

TRANSFORMATION OF INTERESTS AND MOTIVATION TO LEARN OF GENERATION Z

Roganova A.I.^a, Lanovenko Yu. I.^a

^a Kiev Institute of Business and Technology, Ukraine

Abstract

Modern children are unfamiliar with the world without a comprehensive flow of information. They live in a «clip culture». They are surrounded by information and do not know how to study it deeply, but instead cover it widely. Educational institutions state that children have begun to lose interest and motivation to learn. This problem has become global. Our study aimed to determine whether the Generation Z interests in relation to their parents' interests have decreased and whether this decreases motivation to study. Online focus testing of two focus groups of 18 people. One group represents Generation Z, and the other - Generation Y. We used the interview method based on Filimonova O. modification of the «Map of Interests» questionnaire. Analyzing the results, we found, first, that the current generation is interested in more fields of activity than the previous (last ranked area of activity today has 33% of followers, in contrast to the past 17%). Secondly, we divided the obtained data into three groups - unchanged interests, decreased interests, and increased interests. Information technologies appeared in the last group. Third, the motivation to learn has not diminished, but the approach to learning has changed. All this leads to the conclusion that the education system must adapt to the needs of ways to obtain knowledge of the new generation. Our research shows that children's lack of knowledge is caused not by their low interest in activities, but by the incorrectly constructed educational process, namely, without considering their «digital» specifics. That is, we observe a transformation of interests rather than the motivation of Generation Z.

Keywords: self-identity; personal choice; Career Choice; external factors, internal factors.

ТРАНСФОРМАЦІЯ ІНТЕРЕСІВ ТА МОТИВАЦІЇ ДО НАВЧАННЯ ПОКОЛІННЯ Z

Роганова А.І.^a, Лановенко Ю.І.^{a1}

^a Київський інститут бізнесу та технологій, Україна

Анотація

Сучасні діти не знайомі зі світом без всеохоплюючого інформаційного потоку. Вони живуть у «кліповій культурі». Вони оточені інформацією та не вміють вивчати її глибоко, скоріше охоплюють широко. Заклади освіти констатують, що діти стали втрачати інтерес та мотивацію до навчання. Ця проблема набула світового масштабу. Метою нашого дослідження було з'ясувати, чи змінилися інтереси до діяльності дітей покоління Z відносно до інтересів їх батьків, та чи це зумовлює зменшення мотивації до навчання в закладах освіти. Проведено онлайн тестування двох фокус груп по 18 осіб. Одна група репрезентує покоління Y, а друга – покоління Z. За основу взята методика «Карта інтересів» модифікації Філімонової О. Проаналізувавши результати ми виявили, по-перше, те що сучасне покоління цікавиться більшою кількістю сфер діяльності ніж попереднє (остання за рейтингом сфера діяльності сьогодні має 33% прихильників, на відміну від минулого – 17%). По-друге, отримані дані ми розділили на три групи – інтереси які не змінились, змінилися та збільшились. Інформаційні технології виявились у останній групі. По-третє, мотивація до пізнання не змінилась, але змінився підхід до опанування знання. Все це приводить до висновку, що система освіти має пристосовуватись до потреб у способах отримання знання нового покоління. Наше дослідження показує те, що проблема у несприйнятті дітьми знань спричинена не стільки їх низькою зацікавленістю у діяльності, скільки не правильно побудованим освітнім процесом. А саме без урахування їх «цифрової» специфіки. Тобто ми спостерігаємо трансформацію інтересів а не мотивації покоління Z.

Ключові слова: система цінностей; карта інтересів; сучасна освіта; цифрові технології.

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¹ Corresponding author.
E-mail address: lanovenko@kibit.edu.ua

Introduction

Man always improves his life, adjusting the world around him. However, these improvements also create new problems. In particular, at the end of the twentieth century, there was a discovery that no one had foreseen until then: a global information network – the Internet was created. This event has largely determined our present.

Children's upbringing was divided between such social institutions as the family, the school, the institute, the church, and others (Durkheim, 1996). The paradigm shift in society has affected the methods of educating each social institution. Today, upbringing and education must adapt to the abilities and abilities of children and youth. The information society (Mossberger & Tolbert 2008) immerses digital citizens in a continuous flow of information. Gadget users should be on the Internet all the time, using it to meet their needs. Smartphones, tablets, and netbooks are an integral part of modern life for communication, information retrieval, etc. The child's development, behavior, and interests have changed dramatically (Obukhova, 1998; Erickson, 2016).

Well-known educators, psychologists, and research institutes have worked on studying the impact of information technology on children's brains (Vygotsky, 2005; Elkonin, 2007; Vygotsky, 2008). Seymour Papert made a significant contribution to the development of this topic. He clearly articulated the positive opportunities that a child and family can gain with the advent of digital technology (Papert, 1989, 1996; Martinovic, et al., 2016). The phenomenon of the negative impact of virtual reality on children's development was considered in detail (Smirnova, 2018; Khilko & Tkacheva 2019). In 2018, a large study was published to study the four most common digital dependencies in the generation born in the digital age (Wang et al., 2019).

Against the background of global digitalization, experts notice severe changes in children's behavior, namely: a decrease in the child's interest in real life, games with peers, communication, learning, and increasing interest in any activity in the virtual world.

The change in the relationship between adults and children is relevant for our study. After all, upbringing and education is a process of teacher-student interaction (Dzhurinsky, 1998). Among the important factors in obtaining a quality education, we can single out those related to our study. Namely – student motivation to learn, the teacher's authority, learning technology (Rau et al., 2008). Psychologists testify to the loss of authority of adults in children, violation of subordination in relationships, which creates the need for teachers' psychological support (Han et al., 2019). Children who have received the name of Generation Z (born between 1995–2009)

want to receive information independently and only that which interests them, and in that form which satisfies them (Shamis & Nikonov, 2016). They do not study information deeply but rather widely. Moreover, they need training on how to use and how to protect themselves in the virtual world (Lareki et al., 2017). However, modern children are not familiar with the world without a comprehensive flow of information; their psyche and intellect are more comfortable to adapt to new realities. They have more critical thinking than the older Generation Y (born between 1981–1996) and learn to use all the clip perception benefits. The concept of «clip perception» was introduced by Alvin Toffler. In his view, clip perception is a characteristic of the information society, «a fundamentally new phenomenon, which is seen as part of the general information culture of the future, based on the endless flicker of information segments and is comfortable for people with the appropriate mentality» (Toffler, 2010 p. 784). In Russia, Fedor Girenok was the first to use the term «clip thinking». Girenok calls clip thinking such that «тільки responds only to a blow, a flash» (Girenok, 2016).

The MOMRI Institute of Modern Media conducted a study of media-active children. It consisted of a set of 25 experiments. The goal was to find out what kids and teens are doing online, which gadgets they like best, and how they use them. It was found that children's activity is characterized by great diversity and digitalization. Children are media active. The most popular activities for children in their free time are watching cartoons and programs on TV and other media, reading, mobile and computer games. «MOMRI research in 2017 showed that children at an early age turn from passive to active consumers, and already at the age of 3-5 begin to influence the choice of content and goods, 95% of parents talk about the participation of children 3-5 years in the choice.» Multiscreen and digitalization are new features of children's media consumption. A new phenomenon is the mass daily viewing of children's video content on Youtube (48% in 0-12 years), the use of messengers (35% in 8-12 years), communication of children from 8-10 years in social networks (36% in 8-12 years). Mobile games on a tablet or phone have become a daily pastime for every second child from birth to 12 years (45%) (Children, 2017).

Another risk of excessive obsession with gadgets is the child's transition to exclusively individual activities, limiting or blocking socialization's main channel – communication, communication activities. Experts warn that excessive computer addiction can lead to addictive behaviors such as computer addiction or Internet addiction (Papert, 1996; Malygin et al., 2013; Ferrara et al., 2017). A characteristic feature of this dependence, according to experts, is the desire to engage in computer-

related activities, which leads to a sharp reduction in all other activities (Bleakley et al., 2017).

However, the research results are contradictory and ambiguous (Komarova et al., 2011; Frölich et al., 2016). On the one hand, we have theories that indicate the destructive impact of digitalization on the child's psyche (Ivanova & Malyshkina 2017). On the other hand, theories that demonstrate the positive effect of digitalization. What determines the success or failure of the use of gadgets in the child's educational process is still not fully understood.

Our study aimed to determine whether the Generation Z interests in relation to their parents' interests have decreased and whether this decreases motivation to study.

Methods

We chose the method of «Interest Map» modification Filimonova O. to conduct a diagnostic study, applying Student's T-test to unrelated samples. This technique fully met all the requirements of our study, such as relevance, clarity, convenience. This technique allows to pre-analyze the interests close to a particular activity in the child.

To test our hypothesis about the decrease in interest of Gen Z, we needed to compare the interests of the current and previous generations. For this purpose, online testing of adults aged 30-45 and children aged 10-14 was conducted. We had tested two groups of 18 people each. Adults took the same test as children but using retrospective assessment (mentioned their interests in childhood).

This study aroused the adult generation's interest: it allowed adults to remember their childhood hobbies, compare and discuss their memories with their children.

Results and Discussion

According to the «Interest Map» method, the analysis of interests using the method of retrospective evaluation is presented in descending order in Figure 1.

The leading interests of the children of the previous generation were:

- Geography. Interest in it was due to the closed nature of our country at that time. The vast majority of children of the previous generation could only dream of long journeys. Therefore, this area's interest was due to the impossibility of visiting other countries in real life.
- Biology. Children's interest in this field is due to long stays on the street and flora and fauna observations. This has aroused and continues to arouse interest and emotional response in most children.
- Art. The children of the previous generation actively maintained an interest in this area by many different creative groups, which were an integral part of that time's educational process.

In the last place for our studied «children of the past» were:

- Chemistry. The low interest in this science is probably due to its complexity. Training did not have to be entertaining before, and the requirements for the level of knowledge were relatively high. Thus, the complex sciences in most children could cause fear rather than interest. It should be noted that chemistry in modern children is of much greater interest. This is due to the large number of chemical experiments that children can see in various educational shows.
- Physics. Similarly, this science had the status of a very complex. The complexity of teaching and high assessment requirements became an obstacle to the expression of children's interest in this science.
- Information Technology. During the childhood of the modern adult generation, this area was beginning to develop. Computers were not available to most ordinary children. That is why information technology is in the

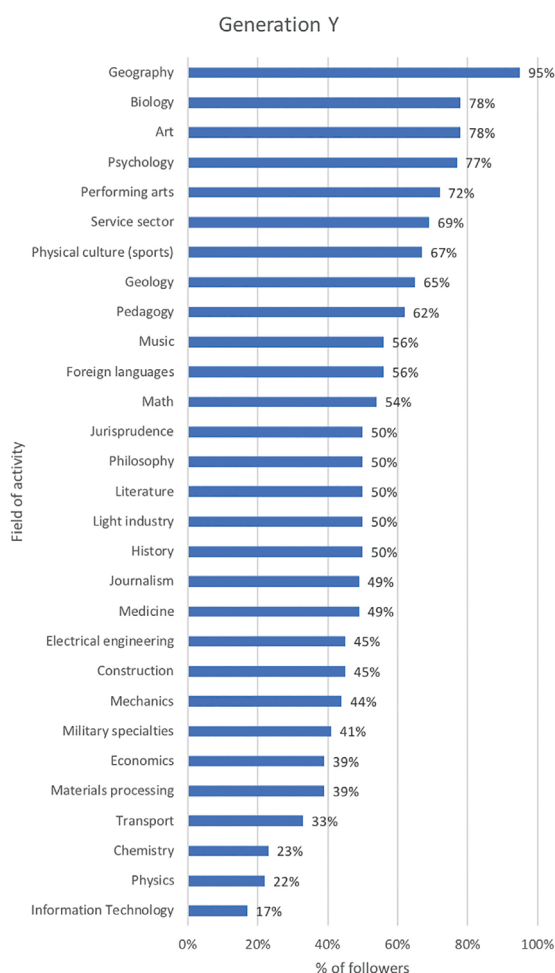


Figure 1. Rating of children's interests (Generation Y).

last place among the interests of children in the past.

In general, we can say that the interests were distributed relatively evenly in different areas, and all areas found supporters among the children of the previous generation.

The analysis of interests according to the method «Map of interests» in modern children is presented in descending order in Figure 2.

The leading interests of modern children were:

- Information Technology. It is an interest in this type of activity that has undergone theatrical changes. Information technology has moved on the scale of interests from the last place (in children of the previous generation) to the first (in modern children). The high interest of children in this field can be explained by the fact that technology provides access to information about all other activity areas.
- Biology. Modern children have shown the same interest in biology as children of the previous generation. Therefore, we believe that interest in this area has the same basis.

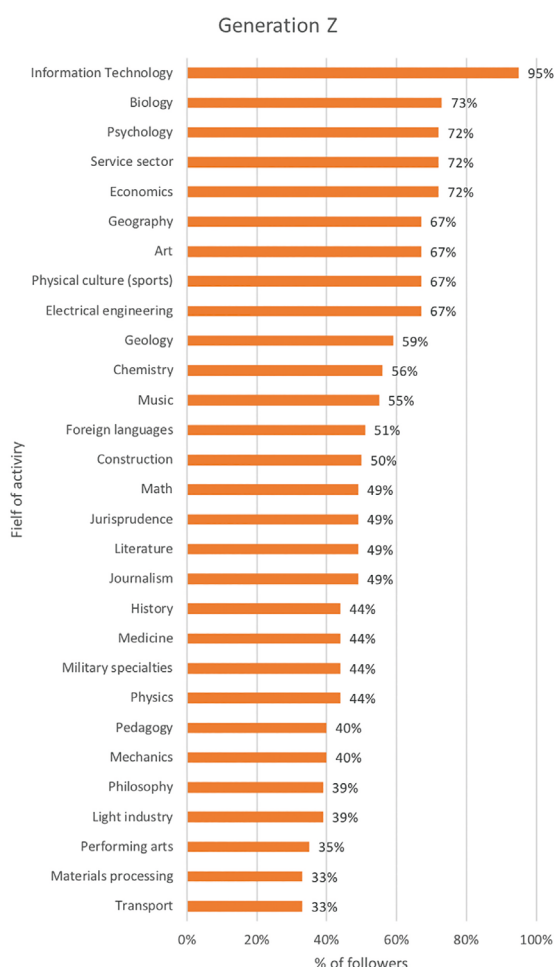


Figure 2. Rating of children's interests (Generation Z).

- Economics. Interest in this activity has grown significantly compared to the interest of the previous generation. This is due to a change in attitudes to this area in society.

In the last place for our studied children were:

- Medicine. Unfortunately, there is an opinion that the work of a doctor is complicated and poorly paid in our society. This understanding is passed from one generation to the next. Children in the past have shown almost the same level of interest in this area.
- Transport, aviation, maritime affairs. The sphere of transport is relatively narrow. In percentage terms, interest in it has not changed compared to the interest of the previous generation. Thus, it can be noted that it has never been widely popular.
- Materials processing. At the moment, this area of activity has virtually disappeared from the lives of children. There are no longer any circles of wood-burning or artistic metalworking. For this reason, children do not have the opportunity to show interest in it. However, it should be noted that in the previous generation, this area had a low rating.

Thus, we can say that the distribution of modern children's interests has changed slightly, but is equally distributed among different areas.

We got the results that showed that children's interests in the past and now differ in 14 of the 29 areas. The following areas remained almost unchanged (see Figure 3): Biology, Service sector, Psychology, Physical culture (sports), Geology, Music, Foreign languages, Math, Journalism, Literature, Jurisprudence, Medicine, Military specialties, Mechanics and Transport. This can be explained by the fact that these areas are still popular in society.

We emphasize that the attitude of children to physical education has not changed at all. Sport is still of great interest to children because the child's physiological need to move remained unchanged.

The decrease in the level of children's curiosity today is presented in Figure 4.

Interest in the Materials processing, History has fallen slightly. Slightly more children lost interest in Art, Light industry and Philosophy. Geography, Pedagogy and Performing arts have lost their position more than 20%. Some of these areas are losing popularity in society either because of unclaimed or because of low pay. It is these processes that affect children's interests.

A small increase in interest can be seen in Construction (see Figure 5). Perhaps this is the result of a change in approach to teaching these disciplines. The appearance of visual play materials helps to involve children in the learning process.

Interest in Physics, Chemistry, Economics, Electrical engineering has grown significantly. The popularity of these areas in society leads to

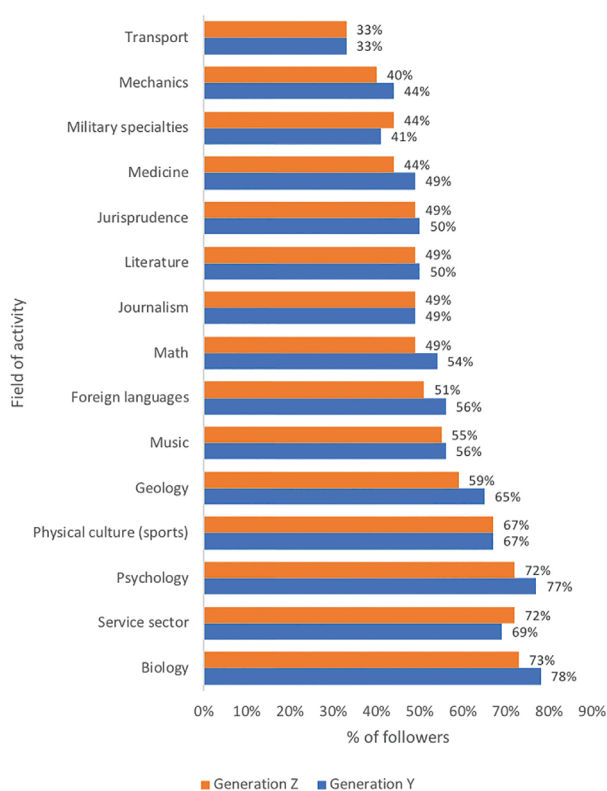


Figure 3. Unchanged interests.

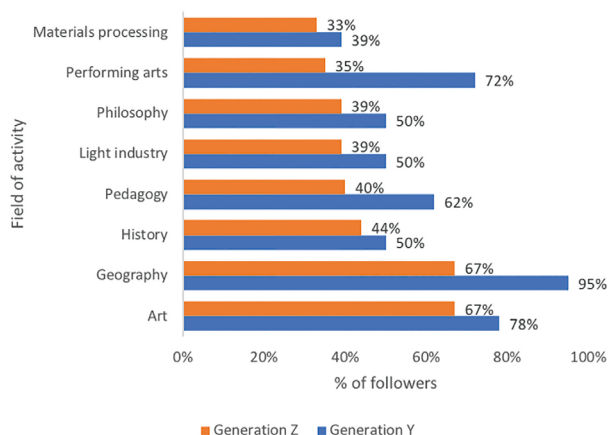


Figure 4. Decreased interests.

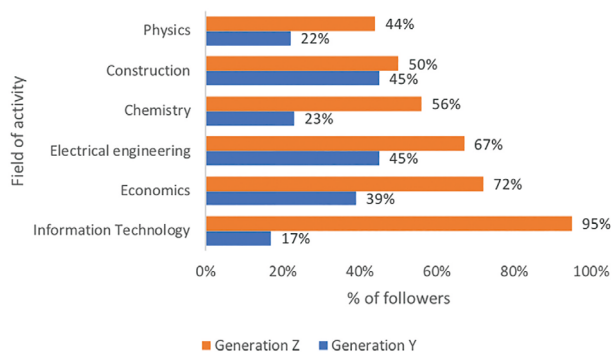


Figure 5. Increased interests.

the emergence of new methods and forms of learning due to the high involvement of children.

Furthermore, the most significant interest of modern children is in Information Technology. This type of activity has moved from the last place of interest in children of the previous generation to the first in modern children.

However, we must take into account the fact that other interests have not declined. In particular, the sphere of activity in the last place among the previous generation children had 17% of supporters. In comparison, today's last-ranked sphere of activity has 33% of supporters among modern children.

Our study is a finding of interest in the younger generation's activities, but it is not exhaustive. For example, a study in Portugal focuses on a child's career choices under the influence of the parent profession (Oliveira et al., 2020). A study by Yanguas, (2020) showed that digital technologies in learning did not improve student performance. At the same time, we have the results of a study in Cape Town Khan et al. (2019), which shows an increase in students' learning motivation.

Conclusion

Our study showed that Generation Z children take even more interest in various activities than their parents. The main difference is the sharp increase in interest in digital technologies, which is due to the advent of the Internet and the advent of the information society. We can say the motivation to learn has not changed. Other factors has changed and need to be understood. Along with the change in the type of thinking, the change in the relationship between children and adults, we see the approach to satisfying one's interests has also changed. Today educational institutions have to involve virtual digital space in the learning process.

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