



How Generations Think: Research on Generation Z

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Abstract. The relationship between current generations and the ones that grow up has always been ambivalent. There are a lot of motivations behind the criticism such as threats, envy or simply pride in the fantastic achievements of a generation, but lack of knowledge might be an explanation as well. The environment including the scientific-technical conditions and cultural-economic relations which surrounds the generations is changing significantly; thus, the socialization of new generations takes place under these altered circumstances, which means that they are not the same as the former young generations. Acceptance of new values and understanding of new behavioural patterns are difficult for parents, teachers and also for decision-makers. In this article, a generational approach is applied to analyse today's emerging young generation. The study presents the results of the research conducted with questionnaires and it highlights the characteristics and lifestyle groups of today's 15–24-year-old young people in Hungary, who are members of either the Generation Z or the late Generation Y. This topic appears in the research of several academic fields, while the conclusion of the research can not only support the development of the theory but the practical decisions as well.

Keywords: generations, generation values, youth, lifestyle, consumer behaviour

Interpretation of Generations

Generations are interconnected by common experience, life experiences and common values. The interconnectivity is loose but significant in its nature. It is loose because members of generations experience a lot of different fates and life decisions which cannot really be considered uniform. However, there is a significant trend of values and common experiences which can connect these decisions and lead to the conclusions that there are differences between generations, and similarities within generations provide a frame for the decisions of the members of generations. This dimension of research comes into view from time to time, so researchers can enjoy the experience of “rediscovering”.

The study of generations is grounded on the difference in *value orientation*. This kind of differentiation results in quite large groups in the research. This might raise the question whether it is possible to interpret the different aspects of the groups that have been made uniform on the basis of lifecycles embracing 30 years, which is a three-generational approach. According to the results of research on this field, this might be the best possible method.

The research on this topic not only makes the results of the segmentation more transparent, but it also highlights the tensions between the generations since the relationship between the previous and the current generations has always been ambivalent (Törőcsik, 2010). The aspect of generation research includes the study of exciting issues which can be the basis of important decisions in several fields.

The generational approach to the description of the society and the examination of social problems mean the acceptance of a simple principle, which involves research based on cohorts (groups by birth age), which results in groups with perceivably different behaviour. The Yankelovich-Report, a research series in the USA, deals with studying the behaviour of generations (Smith–Clurman, 1997). Their initial concept is that basic experiences and major and influential events during socialization accompany people until the end of their lives and have impact on their lives and their choices. Thus, the initial thought is that the analysis of a few factor groups (Smith–Clurman, 1997) is sufficient to understand consumers and to predict their behaviour. These factors can make segmentation feasible such as:

- the *individual situation*, lifecycle, the social and economic status or even the physical condition typical of the individual studied;
- the *environmental influences*: the circumstances and characteristic phenomena that influence the individual’s purchasing power, motivation and vision;
- *cohort experiences*: the experiences of generations which shape the points of view of the people belonging to these generations.

On the basis of the concept, the markers and the cohort indicators of the different generations should be recognized, which can help to predict their behaviour and

explain their current decisions. It is the common experience, life experiences and common values that interconnect generations (Schewe–Noble, 2000). The point of this system is that the respondents' ages are strictly differentiated and individuals from different generations have different cohort-experiences. The question is what cohort-experiences are chosen to be shown and what sources are in the focus while experiences are collected. The sources can be great political, historical or economic events which had unsettling influences on the cohort, but it can also be the strong impact of significant innovations or the influence of arts, e.g. music and films.

According to Howe and Strauss (2000), there are three factors which can define generations more precisely than age, but these factors are also related to age; therefore, they are connected to cohort experiences:

- *perceived membership*: the self-perception of members, which starts with adolescence and becomes complete in adulthood;
- *common beliefs and behaviour*: attitudes towards family, career, private life, politics, religion etc. and behaviour (decisions concerning job, marriage, children, health, crime, sex, drugs etc.), which characterize the generation;
- *common place/situation in history*: the turning points of historical trends and significant events which affect the generation during the important years, such as adolescence or young adulthood.

When generations are studied, the first question is how to define generations, what kind of age limits and cohort-limits should be defined and how many generations should be thought about. For a long time, it was accepted that three generations should be examined, and it seemed obvious that young, middle-aged and old generations should be differentiated. The initial point of the generation research originally included the examination of the above three groups, which were called X-generation (based on Coupland, 2007), baby-boomers and the mature. American professional researchers were curious about the behaviour of the latest generation, which they called the Generation Y and the Millennium generation (Bakewell–Mitchell, 2003; Howe–Strauss, 2000; Marconi, 2000). Yankelovich and his colleagues defined four groups in order to follow changes and owing to the market pressure. They identify the Echoes (born between 1979 and 1991; career, independence and credibility are important for them), Generation X (born between 1965 and 1978; competence, diversity and enterprise are important for them), baby-boomers (born between 1946 and 1964; individuality, youth and egoism are important for them) and the mature (born before 1946; duty, winning and team work are important for them).

There are further ideas in connection with generations, for example the Pew Research Center conducted a study with five separate generations, which was aimed at revealing the differences in the Internet usage of generations. In this case, generations were differentiated on the basis of Strauss–Howe's ideas (Strauss–Howe, 1992). The initial point of the research is interesting since the Internet

usage is assessed; therefore, it is understandable why the young group is divided into several groups; however, it is less justifiable why the old group is divided into several subgroups. Echoes mean the groups that were born after the wars, and G.I. group means the generations who lived during the wars. Since Internet usage is a generational distinctive factor (Gergátz, 2010; Csepeli-Kígyós-Popper, 2006; Csepeli-Prazsák, 2010), it is interesting to note why and how often the different groups use the Internet.

Ursula Lehr (Lehr, 2010), the German researcher, says that instead of the three generations examined previously, five ones should be studied, and the co-operation and “social contract” of these generations should be solved so that various social problems can be sorted out. She says that nowadays, due to the increasing longevity, five generations might live together during the examination periods, so their common problems should be solved. She suggests that the elderly generation between 60 and 85 years should be divided into two parts: the self-sufficient and people in need of nursing.

According to other German studies, three generations can be considered as a relevant initial point (Glas, 2009), and they make proposals based on this. However, generational boundaries are also defined differently from the “classical” Yankelovich categories and researchers emphasize that young people between 18 and 29 are the mature youth, members of the middle generation are between 30 and 49, and people between 50 and 69 are members of the best age generation. The results of the research reveal significant differences in terms of consumption and involvement in different product categories. Young people are interested in mobile phones, fashion and computers, members of the middle generation like holidays and clothing, while members of elderly generations prefer travelling and gardening.

It is obvious that the differentiation of generations is a crucial issue; however, obvious boundaries and calculation methods for generations cannot be identified even in the classical Yankelovich-Report. Nevertheless, it is generally accepted that one can be considered a member of the young generation up to 29 years of age, middle generation includes people aged 30 to 59 years and members of the elderly generation are over 60 years. It is quite an important question if the three-generation distinction is applied, where the boundaries of the generations are today, when there have been changes in several socio-demographic features and whether criteria for this distinction can still be regarded relevant. It is often debated if the increase in the time spent in education and the tendency of starting a family later than before would change the boundary of the young generation so that the middle generation could start at the age of 35 years. If this assumption were to be accepted, there would be another question whether people at the age of 60 years belong to the elderly generation or, considering the Hungarian situation nowadays, this starting age should be 50 or 55 years. However, if trends of developed countries are taken into consideration, the boundary could be the

age over 65 years. If all of these suggestions are accepted, five or six groups or even more could be formed (Tarr, 2010), which, on the one hand, would approach the fundamentals of lifecycle-marketing, while it would cease the advantage of this simple conceptual system, on the other hand. Therefore, it seems to be useful if it is reviewed what different researchers dealing with the generation boundaries think about the labels and boundaries of generations. (Table 1)

Table 1. Generation labels and periods in different sources

Source		Labels			
Howe and Strauss (2000)	Silent Generation (1925–1943)	Boom Generation (1943–1960)	Generation 13 (1961–1981)	Millennial Generation (1982–2000)	-
Lancaster and Stillman (2002)	Traditionalists (1900–1945)	Baby Boomers (1946–1964)	Generation Xers (1965–1980)	Millennial Generation; Echo Boomers; Generation Y; Baby Busters; Generation Next (1981–1999)	-
Martin and Tulgan (2002)	Silent Generation (1925–1942)	Baby Boomers (1946–1960)	Generation X (1965–1977)	Millennials (1978–2000)	-
Oblinger and Oblinger (2005)	The Mature (<1946)	Baby Boomers (1947–1964)	Gen-Xers (1965–1980)	Gen-Y; NetGen; Millennials (1981–1995)	Post-Millennials (1995–present)
Tapscott (1998)	-	Baby Boom Generation (1946–1964)	Generation X (1965–1975)	Digital Generation (1976–2000)	-
Zemke et al. (2000)	Veterans (1922–1943)	Baby Boomers (1943–1960)	Gen-Xers (1960–1980)	Nexters (1980–1999)	-
Reeves and Oh (2008)	Mature Generation (1924–1945)	Boom Generation (1946–1964)	Generation X (1965–1980)	Millennial Generation (1981–2000)	Generation Z (2001–present)

Source: Reeves and Oh (2008: 296–297)

Generational division and even the application of a generational approach might raise questions since this is an artificial segmentation method; however, it is indisputable that this method can be applied for certain markets quite well. This can be proven with a review (Table 2) which highlights the different characteristics of generations.

Table 2. Generational differences based on 12 criteria

Criterion	Boomers	Gen Xers	Millennials
<i>Level of trust</i>	Self-confident, no respect for authority	Low respect for authority	High respect for authority
<i>Loyalty to institutions</i>	Cynical	Naive	Committed
<i>Importance</i>	Seizing power	Starting an enterprise	Following a hero of integrity
<i>Career goals</i>	Building a stellar career	Building a portable career	Building parallel careers
<i>Rewards</i>	Title and corner office	Freedom not to do anything	Meaningful work
<i>Parent-child involvement</i>	Receding	Distant	Intruding
<i>Having children</i>	Controlled	Doubtful	Certain
<i>Family life</i>	Indulged as children	Alienated as children	Protected as children
<i>Education</i>	Freedom of expression	Pragmatic	Structure of accountability
<i>Evaluation</i>	Once a year with documentation	“Excuse me, how am I doing?”	Feedback whenever I want it
<i>Political orientation</i>	Attacking oppression	I – Individual and indifferent	Craving community
<i>The big question</i>	What does it mean?	How does it work?	How should we build it?

Source: Reeves and Oh (2008: 99)

It is the three-generation approach that is typical of the Hungarian research (Törőcsik, 2007), although Istvánné Hoffmann proposes the examination of four generations (Hoffmann, 2007). She suggests that four generations should be studied: those who were born between 1920 and 1938 – they are the generation of big changes; members of the losers and winners generation were born between 1939 and 1960; the generation of the post communist era includes those who were born between 1961 and 1980, while the Millennials were born between 1981 and 2000. However, research on this has not been conducted yet.

If generational marketing is not regarded only as a theoretical issue and it is reviewed how generational approach to the research of particular fields appears in the Hungarian literature, then mostly instances of the three-generation approach can be found (Törőcsik, 2009).

Youth, Media Generations

Nowadays, the focus of the media turns towards the youth, newer and newer “generations” are discovered and the media write about their “fantastic” traits. It is important to highlight this because the logic of the categorization described above is the interpretation of the features of larger groups that are distinguished on the grounds of values that are mostly based on characteristics such as reading, media usage, gathering information, source of knowledge and attitude to health. It is clear that the uniform handling of generations might result in wrong conclusions; however, everyone knows and perceives that the behaviour and view of life of generations are different.

It is obvious that thinking about the youth may seem to be a mistake and it does not matter if this group is labelled as Generation X (Coupland, 2007), Generation Y (Tari, 2010), Generation G (www.trendwatching.com) or Generation Z (Tari, 2011). If the research is focused on the millennial generation, who were born around the millennium, the problem may arise that it is quite difficult to generalize because the diversity of their lifestyle, motivation and habits is quite high, which is also true within other generations, which become “homogeneous” and characteristics only after a while.

Today’s youth can be described with scenes (Prykop, 2005) rather than with larger groups. This is a characteristic feature which is the result of today’s freer choice. Several different studies deal with the life of the young, and now these results are summarized.

Fanta Trendriport 6 focuses on recreational activities. The results of the study reveal that young people spend their free time mostly with some kind of electrical device (Fanta Trendriport 6). The rate of computer and Internet users was approximately 90% in 2008 (Ifjúság 2008: 83), which has become almost 100% since then (Csécsi et al., 2012).

Interesting conclusions can be drawn from the analyses of the youth within lifestyle researches. The study of German youth between the ages of 14 and 19 years (Borgstedt–Calmbach, 2010) may illustrate well the milieu-oriented lifestyle groups of young people. Based on the outcomes of Hungarian lifestyle research (Törőcsik, 2010), three large groups with different motivations can be distinguished:

- There are young people who are prestige-oriented and *strive for outstanding knowledge* (17%). They not only want to obtain a university degree but also want to acquire outstanding knowledge and have a significant career.

- *Experience seekers* (33%) would like to “live”. They meet the minimum educational expectations while they are sometimes willing to accomplish new levels of knowledge acquisition.

– *The level-headed* (43%) live in difficult circumstances; they do not have great plans. Comfort, cheapness and price-performance ratio are important for them. Young people wishing to break out also belong to this group.

The literature provides a lot of different attempts to define *Generation Z* (Pál, 2013). There are research studies which rate those who were born after 1982 as members of this generation (Howe–Strauss, 1991), while other researchers suggest that those who were born between 1991 and 2010 belong to this generation. According to some approaches, members of *Generation Z* were born after 1995 (Grail Research, 2010 and Tari, 2011) and 1996.

Oblinger and Oblinger (2005) call this group post-millennarians, but it is also called „Facebook Generation”, digital natives (Prensky, 2001), zappers, which means switchers, “Instant online” group (Mutte, 2004), “dotcom” kids, net generation, iGeneration. This generation is often called *Generation C*, where C stands for connection, or *Generation D*, which refers to digital, or *Generation R*, which stems from the word responsibility (Heckenberg–McDuff–Smith–White, 1991).

It is important to emphasize that *Generation Z* is the first global generation in the world (*Homo Globalis*). They grow up using the same culture, they like mostly the same food, fashion and places. Globalization appears in their language as well because they use words and expressions that the members of other generations do not use and often do not understand (Tari, 2011). They are affected and formed by the same impacts; they may be interconnected on the web and social networks (McCrindle–Wolfiger, 2010), which is another factor related to globalization.

Members of *Generation Z* have the same problems as the previous young generations did, but their technical opportunities provide such new frames in their lives which make their behaviour incomprehensible for elderly generations.

The youth of today are members of the generation that grow up using the Internet and know the verbal and visual world of the Internet. It means that they handle short, up-to-date, real time information with pictures. Short attention span is typical of this generation, thus messages for them should be created by taking the “less is more” approach into consideration. Simplification and getting to the point can be productive.

Young people spend more and more of their free time using the social media, which means either immobility or time consumption in a mobile way. This means that they have less time left for outdoor activities. It is worth creating a strategy for the social media so that they can be reached.

Increasingly more members of the generation take part in education. It means that they are under time pressure because they are required to achieve the expected performance, which takes a significant part of their free time. Therefore, they mostly make contact by using devices – so, contact via the Internet is more typical of them than the personal one.

Today, the youth accept only a few adult role models. The most trustworthy faces for them are young people from their own generation who have achieved something significant in a field, or at least they are famous. They do not want to look up on these people, but they would rather face them.

For today's young people, interactivity and involvement in processes are quite natural. If they can participate in product development and the discovery of new technologies and new procedures in order to inspire large multinational companies, it can be also fruitful for secondary and tertiary education not only to enquire about their opinions but also to accept their proposals and include their ideas in the communication and the education.

This period of their life is not necessarily about career-planning and knowledge acquisition but rather about finding themselves, experiencing relationships and finding a circle of friends. This socialization process is at least as important as the acquisition of rational knowledge.

The conclusions of the interviews conducted with young people have revealed what kind of rules should be followed if anyone would like to communicate with them:

- young people are in difficult life situation; that is why they and their problems should be taken seriously;
- sharing is typical of them; that is, the information obtained has no value, so they want, expect and pass on everything for free;
- they only accept trustworthy people and things (except celebrities);
- they reappraise, question and criticize everything;
- they are pragmatic, they reject those things which are too expensive, too popular or too uniform (except for their “cool” brands – they would give anything for these);
- they belong to scenes and cliques; however, they would like to implement the expression of individuality;
- experiences and pleasure are especially important for them;
- egocentric behaviour and the rejection of problems and rebels are typical of them;
- because of the excessive supply of the media, they are very selective, they criticize, click and surf on the Internet;
- they like provocative, extreme, spectacular and show-like presentations.

About the Project

The research presented in the study was supported by SROP-4.2.2.A-11/1/KONV-2012-0058, modelling the effects of the energy production, utilization and waste management technologies to the competitiveness of the cities and regions (2013–

2014). The basic aim of this research was to present the results and values of the scientific and academic work of the University of Pécs to young people between 15 and 24 years of age. This aim can be achieved if this age-group is known and they are approached by using their specific language, communication style and means of communication. Activities are concentrated on the young generation so that the goal of the project can be met; thus, activities which involve high school students, university students and PhD students should be devised. The following activities and activity groups have been created so that the aim of the projects can be achieved.

1. Acquaintance with young people's behaviour and decisions

Since there is little comprehensive and reliable research information available about the target group, which is the youth of the new generations, a Hungarian representative survey was carried out with the participation of 2000 young people between the ages of 15 and 24 in order to raise awareness about this group. Separate research on young people living in the South Transdanubian Region in Hungary was carried out. Qualitative methods were applied in order to meet the objective: ten focus group discussions were organized with high school students and university students, ten interviews were conducted with high school teachers and ten interviews with university teachers to get to know their experiences about the above mentioned generation.

2. Acquaintance with young people's communication

In parallel with the examination of young people's general characteristics, the method, channels and characteristics of their communication were also explored. The results can be found in other studies in the current issue of this journal.

3. Development of the PhD community

The focus was also extended to PhD students. The development of an online platform, the target audience of which comprises PhD students who have started their studies but have not finished it yet, was implemented in the frame of this project element. The connection of members of the target audience is feasible with the usage of the interactive application on the website of the project. Web2 offers the opportunity for PhD students to help each other's work to a greater extent, plan and implement manifold research activities.

4. Researcher portraits and exciting research topics

Exemplars should be presented to young people; that is why short, 1-2-minute-long researcher portraits were prepared with young researchers who work at the university and with students who have outstanding scientific achievements. These videos can be downloaded from the website of the project and are presented on different platforms to the target audience. Besides, short videos of 2-3 minutes are being prepared to present different topics that compel the audience to think. These videos are about different comprehensive topics, such as transparency, secret or experience, and three researchers give inspiration in connection with the topics.

5. Flash mob events

Flash mob-like events are taking place in order to present the scientific achievements and innovations of the University of Pécs, mostly to high school students. 72 flash mob activities are taking place during the project in Pécs and in the smaller settlements of the region.

6. Communication with Generation Z – the transfer of knowledge

The information gathered due to the research and activity elements of the project should be presented to the people interested and forums should be created in order to discuss the results. For example, conferences should be organized for discussions. The outcomes of the research are carried on by the staff of the university and by colleagues working in educational institutes and organizations which have connection with the target audience. Four workshops were organized for those who work in the front offices of the University of Pécs so that their communication with university students can be improved. An in-house conference was organized for university teachers (mostly for teachers who meet first-year students) so that new knowledge and experiences obtained during the research can be passed on and discussed.

About the Research

The description of the project reveals that activities and research constitute this work. A few results of the quantitative research referring to *Hungarians between the ages of 15 and 24* are discussed here. During this research, a sample of 2,000 young people was interviewed in Hungary. Besides this research element, five-five focus group discussions with 8-9 participants were conducted with high school students and university students from the South Transdanubian Region. The

purpose of this project element was to find attractive solutions to and arguments about science communication. One further research element was the in-depth interviews with high school and university teachers about their educational experiences concerning Generation Z. *Ten-ten in-depth interviews* were planned and implemented in connection with the secondary data analysis. There are several good solutions to reaching the young segment; therefore, the best practice examples of the communication with young people were collected with trend research in one of the work phases of the research project. Studies were written about related topics, such as time utilization, learning and content consumption, which can be used in the later phases of the project. These studies are available in Hungarian on the website of the project: <http://www.zgeneracio.hu/tanulmanyok>.

During the interviews with the large sample, *values, lifestyles, every day activities* and the communication channels of young people were in the focus. Obviously, the fundamental aim of the project was also important concerning this research element; that is why the attitudes of the target audience to science, natural sciences and scientific achievements were examined. It means that several topics were in the focus of this element:

- science and attitudes about scientific results;
- the main characteristics of attractive science;
- science communication – trends and tools;
- time utilization and free time activities;
- content consumption and preferences;
- values, attitudes and lifestyle;
- media usage.

The purpose of the survey on a large sample was to gather substantiated information about the preferences of the target audience with the involvement of those topics which can support the dissemination of scientific results effectively. It was of great importance that the sample should be representative and the interviews should provide the best possible approach so that the research goals and the content elements of the project could be supported. After all these were taken into consideration, face-to-face interviews seemed to be the best method. This research element took place at the beginning of the project in 2013.

Methodological Considerations

During a survey research, the researcher hopes and compiles the necessary tool in order to be able to gather correct data that are related to the research questions. In this context, correct data mostly means data free from measurement errors, which is an optimistic presumption in most cases; that is why potential problems should be dealt with before deeper analysis is carried out and conclusions are drawn

(Kehl, 2011). Measurement errors should be reviewed so that their possible causes and the methods of their management can be understood. Handbooks on survey research often put potential errors in four categories (Grover–Vriens, 2006):

Sampling error: every instance of sampling causes errors, which means that the gathered information about the population is not as accurate as if the opinion of the whole population would have been interviewed. This error cannot be prevented.

Coverage error: this error happens when the potential participants of the research do not cover demographically the whole population. This error can be prevented with the careful preparation of the sampling plan.

Non-response error: this error occurs when some of the potential respondents cannot be reached or they reject the response. In the current research, this kind of error is not typical because the proportion of those who did not respond is quite low compared to the size of the sample. It is a more serious problem when this proportion exceeds 10% significantly or when not responding is systematic. In this research, the data did not show the signs of these phenomena.

Measurement error: this error indicates the difference between the actual value of the respondent for a given variable and the value obtained with the questionnaire from the survey. This error occurs the most frequently and is the most difficult to recognize and to prevent. Respondents themselves or the method of the survey (e.g. a face-to-face interview results in different outcomes than a telephone interview does) can cause systematic measurement errors, though it is often difficult to distinguish these reasons. These kinds of errors are often called *common method variance* in the literature, which has been a serious research field since the 1960s. Podsakoff et al. give a very extensive summary about this field (Podsakoff et al., 2003).

Measurement errors and respondent bias frequently occur; however, researchers do not often take them into account. Errors can cause several different kinds of bias; however, in the current research, the focus is on the impact on the relationships between the variables. In some cases, Type 1 and Type 2 errors can occur due to bias; that is, in some cases, correlation can be detected between independent variables due to overestimation, and vice versa: an existing relationship between variables can be obscured owing to bias. These kinds of systematic errors can make the actual correlation and the measured one have opposite signs. The degree of the error depends on many factors, but the largest bias occurs in the case of attitude statements according to Podsakoff's study (Podsakoff et al., p. 880). The respondent bias that is mentioned the most frequently and has generated the most research is the following:

Socially desirable responding: it is the tendency which means that respondents make themselves appear to be better than they are in reality owing to the existing social norms. Typical examples are questions about tax evasion, alcohol consumption or racism.

Acquiescent responding: according to the general definition, this bias includes the tendency which means that respondents agree with the statements regardless of their content (Winkler, Kanouse and Ware, 1982). The phenomenon is also called agreement tendency, yea-saying and positivity. The acquiescent responding has a less frequent counter-version, the nay-saying or disacquiescence responding.

Extreme responding: this means the responding pattern, in which respondents choose the extreme (the lowest or highest) values regardless of the content of the question. There may be a lot of reasons for this kind of responding. According to research, little children and those respondents who have strong emotions about the topic can fall for this kind of bias.

Midpoint responding: this responding pattern is the opposite of extreme responding. It means that respondents choose the middle value from the scale regardless of the content of the question. The reason for this bias is usually caution.

There are other potential threats than the above mentioned ones, and their management is very important so that right conclusions can be drawn.

The Results

A short overview of the basic data of the research is presented, and then the focus of the study will be directed on youth lifestyle groups.

80% of the respondents live with their parents, 60% of them study and 23% of them work. Participants were asked to evaluate their *awareness about everyday news* on a five-point scale and the mean value was 3.31, which is not an outstanding result. On the other hand, it is not that important for them (3.48). People living in larger settlements and older respondents appeared to be more interested. Surprisingly, the most frequently used everyday *information source* is still the news on television. 35.4% of the respondents (n=2000) watch the news on television almost every day. 32.5% (n=2000) read online news portals and 21.9% (n=2000) listen to radio news almost every day. The information channel which is the least frequently used by the youth is the print media. It is only 11.6% of the respondents (n=2000) who regularly read newspapers.

However, online sources are considered to be the most important in terms of *active information seeking*. Most members of the age-group (56.7%; n=2000) find answers to their questions on the Internet, and they usually use search engines if they need information. Personal contacts are regarded important when they seek information. 48.8% (n=2000) of young people ask their peers and friends for information, and 45.8% (n=2000) of them ask their parents. Only 31.3% (n=2000) of the respondents use social media on a regular basis to find information. Print media is the least used information source among young people: only 16.8%

(n=2000) reported to gather information from books and newspapers. It is an interesting result that female members of the age-group prefer using offline sources, especially personal contacts. The larger settlements they live in, the less significant these sources are, and online sources become more dominant.

The rapid spread of *smartphones* indicates that 59% of respondents (n=2000) in this age-group have such a device and 45.5% of them (n=2000) even have mobile Internet connection. Whereas 11.1% (n=1181) of smartphone users have never downloaded any applications on their telephones, 45.8% (n=1181) of them regularly update applications. Almost half of the respondents (46.8%; n=2000) reported that they used increasingly more functions of their *mobile phones*.

The proportion of households where *Internet connection* is available is 94.9% (n=2000), which is almost the same as access to television in households. As it is expected, households in smaller settlements are less likely to have Internet connection.

According to the research, young people have *regular contacts with others mostly on online* platforms, with 37.2 people on average (n=1946). The average number of personal contacts is 21.9 (n=1981) and contacts via the phone are 12.0 (n=1970). One of the respondents reported to keep in touch with 1,500 other people on the Internet, which indicates the contact intensity of online platforms. Naturally, most of these online relationships mean weak connections because *an average 15-24 year-old young person considers 11.1 people as friends* (n=1982), while *there are typically five people in a circle of friends*. A good indicator of an active social life of the age-group is that only 15 people (0.7%; n=1982) reported to have no friends at all.

Whereas 35.9% of the respondents (n=2000) are interested in *new scientific achievements*, 26.0% of them are not interested in scientific novelties at all. The *average value of 3.11* of the responses is almost the same as the value of how interested the youth are in checking scientific contents in social media. As it is expected, older members of the segment, men and those who live in larger settlements are more open to research and development.

Outdoor activities of youth are fairly active; respondents spend 4.58 nights out of 10 on average out of their homes. As the settlement hierarchy rises, the number of nights spent out of the home also increases.

An average young person between 15 and 24 years of age read 5.23 books (n=1864) the year before the research, which did not include compulsory reading and textbooks. The dispersion of the responses is significant since there were respondents who had not read any books the year before, whereas other respondents had read 150 books during the previous year. The attitudes are well reflected by the mode value, which is zero in this case, since 21.7% of the respondents (n=1864) did not read any books and 6.8% (n=2000) could not answer the question. The most typical mode value was 2 among those who

read books, while 16.5% (n=2000) responded that they had read two books the previous year. Women and respondents living in Budapest typically read more than the average. It is a popular free time activity among the youth to *watch movies and series*. 67.0% of them (n=2000) watch series at least every week and 16.9% (n=2000) watch every day. Women and the younger members of the segment seem to watch series more actively than the average. 31% of those who watch series (n=1470) follow the series in a foreign language, mostly in English. The rate of other languages is very low.

On the basis of the findings of the research, *high confidence* is typical of the respondents. 64% of young people (n=1989) think that they are successful in what they do. 62.2% (n=1990) even think that they can always get, receive and achieve what they really want.

In the survey, respondents were asked about *satisfaction with their life*. The average is closer to 4 on a five-point scale (3.77), while the median and the mode are also 4. Two-thirds of the respondents (66%, n=1976) are quite or absolutely satisfied with their lives. 7% reported that they were mostly dissatisfied with their lives. 27.1% chose the middle value. It can be considered a tendency that as the respondents' age increases, their satisfaction with life decreases. The research has yielded another interesting finding. Decrease in the degree of urbanization makes young people's satisfaction increase gradually. The average value of young people from Budapest (n=346) is 3.36, which reflects that they are the least satisfied, whereas young people living in settlements with a population of 2,000 are the most satisfied. There is no significant difference between the satisfaction of men and women.

Appearance is really important for this segment. 63.6% of the valid responses (n=1996) gave a value higher than three about the statement that 'I take a good care of my appearance.' The average agreement with this statement is 3.8 (n=1996), whereas the median is 4 and the mode is also 4. Good appearance is important especially for young women, their average (3.94; n=1017) is 0.3 points higher than men's value. It is interesting that people living in Budapest and in small settlements with a population of less than 2,000 think that appearance is very important.

It also supports the importance of appearance that 49.8% of the respondents (n=1986) chose the two highest values on a ten-point scale when they were asked about how important it was for them *to have their own style*, and the number of respondents who opted for ten on this scale was the highest.

Typical groups (clusters) that represented significantly different attitudes to the *judgment of science* were identified among young people. Ten attitude statements from the questionnaire were used for this analysis. The simple k-means cluster analysis seemed to be the most effective to identify the clusters of science communication. After a multiple iteration process, a solution consisting of four

clusters was chosen. The four segments deriving from the cluster analysis show preferences that can be separated and interpreted well; so, the following clusters can be identified:

1. *anti-science group*: their main feature is that they consider the efforts of science to be dangerous and they protest actively;

2. *believers of science*: they have totally different views from those of the first group, they agree with every statement to a greater than average extent, and their support is active;

3. *science supporters*: their important feature is that they support science passively; that is, they understand and acknowledge science and the importance of scientific achievements; however, they do not want to take part in the development of science; so, their support can mostly be considered passive;

4. *the indifferent*: they practically rejected all of the statements compared to the other groups. They can be supposed to protest passively.

Lifestyle Groups

One of the most important questions of the research was about the lifestyle of youth. For this purpose, a model was initially chosen, whereby groups were identified in the dimensions of *pace of life* and *value orientation* (Töröcsik, 2011). Since the adaptability of the model had been previously justified (Szűcs–Töröcsik–Soós, 2010), data processing could be started from this initial point. The aim was to define the latent variables of pace of life and value orientation on the grounds of data cleared from the average respondent characteristics. A principal component analysis of the transformed values was conducted in accordance with the model. Some of the variables were removed for professional reasons and there were variables which did not correlate with any other variables. These variables were removed from the analysis. The remaining variables consisted of two principal components which were called pace of life and value orientation on the basis of the model:

Pace of life (To what extent do you agree with the following statements?):

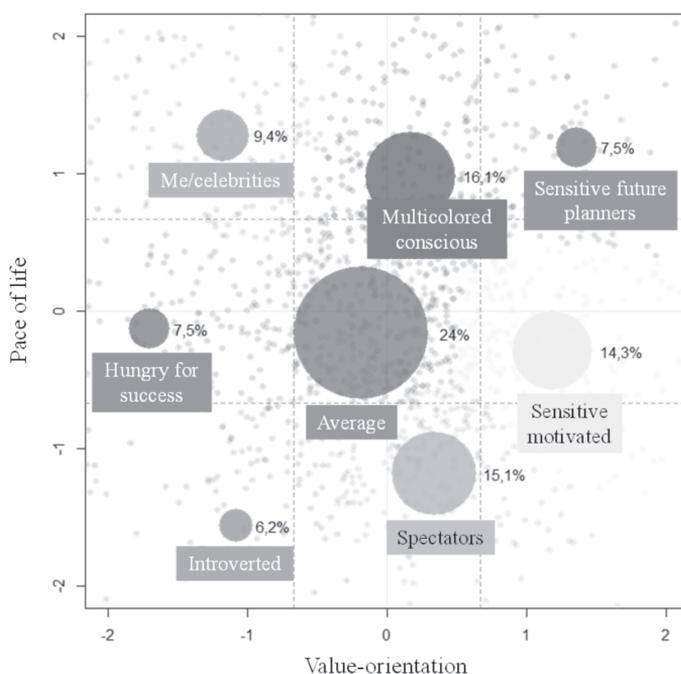
- I like to be everywhere and live intensively. (-)
- I take great care of my appearance. (-)
- I stay out of things. (+)
- I usually just contemplate. (+)
- I live slowly compared to others. (+)

Value orientation (To what extent do you agree with the following statements?):

- Wealth and money. (+)
- Listening to other people, who I do not agree with. (-)
- Humble, modest and restrained. (-)
- Success and acclaim. (+)

The categories above can be considered as the final consequence of the analysis. The principal component analysis was chosen so that latent variables can be defined. The analysis was applied for the modified variables which measured pace of life and value orientation. The principal components with eigenvalues over 1 were included, whereby the total variance explained reached 50%, and communality values were between 0.4 and 0.5. The 0.764 value of KMO test, which is used conventionally, can be considered good. The positions of the groups are shown in Figure 1.

Figure 1. Lifestyle groups of Hungarian young people



Source: edited by the authors

The presentation of the groups shows that three groups faster than the average could be identified and there were three other groups with fast pace of life and two more groups that were slower than the average.

The description of all eight groups is summarized in the following section:

The *multi-coloured conscious* group (16.1%) consists of young people who live a faster life than the average, they have a lot of different friends, they enjoy life and they are satisfied with it, which is supported by the fact that their families are relatively wealthy. They plan their future, they are preparing for it consciously, but this does not mean that their interests focus only on a few things. They like

taking care of themselves and they know and like the various brands; however, education is also very important in their life. Women and young people from Budapest are slightly overrepresented in the group.

The *sensitive future planners* (7.5%) also live fast lives, and they are in the middle of actions. They not only study but they also spend their free time actively. Their distinguishing feature compared to other groups with fast pace of life is that they pay attention to others. Kindness and modesty are their preferred values. They are sensitive but they have definite ideas. The rate of younger respondents and women is higher in this group than in the sample. Their relationship to sciences is positive; they like to study and plan to go to university or to college. They are also satisfied with their lives; their family is in a good financial situation.

The members of *me/celebrities* group (9.4%) live a fast life. They take care of their own appearance intensively. It is important for these young people to show their own style. They know and like the various brands. They spend quite a lot of time by themselves, they are confident, they dare to be themselves and they regard money and success important. Interestingly, this is a group typically comprising men and people living in large towns. They are not that interested in sciences, except informatics and information technology. Their Internet usage is high, they are quite active online, upload photos, like to chat and they keep contact with a lot of online and offline friends.

The *average* group (24%) presents the median values and average speed of life which are typical of the average Hungarian young people because most of the values do not differ significantly from the average; therefore, conclusions referring to them can be generalized. Money and success seem to be very important for each member of this age-group. They are also confident, they think they are not left out of anything and they take part in every significant event. It is essential for them that they should prepare for the future; however, they do not do too much for it. What differentiates this group from the others is that they do not consider style to be of great importance, they appreciate it less than the other groups do and they have fewer friends than the average.

Members of the *sensitive motivated* group (14.3%) typically think that understanding others and paying attention to others are very important, which means that they do not deal only with themselves and their own plans, but they also react on their environment. They evaluate characteristic features such as being humble, modest and restrained. Contemplating is typical of the group rather than taking part in everything intensively, although they may not have the opportunity for this. Members of this group are satisfied, they typically live in smaller settlements and they have modest financial conditions. They are especially interested in sciences; the majority of the group is planning their future consciously, which can be an opportunity for them to break out. They mostly plan their future on the field of humanities.

Members of the *hungry for success* group (7.5%) have average pace of life. It is not a large group, but some characteristics are quite typical in the group. It is obvious that the desire for tangible assets, money and success greatly influence the group members' way of thinking. They seem to be envious but they do not do anything in order to get in a better situation. They do not appreciate modesty, and do not pay attention to others. Education is not important for them and the proportion of those group members who have vocational school diploma is high. They follow brands on the Internet and they admit overtly that they are interested in these brands, even if they are not necessarily available for them. Their online activities include watching videos and uploading contents, and they feel good in the virtual space. They have a strong desire to live another life, but they are not dissatisfied with their current life.

15.1% of young people are *spectators*. Members of this group live more slowly than the average; they prefer contemplating, but they are not dissatisfied with their circumstances. This group is not that motivated to continue their studies and to deal with sciences and they do not deal with building their future. Men have a higher participation rate than the average in this group. In contrast with the other groups, the group members' Facebook activity is less intensive; however, writing blogs is interesting for them. They are less satisfied with their health conditions, they are a little introverted and only a few of them have a relationship.

The group of the *introverted* is not a large group (6.2%). Its members seem to be problematic, and they are definitely separated from other clusters. They have few friends, they are reserved and they live slowly and they even think that they are left out of things. Men are overrepresented in the group. Their Internet and Facebook activities are low. Their relationship with the virtual world is not that close. They are not interested in sciences; however, engineering raises their interests a bit. The financial situation of the group members is under the average, but money is important for them too.

Conclusions

In this study, the aspects of generational thinking, the possible segmentation of generations and the significance of cohort experiences were presented. It was highlighted that today's media-driven generation labelling is not enough to interpret generational characteristics. The examination was aimed at the segment of young people between the ages of 15 and 24 who partly belong to Generation Z and partly to Generation Y, and are really important for universities both as potential students and also as current students. A project, which involves research and activities aimed at the acquaintance with the target audience, was introduced. Research findings were highlighted, which reveal that today's young

people cannot be described with uniform features, they do not consist of happy life-starters because they also have to struggle with problems. Their confidence and their desire for money and success are typical of them, but they also need help while they search for their identity. The question, which can initiate discussions, is whether today's young generation is different or they have to struggle with the same problems as previous generations had to at the same age. There is no doubt that the circumstances of this generation are different: for example, they use IT-devices, social media and mobile phones actively.

The study revealed the lifestyle groups of Hungarian youth, distinguishing carefree, ambitious, struggling and longing young people. Hopefully, this research can contribute to the better understanding of this age-group.

References

- Bakewell, C.-Mitchell, V-W. (2003). Generation Y Female Consumer Decision-Making Styles. *International Journal of Retail and Distribution Management* 31: 95-106.
- Borgstedt, S.-Calmbach, M. (2010). *Vernetzt, Verplant, Verschieden. Jugendliche Freizeitwelten*. Nürnberg: Das Baugerüst, Jugendarbeit 2017.
- Coupland, D. (2007). *X generáció*. Budapest: Európa Könyvkiadó Kft.
- Csepeli, Gy.-Kígyós, É.-Popper, P. (2006). *Magára hagyott generációk. Fiatalok és öregek a XXI. században*. Budapest: Saxum Kiadó.
- Csepeli, Gy.-Prazsák, G. (2010). *Örök visszatérés? Társadalom az információs korban*. Budapest: József Műhely.
- Fanta Trendriport 6* – Retrieved from: http://campuslet.unideb.hu/dokumentumok/tanulmanyok1/fantatrendriport6_091026062651.pdf
- Gergátz, I. (2010). *ICT az 50+ generáció életében*. PhD értekezés, Pécs.
- Glas, I. (2009). *3 Generationen im Vergleich*. Bauer Media KG.
- Grail Research – A Division of Integreon. (2011). Consumers of Tomorrow: Insights and Observations about Generation Z – Retrieved from: www.grailresearch.com/pdf/ContentPodsPdf/Consumers_of_Tomorrow_Insights_and_Observations_About_Generation_Z.pdf
- Grover, R.-Vriens, M. (2006). *The Handbook of Marketing Research: Uses, Misuses, and Future Advances*. SAGE Publications, Inc.
- Heckenberg, N. R.-McDuff, R.-Smith, C. P.-White, A. G. (1991). Generation of Optical Phase Singularities by Computer-Generated Holograms. *Optics Letter*.
- Hoffmanné, I. (2007). A generációs marketing alkalmazása a civil szférában. Retrieved from: <http://www.mifigyelo.hu/Civilkomp02.07/civilkompaudio.htm>
- Howe, N.-Strauss, W. (2000). *Millennials Rising: The Next Great Generation*. New York: Vintage Books.

- Jones, S.–Fox, S. (2009). Generations Online in 2009. Pew Internet Research – Retrieved from: <http://www.pewInternet.org/Reports/2009/Generations-Online-in-2009.aspx>
- Csécsi, R.–Dulka, M.–Juhász, Gy.,–Lakatos, D.–Molnár, Cs. G.–Mrázik, Gy. (2012). *Ifjúság 2012*, (ed.: Székely, L.) 3 December 2012. Retrieved from: http://kutatopont.hu/files/2012/02/magyar_ifjusag_2012.pdf
- Kehl, D. (2011). Skálák és statisztikák: a méréselméletről és történetéről. *Statisztikai Szemle* 89(10-11): 1057–1080.
- Lehr, U. (2010). Herausforderungen der demografischen Entwicklung in Europa. Retrieved from: http://www.google.hu/search?q=Lehr_20Vortrag.&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:hu:official&client=firefox-a
- Marconi, J. (2000). *Future Marketing: Targeting Seniors, Boomers, and Generations X and Y*. Chicago: NTC Business Books.
- McCrinkle, M.–Wolfinger, E. (2010). Az XYZ ábécéje. A nemzedékek meghatározása. *Korunk* 11: 13–18.
- Mutte, J.-L. (2004). Managing Workers of the Next Decade. Expatica HR [online] Retrieved from: <http://www.expatica.com/hr/story/managing-workers-of-the-next-decade-11866.html?ppager=1>
- Oblinger, D.–Oblinger, J. (eds.) (2005). *Educating the Net Generation*, Washington, D.C.: EDUCAUSE.
- Podsakoff, P. M.–MacKenzie, S. B.–Lee, J.-Y.–Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies, *Journal of Applied Psychology*, 88(5): 879–903.
- Prensky, M. (2001). *Digital Natives, Digital Immigrants I-II. On the Horizon*, NCB University Press, Vol. 9 No. 5, October.
- Prykop, C. (2005). *Scene-Marketing*. Wiesbaden: GWV.
- Schewe, C. D.–Noble, S. M. (2000). Market Segmentation by Cohorts: The Value and Validity of Cohorts in America and Abroad. *Journal of Marketing Management* 16: 129–142.
- Smith, W.–Clurman, A. (1997). *Rocking the Ages*. New York: Harper Business, p. 5. (2003). *Generációk, márkák, célcsoportok*. Budapest: Geomédia Könyvkiadó Kft.
- Strauss, W.–Howe, N. (1992). *Generations: The History of America's Future, 1584 to 2069*. New York: Harper Perennial.
- Reeves, T. C.–Oh, E. (2007). Generational Differences. *Handbook of Research on Educational Communications and Technology*, 295–303.
- Szabó, A.–Bauer, B. (eds.) (2009): *Ifjúság 2008 – Gyorsjelentés, Szociálpolitikai és Munkaügyi Intézet*. Retrieved from: http://www.ncsszi.hu/download.php%3Ffile_id%3D785
- Szűcs, K.–Törőcsik, M.–Soós, J. (2010). Consumers' Trend Affinity in the Hungarian society. In: Bauer, A.–Agárdi, I. (eds.) *Marketing Theory*

- Challenges in Emerging Societies: MTC4*, 1st EMAC Regional Conference. Conference proceedings. Paper 1. Budapest: Corvinus University of Budapest.
- Pál, E. (2013). *The Generation „Z” – Overview Study*. Retrieved from: <http://www.zgeneracio.hu/getDocument/4252>
- Tari, A. (2010). *Y generáció: Klinikai pszichológiai jelenségek és társadalomlélektani összefüggések az információs korban*. Budapest: Jaffa Kiadó.
- Tari, A. (2011). *Z generáció: klinikai pszichológiai jelenségek és társadalomlélektani szempontok az információs korban*. Budapest: Tericum.
- Tarr, F. (ed.) (2010). *A 80-as generáció – pályakezdő társadalomtudósok esszékötetete*. Budapest: Kontra Műhely.
- Törőcsik, M. (2007c). *Vásárlói magatartás*. 1st edition Budapest: Akadémiai Kiadó.
- (2009). Generációs marketing. In: Bugár, Gy.–Farkas, F. (eds.), *Elkötelezettség és sokoldalúság*. Tanulmánykötet Barakonyi Károly tiszteletére. Pécs: Pécsi Tudományegyetem Közgazdaságtudományi Kar, 221–228.
- (2010). A fiatalok fogyasztói magatartása – az egyetemek fő célcsoportjának megértése. In: Törőcsik, M.–Kuráth, G. (eds.): *Egyetemi marketing*. Pécs: Pécsi Tudományegyetem, 123–141.
- (2011). *Fogyasztói magatartás – insight, trendek, vásárlók*. Budapest: Akadémiai Kiadó.
- Winkler, J. D.–Kanouse, D. E.–Ware, J. E. Jr. (1982). Controlling for Acquiescence Response Set in Scale Development. *Journal of Applied Psychology* 67: 555–561.