed to make sure that we can attain reliable and honest answers to the questions.

The respondents were provided the same information background of the research and were asked equally formulated questions in the same order. The length of the interviews was ca. 30 minutes each.

In the introduction of the of the semi-structured interviews the following key concepts were mentioned: acknowledgement or negligence of our own and others' performance, what do we like or not like about ourselves, extrovert and introvert behaviour, collecting valuable things and demonstrate achievements, leading position or dependence on something.

After a brief historical review and clarifying some important terms, in the second part of the interview, we asked the respondents about what digital lifestyle, existence in a network, current relation network mean for them and how they see their near future.

6. Interview questions

In this following chapter we are elaborating the most typical statements from the interviews, in a thematic arrangement. After considering the interview questions and answers we divided the responses into three parts regarding the focused topics.

Prior to making the second half of the interviews, we had a free talk with the respondents to map what theoretical knowledge they have about network systems, the science of networks and its basic concepts.

The semi-structured interview involves fifteen open questions where the interviewees had the opportunity to share as much information as they intended to and could add any ideas they considered important. The first part of the questions mainly focused on the technological issues of interconnectedness, the second part of the interview was exploring the effects of existence in network, and the third group of questions was aimed to reveal the values, benefits and risks of networking.

The questions are the following (according to thematic division):

Part 1
- In which channels do you keep contact with and make relationship to other people?
- How many online human networks do you feel being connected to?
- What is the role of digital technology of building contacts?
- What other elements do you find important in connecting to groups of people?

Part 2
- What makes you a permanent participant in online human networks?
- What makes digital lifestyle different from real face to face communication?
- Has any of your characteristic feature changed due to your existence in networks?
- How do you feel about your role in the network community (leader, deciding, adaptive and compromising etc.)?
- Do you feel any acknowledgement or negligence of your shared achievement from the others?
- How do their comments affect your self-image?

Part 3
- What kind of information do you typically share with others in the online network?
- How much are you willing to go into conflicts and discussions there?
- What are the biggest benefits you can get by online existence and relations (currently and in long term)?
- What are the biggest threats on you be online existence and relations?
- Could you give any other different reflections on being a member of online networks?

Marginal and no significant responses are not mentioned and analysed in details in the following chapter but gives a clear insight into the attitudes and ideas of the 32 interviewees.

7. Findings. Everyday life in the network society reflecting the interviews

7.1 Technological background

The first four questions focused on the necessity and quality of technological background of human networks. The respondents found remarks on the technological background the most important factor, so many of them (81%) mentioned this topic at first place. They emphasized that digital devices comprise a network themselves and use many channels simultaneously, while network operation systems offer more and more user-friendly solutions.

As other basic elements for the contacts the following factors were mentioned typically: same age group (59%), common interest (53%), desire for information (75%), getting attention from others (40.6%).

The digital technology provides practical solutions to set up, copy, spread and reuse surfaces and contents easily. And also, it offers a safe technological background for transmitting information because the binary system offers the opportunity to make dichotomy decisions in a simple way. The positive and negative charges secure forwarding information, so the content of information transmitted in bits will not suffer any losses. Websites in the network refer to and quote each other, and they build up a network and the searching algorithms can detect countless connections in a very short period of time. So, the users can find the required information without any difficulties. The respondents consider digital technologies absolutely positive (90.6%). Nevertheless, a lot of respondents (62.5%) claimed if individuals join several networks at the same time, too many connections can be a burden on them and find themselves in a confusing communication context.

Table 1: Technological background and other important aspects of networks. (Source: own research)

N 32 = 100%	
good quality of technology	0.6%
technological background	1%
same age	9%
desire for information	5%
several networks simultanously	2.5%
common interest	3%
getting attention	0.6%

7.2 Individuals in the hubs

The next six questions (question 5-10) form the second thematic issue of our research, that is, the individual as a part of the hubs. In the models of human communities and cooperation, active individuals operate as isolated hubs and there is a tendency that the online groups take the place of the natural communities. Vast majority of the respondents (90.6%) formulated the idea that new forms of community formulation emerge because anyone can join the hubs and can initiate contacts, anyone can become an active participant, play and learn in interactive forms which provide them with the feeling of freedom. Continuously changing and flexible networks are formulated according to the users' demands.

According to the interviewees, the basic aims of individuals are the fulfilment of information demands and its opposite: publishing works and opinions and making them available for others (93.7%). When we asked the respondents about the relevance of living in an online or offline environment, they stressed the importance of staying in contact (100%) since they do not want to miss anything important. They wish to exclude the feeling of loneliness (87.5%) in their lives (I am not alone even if I am alone). The question arises if the online and offline life can be separated or they are built on each other making a complex life sphere (Boase – Wellman 2006). The generation of twenty-some years lives in a world of two selves simultaneously, they separate the self living in networks and the personal self. However, they deem the younger generation around them to live in a world with combined selves (91%). They recognize, though, that a merging process of personal and public spheres has started in each generation (Nádai 2018).

It is interesting to see that female students use the network for maintaining existing relations (78%), whereas male students use it for attaining new relations (84%). In online social networks new behaviour patterns are formulated regarding responses to messages, and how to like and share posted information. It is noticeable that information with some emotional traits is spread the most quickly and provoke reactions from masses, just like virus infections. Social psychology has dealt with this phenomenon for long. It is enough to mention a special case dating back to times of book printing when the German writer Goethe published his work entitled Werther, which triggered a flow of suicides.

The respondents in the present research consider blogs (73%) the most popular genre on the internet. The popularity of other genres cannot be stated to be lower as the interviewees' number is relatively low. To get a more reliable result on this issue we need to extend the research with a greater number of samples. According to the 32 students' answers the authors of a blog can get rid of stress by writing about and sharing their ideas and problems. Producing contents is a creative activity and as a personal achievement, it can strengthen self-esteem. Students mostly learn techniques from each other how to create their profiles which can contribute to experiencing joint creation and helps them to find friends with a similar way of thinking (Nádai 2005). It happens that cooperation starts between people from various generations and with completely different qualifications. Due to cultural habits and routines in the real (or offline) world, these people should fight much more obstacles to do so. In the network human relations have got less hierarchy and authoritarian characters.

Table 2: Importance of hubs for individuals (Source: own research)

N 32 = 100%	
constant contacting	00%
availability	3.7%
new forms of community	0.6%
combined selves (online and real world)	1%
exclude the feeling of loneliness	7.5%
safety bubble	4%
establishing new relations	4%
maintaining existing relations	8%
blogging	3%

The younger generation emphasizes the importance of the 'safety bubble' (84%) on the internet, which is personalized, unique and intimate, and applications with codes ensure anonymity and protection for the participants. SMS and e-mail messages seemingly exclude a third and unauthorized party from keeping contact. The respondents think that they can protect their data sufficiently and cope with the problems of traceability.

7.3 Value system
In the third thematic unit, it is worth giving an overview of warnings and statements concerning value systems and value judgement.

The most practical use of networks for the individuals is the constant growth of their relationship (71.8%) capital. According to the respondents, another advantage of networks is the opportunity of continuous contact with the physically distant acquaintance (93.7%). The persistent contact with friends, family members, colleagues and schoolmates means a great value for them (85%), as it is appropriate for increasing the quality of life because participants can help each other with solving their everyday problems.

Although technology enforces a social isolation, according to the respondents the more relations someone has got on the internet, the more personal relations they can build. It occurs that relations on the internet contribute to making personal friends with new people. In their opinions, people usually can have tight and private relations only with three to five people and it is possible to meet about fifteen or twenty friends or relatives regularly in person. Loose and irregular meetings for cooperation can occur with one hundred or one hundred and fifty colleagues or acquaintance. As opposed to this tendency, in online environments many hundreds of people can be regarded as friends (68.7%) (and exceptionally, celebrities and well-known people contact with many thousands and millions). Average internet users strive for increasing the number of their acquaintance and that of posting comments; this competition is prevailing in the online network.

Changeable networks show less solidarity than former village communities or friends but their checking function is less strict (65%). Actually, checking takes place in an unknown hub and not in the community on location. A respondent formulated the generally accepted statement that the meaning or interpretation of presence has changed because it is possible to be present in distant locations and our distant friend can be present where we are at the very moment. This situation requires thorough consciousness and responsibility as we have to consider what we can do to others and ourselves.

Self-restrictions play an important role in network societies. It is not right to do everything we could (65%) do, such as offending others, mocking at them or share their confidential data, because the individuals concerned are not present personally. In networks time and space are perceived differently from as they are in real life.

The new situation involves risks, too, since people and institutions are visible in public (78%); their data and contacts can be detected easily. For the individuals it is vital to develop and confirm the skills to distinguish between hubs of the relationship network and make the value judgement of authenticity and reliability of institutional, professional and family or friends information resources (Garai – Nádai 2015). According to the responding students, users of networks become more and more conscious, critical and confident due to the extremely huge amount of information and they are willing to learn how to distinguish resources and hubs providing information. At the same time, they warned of the danger that younger generations would tend to adopt unwanted cultural patterns (66%) due to the insufficient control of the mass media. In their opinion, the speed of expansion of humiliating contents (65.6%) exceeds that of becoming conscious about selecting authentic information in the generation of teenagers. There are several scientific publications in which the central issue is the extent of responsibility of the individual to establish the value system of the digital community (Pfeitsch 2013).

From the above ideas we can conclude that the respondents see and formulate deep relations concerning the examined issue clearly, understand background motivations and express critical and self-critical opinions.

Table 3: Values and risks of existence in networks (Source: own research)

N 32 = 100%	
Values	
contact with the physically distant acquaintance	3.7%
new forms of community	0.6%
persistent contact with friends and colleagues	5%
relationship capital	1.8%
hundreds of people can be regarded as friends	8.7%
less strict checking functions	5%
Risks	
exposed to public	8%

unwanted cultural patterns	6%
humiliating contents	5.6%
sharing confidential data	5%

8. Discussion

The present study was aimed at revealing the special characteristics of international university students' self-esteem in the world of interconnectedness and a system of networks. The purpose is to reveal what behaviour patterns they adapt to and how the network system motivates, honours and sanctions youngsters in the virtual connections.

The theoretical framework of the study derives from social communication theories ad goes on to explain formulation of self-image based on networking theories where the technological aspects and effects are in the focus. It does not mean that a merely technology centred focus could lead to clear and objective results. Thus, in an extended study we have to note the authenticity and reliability of the research results could be improved if the interviewees' sociocultural background was elaborated in details. Nevertheless, the present study is mainly focused on the impact of virtual networks, where, in fact, the latter mentioned factor cannot be neglected.

The semi-structured interviews showed the respondents' own reflections to questions related to forming their self-images when being connected to various hubs and network groups. The analysis of the conducted semi structured interviews concerning the research question of self-images in networks revealed that individuals' self-esteem is strongly influenced by the utterances of other members of the hubs. A number of positive effects were experienced by the respondents as they feel more involved in social groups, free to exclaim their own ideas without any great consequences and are able to make relationship capital that can be utilized in their future career, too.

The paper also sought to explore the values of being actively present in networks. The interviews showed the appreciated value of contacting with physically distant friends, family or colleagues.

A negative effect of connectedness is the danger of humiliating remarks by anonymous bloggers that may destroy self-images and enforce the communicators to adopt undesired behaviour and culture patterns, all these rooted in the great number of interrelating participants.

The issue of being biased in the research and data analysis process is worth discussing, as well. Bias can occur on the researcher's side as well as the respondents' side. As the work is rather a preliminary and pilot research sampling could be biased by selecting only a certain age group studying the same BA major. A random sampling could be more efficient in terms of validity of the results. As for the students, they knew that they had actually been observed in the framework of a research interview, their answers might have been adjusted to their deemed correct or expected answers and may not have expressed their real attitudes and ideas on the questions. To avoid biases in the future

research it is necessary to change sampling method and use a control method – e.g. a survey – to check the reliability of the answers. Furthermore, it is worth considering inviting an independent researcher to test the methods and review the results.

9. Summary

Based on respondents' statements we can claim that the 32 students' self-images and attitudes to digital world are fairly similar. They were able to define the most current and global topics and tasks, such as social justice, sustainability, right to study, operation of transnational networks, migration, health and poverty. The similarity of the responses let us assume previous learning processes that the respondents have already completed. They see themselves as autonomic individuals with good decision skills and they wish to do so also in the future.

The limitation of the research derives from the low number of respondents and the method was convenience sampling which could lead to biases. And also, a deeper analysis of the sociocultural background of the respondents is required to understand certain reactions and attitudes during the interviews.

The interviews (on the everyday communication routines) with university students acting in the network offered us useful conclusions. Based on content analysis of the interviews we managed to identify statements which can serve as a basis for a large-scale survey research with a great number of respondents. The survey must focus on values which are important for the younger generations, such as freedom and openness, a personalized and safe online network system, less hierarchic and authoritarian forms of cooperation, common learning and playing, critical and conscious decision making, positive self-images and self-esteem, confidence and also self-restriction and taking responsibility. The younger generations keep the world under control and their lives are dominated by the force of online contacting. Meanwhile, existence in the network gives them specific experience that would be impossible in the real world. If they acquire the abilities and skills to make the right decisions, they can become more confident and conscious, and their self-esteem can become stronger.

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