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The Future Impact of Artificial Intelligence According to the Opinions of Hungarian and Turkish Youth in the Sight of a National Competitiveness

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Abstract: The 21st century has brought many changes to our lives. Digitalisation has gained unprecedented momentum, leading to a series of innovations in the field. Artificial intelligence was in its infancy at the beginning of the millennium. Research into artificial intelligence as given a boost by the rise in computer power and the ubiquity of the internet, which opened up new avenues for research. The real breakthrough for artificial intelligence came in the 2010s, when deep learning and the use of neural networks became widespread and generalised. Opinions on the future of AI are very mixed. One thing is certain: its rapid future development will transform the labour market, education, but the production and manufacturing sectors will be no exception. Artificial intelligence applications are capable of autonomous decision-making and creative problem solving, which will make people increasingly comfortable. Today's young people will certainly learn, work and live in an environment that will be significantly influenced by AI applications. That is why we consider it very important to get the views of the young, currently school-age generation on this topic, in order to prepare them adequately for the challenges and expectations. To be able to cope in a world where artificial intelligence is at work, young people need to have the right digital skills and competences, which the education system must provide them with. Our study aims to highlight the differences between Hungarian and Turkish young people, and to show the development directions and gaps for future success.

Keywords: Digitalisation, Artificial intelligence, Innovation, Educational technology, Development

Introduction

The 21st century is an era of change. Perhaps more than ever before, we are experiencing it in many areas of our lives. We are experiencing an accelerated transformation, often out of our control, in which it is not easy to find stable points. At the same time, expectations are changing in some areas of society, as well as in the work of teachers and educators in schools. These expectations extend to both staff and material conditions. What is a good school like today? Is it quantity or quality that counts in education? What are the qualities of a good teacher? What kind of pedagogical spaces does a school use in its daily life? How well can it keep up with the technological revolution? What are the expectations of students today? What is an attractive and motivating environment for them? What role does digitalisation play in a dynamically changing environment?

A series of questions such as these and more are the questions we are confronted with as we explore this topic. Over the past two decades, technological factors such as computers, the games industry and the internet, as well as social factors such as family, friends and society, have changed the way children think and perceive. Education is an area where innovation is needed for a number of reasons. Innovation is the solution to the challenges of the new age. For the digital natives of generations Z and alpha, digital tools and methods have become part of everyday life. However, introducing initiatives and methods related to innovation is a complex and difficult process. For education professionals, opinions are still divided on digital education and digitally-enhanced learning materials.

Literature Review

a. Focus on Competitiveness

There are numerous definitions of the word competition in the literature. Different approaches and different adjectives have been used to describe the meaning of the word. Some key words, such as struggle, will to win and surpass, appear in several definitions. Competition can in fact be identified as a motivating factor. From the very early stages of one's life, one strives for a kind of victory and success.

The Concept of Competitiveness

Competitiveness is a concept that everyone knows in different aspects. Nevertheless, it is difficult to understand from a technical point of view, particularly in terms of its content and measurability. There are many explanations for its definition. In this paper, I would like to build on what I have read in “Magdolna Csath's books *Changes and New Directions in Competitiveness Measurement and Competitiveness Dilemmas in the Age of Digitalisation and Robotisation*”.

Others, such as Garelli (2002), emphasise market success and the welfare of the population in defining the concept. According to the Organisation for Economic Co-operation and Development (OECD) (1992), competitiveness is defined as the production of goods and services under conditions of free trade and fair competition, with a steady improvement in the quality of life and standards of living of the population (Csath et al., 2019). Lengyel (2012) identifies it as a kind of umbrella term for the tendency to compete, in which the ability to gain a position and to hold a lasting position, as well as the propensity to succeed, play a prominent role. It can also be linked to economic growth and the capacity for sustainable development (Csath et al., 2019)

Soft Factors of Competitiveness

In defining competitiveness, it is clear that GDP alone cannot be used as a measure of competitiveness, as it cannot measure environmental sustainability, people's sense of personal security or their level of education. These, in Garelli's words, the soft attributes of living standards, need to be measured in a different way, using other factors. The so-called soft factors are not easy to decipher. Nonaka and Takeuchi (1995) made known the *tacit* and *explicit* word pair from the English language. These were used to define soft and non-soft factors. The word *tacit* has an intangible meaning, while *explicit* has an overt, visible meaning. The aforementioned pair of researchers emphasise the prominent role of 'deep knowledge', which can be associated with innovation and creativity (Varga, 2023a). If this particular knowledge can be brought to the fore, it can certainly have a positive and beneficial impact on competitiveness. They also argued in their reports that an encouraging environment and a stimulating culture are essential for this process. The ability to innovate is a typical soft factor (Varga, 2023b).

Sleutjes (2013) points out and defines in his research that the so-called hard factors of competitiveness are, for example, good infrastructure, a safe environment, good basic services. In addition to these, he also emphasises local soft factors as a kind of cultural milieu. The basic idea behind this grouping is that without all these factors, it is not possible to attract and retain labour. To use a simple example, it is not enough to provide high salaries, quality living spaces and a living environment are just as motivating. North (1990) addressed the issue of *path dependency*, according to which the values and traditions of the past have an influence on the institutional arrangements of the present. For this reason, it is particularly challenging to change or 'correct' an erroneous idea or thought.

On the soft factors, I would like to highlight Harrison's (1992) statement that the success of a society is determined by culture, not politics. This idea can also be interpreted as a kind of union between the concepts of education and competitiveness. The key word is culture. Again, a concept that is difficult to understand, encompassing values, behaviour, religion, customs, lifestyle (Hofstede, G., 2005.) In fact, it is a major task of educational institutions, since it includes all of these in the work of teaching and learning and in the workplace (Jäckel-Garai-Fodor, 2024; Garai-Fodor et al., 2023). In addition, social trust, creativity, a critical approach and equal treatment are all central to the role of schools. Hanifan (1916) organised social capital, both soft and soft factors, around friendship, goodwill, community and mutual sensitivity.

Fukuyama (1995) emphasised the power of trust. In his view, it is present in the most basic groups of society and is prominent everywhere. We need strong community norms, honesty, loyalty and trustworthiness to strengthen social capital. We conclude that national culture and social capital, i.e. soft factors, play an important role in the development of the competitiveness of nations. A nation can compete with higher levels of social development, knowledge, creativity and quality of life factors that ensure a high standard of living and quality of life.

The Links between Development and Competitiveness

It would be a step forward if a public mindset were to emerge in our country that the importance of social and environmental values and the goal of achieving a high quality of life goes beyond economic data. The development of a country can be measured in many ways. The evolution of the measurement of competitiveness has evolved continuously until today's methodology. The development of a society is approached and explained in different ways by researchers and thinkers. As it has evolved, there has been a broadening of its content. In the past, development was measured from a purely economic perspective. Then other social indicators have become increasingly important. As I have already highlighted in the previous chapter, the role of soft factors has become more prominent. In addition to several indicators, society can be analysed using data on educational attainment and human infrastructure. The use of groups of social indicators has become common practice. In my own field, education is one of the second group of sub-indicators. The average number of years spent in school is precisely defined. The role of schooling has increased, due to the fact that it can be compared to the extent to which a person can participate in social production and decision-making processes. The higher the level of education in a society, the more advanced it is considered to be. A society is composed of members with a wider range of knowledge, skills and adaptability.

A new concept, the so-called happiness index, has been introduced to measure the development of society. It basically measures the satisfaction of the members of society with their own situation. In recent years, the pursuit of quality of life has increasingly become the overriding goal, rather than prosperity. It has been argued that environmental stress cannot be offset by material goods. It has also been argued that the level of development of a society cannot be determined by economic and social indicators alone. It is necessary to complement this with environmental indicators. The concept of a sustainability perspective has emerged. In fact, it covers the economic, social and environmental spheres. At the same time, the process of measuring competitiveness has been extended in terms of content. More analyses focusing on the business environment and then including social factors have been developed. Education is given a central role in several areas. A good example is the European Union's Regional Competitiveness Index, which has 11 pillars grouped into three categories: health, primary education and higher education, labour market efficiency (Annoni-Dijkstra-Gargano 2017). At home, the report of the Hungarian National Bank also highlights education alongside demographic and social structure. As part of our research topic is digitalisation, I would like to mention the concept of green competitiveness in addition to technological development. "Green competitiveness is the reduction of the environmental burden through the development of technologies and related products and services that increase the diversification of an economy, raise its overall technological level, increase the attractiveness of its products and services, creating new markets for them, and thus improve the quality of life in the country not only through improving the quality of the environment, but also through the prosperity of the economy." (Csath et al., 2019)

Priority Research on the Impact of Competitiveness on Society

Several organisations have ranked countries according to different criteria. The International Institute for Management Development (IMD) has produced the Digital Competitiveness Index, which looks at how companies can adapt to digital technologies. They have grouped the set of indicators into three factors: knowledge, technology and future readiness. Hungary's position on these measures lags behind other countries. Hungary also scores poorly on the factor of preparedness for the future. The SolAbility Sustainable Competitiveness Report looked at the competitiveness of nations through digitalisation. In the ranking, Hungary also scored low. The UN Human Development Report looked at life expectancy, education and gross national income. Some of the indicators highlighted in the report include the gender inequality index and the proportion of people with at least upper secondary education. The Social Progress Index is structured around access to high quality education at the point of opportunity. Among the countries surveyed, our country ranked highest in access to basic knowledge. This can be explained by the literacy rate, the number of people in secondary education and the gender ratio in education. The Happiness Report shows that the indicator in our country lags behind that of other countries. However, this is not necessarily linked to income conditions, as several countries

have achieved more positive results where the material situation is not good. Looking at surveys and indicators, we can highlight several correlations. For example, it is clear that the competitiveness indicator and the share of tertiary education are interrelated. If there are fewer people with higher education skills in a country, the economic structure based on innovation is less developed.

Competitiveness in the Context of Digitalisation

Everyone in our society is part of the technological revolution that is happening all around us. Meanwhile, in the competitiveness process, digitalisation is certainly opening new doors and opportunities for the state, society and the economy. The needs and demands of the modern state can be found in the McKinsey report (2017). Among the problems highlighted is the low quality of education. In detailing the education process, we find several points that can be linked to digitalisation. The need to prepare for the 'digital age' in many areas of life is highlighted, with a particular focus on education processes. A comprehensive database and associated methodology have been developed. It focuses on digital technologies and data analysis, and on the development of talent management. He sees the need for digitalisation as essential in many areas other than education, such as public administration. Many of the tasks related to digitisation are attributed to the responsibility of the state, such as the provision of services, the organisation of processes, decision support and data sharing. As regards the organisation of processes, it is proposed to rethink and automate them. The readiness of countries was examined in the IMD Digital Competitiveness Study. The results clearly show that our country is lagging behind in this area. Moreover, there has been no improvement in digital competitiveness in recent years. In the area of so-called future readiness, we scored lowest. As the DESI (Digital Economy and Society Index) report shows, Hungary changed its strategy in 2015, and this was adopted in the Digital Wellbeing Programme. As a regulator, the state is supporting several innovation initiatives, such as the 5G coalition. The DESI shows that one of the biggest risk factors is the low share of people with basic digital skills. This number covers 50% of the population, according to the report. This is compounded by a shortage of existing skills. There are a number of ways to address these problems. First and foremost, we can make major strides through innovation in education. By changing attitudes and developing digital literacy, we can be sure of results. In terms of target groups, in addition to the young age group, the over-45s will be a priority. A comprehensive approach to digital skills development in education is needed. In the Czech Republic, the Digital Literacy Strategy, already in place, supports the development of digital literacy. It will also raise awareness of how people can actually improve their quality of life and social participation through the use of new modern technologies. As I mentioned earlier, in addition to education, the introduction of digitalisation also offers opportunities in the public administration system. A good example of this is online administration or e-invoicing.

b. Focus on Education

Even in antiquity, knowledge, the application of information and its sustainability were considered important. The transmission of knowledge was a priority even then. "Scientia potentia est", knowledge is power, as the Latin proverb says. This line of thought can be perfectly integrated into the process of linking competitiveness and education. Support for education and the creation of quality conditions are central, since knowledge influences development and development has an impact on social progress. Taking the issue further, the application of the knowledge gained can be stimulated through the right jobs, research and innovation. As we have already read in the analysis of the McKinsey report, supporting talent is a priority. The training of skilled professionals with secure knowledge is an ingredient for the development of competitiveness. The process of education is characterised by constant change and evolution of methods and spaces.

The Potential of Pedagogical Spaces

The opportunities offered must be used within certain limits. Age specificity must be one of the central criteria. It's true that our attachment to certain places is not always conscious, but it is important in our lives and creates security. The emergence of the physical and virtual environment is a feature of our times, and their combined effectiveness is clearly visible (Reti, 2011). In an age when the virtual world pervades our daily lives, mobile phones and computers are changing the social experience, and there is a particular need for activities that we do together (Hercz, 2015). It is very important that the environment is a breeding ground for social relationships. Different spaces, such as school, home, workplace, all have an impact on us. We must strive to create an environment that fosters teacher-student interaction. The environment can also be fully paralleled with life education (Reti, 2011).

Criteria Set for the Environment

The criteria for the learning environment have already been set out in several international programmes. For example, the UK government's Building Schools For The Future programme, which includes physical well-being, safety, personalisation, community, learning environment, literacy, identification, adaptability and sustainability as pillars. The latter is a good practice in our country, the Eco-School: sensitivity to the natural environment, e.g. reducing the eco-footprint, insulation, use of alternative energy sources, use of natural environmentally friendly materials (Csath, 2020). Summarising the above points, we can see that pedagogical spaces have played and continue to play a prominent role in the educational process. Change and innovation are clearly visible. Beyond the classroom, virtual spaces are now part of the pedagogical space.

Digital Spaces at School

A new concept emerging as an innovation in classrooms is the smart classroom, where education is an experience for students and teachers alike. Today, the demand for modern technology is undeniable. The pandemic period has highlighted the need to give schools where digital tools are part of everyday life a head start (Trust, T. 2018) Research and experience show that students are more motivated in an ultra-modern environment and that there are fewer disciplinary actions. Activity is higher and education is smoother. Information can be delivered and shared more quickly using new, creative solutions. Here we should note the parallel between the process and the world of work. Laptops, interactive panels, robots can make the process more colourful, faster and more efficient. Students can animate, simulate and learn more about the algorithmic and programming process (Meyer, B. ,2015).

Smartphones should not be forgotten either, although students should be taught how to use them. It is important that they know how to search for information in a targeted way, how to check its veracity and how to use it to solve problems. In the past, the most important task when using books was to access information. Today, the focus has changed to selection. The key is to select reliable sources on which to build. Students can also experience the joy of creating, for example with 3D printers and laser cutters that turn the digital world into reality. Creative pedagogy plays a key role in the learning environment. Students work collaboratively, in groups and on projects. In my opinion, digital education is a complement to traditional education. I cannot imagine that in the near future digital education will completely replace the former type, because the personal relationship between student and teacher is very important. Digital tools can also strengthen the relationship between the student and the teacher, as it allows the teaching to be outsourced from the classroom, giving the teacher more opportunity to work individually with each student (Demartini, 2020.) The role of furniture in pedagogical spaces has the same characteristics as mentioned above. It is important that flexible furniture suitable for group work replaces traditional desks.

The use of digital tools provides an opportunity to visualise work processes for students, helping them to be more confident, successful in their career choices and to take their place in the world of work (Cohen, 2001). In our country and internationally, we hear of several school development programmes, such as the High-Tech Schools programme. In addition to the purchase of equipment, there is also a strong emphasis on teacher training.

c. The Link between Competitiveness and Education

What are the characteristics of a competitive school in the 21st century? Garelli (2006) argues that nations can compete not only with their products and services, but also with their education systems and values. Baily et al (2013) stressed the importance of innovation. They introduce the notion of innovation capital, which is built on the pillars of physical as infocommunication tools, knowledge as research and human as individual and structural knowledge. Together, these result in effective and successful education and the development of science. Competing is about talent and skills. The biggest result and impact of this is to improve the knowledge levels of the workforce. In schools, the determining factors are the state of social capital, cultural characteristics, attitudes to work, motivation and commitment. We need to pay particular attention to developing these. All these can raise the level of creativity of the nation through organisational, management and leadership skills. Education is thus a source of competitiveness based on knowledge and innovation (Hanushek, E.A., 2007.) Technological innovations have a high added value. It is crucial to provide members of society with a green environment. (Florence 2016) It is an indisputable fact that intellectual performance is higher in natural environments than in artificial ones. The state has a catalytic role to play in this field, through investment,

training of professionals and shaping societal attitudes. Green competitiveness must also be supported in the structure of the education system, as a good state trains the workforce for the future. A high quality, future-oriented, environmentally aware education system is needed. We need to pay particular attention to developing skills linked to green innovation. The education system must be used to develop and improve society's environmental awareness.

Material and Method

Our research explored the opinions of high school and young university students through a questionnaire survey on the integration of new technological tools, with a particular focus on the impact of artificial intelligence and digital education on the world of work and the opportunities it presents. We asked their opinions on the opportunities and threats they present, using a pre-tested standardised questionnaire, in relation to their future work, the world of work and its impact on humanity. Thanks to the closed questions, the samples obtained can be easily evaluated. The questions are structured around the theme of incorporating artificial intelligence into student learning, in line with our research topic. We were looking for their opinions on the use of digitalisation and AI. How do they think AI will affect their future job prospects and the world of work, do they see the use of AI as an evolutionary step forward or an evolutionary dead end, and to what extent do they consider AI to be a threat to humanity. The questionnaire was distributed online and completed by members of the target group. The Hungarian sample consisted of 470 responses and the Turkish sample of 328. In order to draw conclusions, cross tabulation analysis was conducted in addition to traditional basic statistical methods. The following figure shows the distribution of our target group, consisting of Hungarian and Turkish secondary school students and university students. The questionnaire was prepared in Hungarian and English, and the international results obtained allowed for a comparison between the two countries. As the two nations have different education systems and are incorporating digitalisation at different rates, with a particular focus on artificial intelligence, other conclusions can be drawn from the samples obtained.

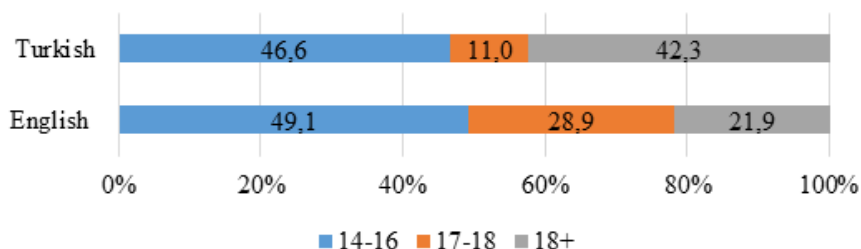


Figure 1: Composition of the sample

Source: Own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

Results

Figure 2 shows in detail the impact of AI on job opportunities and the world of work, based on the opinions of the whole sample, along the responses of Hungarian and Turkish youth. It is clear that young people clearly attribute a high impact to AI, and this is true for both nations. For Turkish youth, the proportion is much higher (65.6%), representing the opinion of almost two thirds of the sample. For Hungarian youth, the identification of a large impact is slightly lower (49.1%), but still the highest. The perception of a negligible impact is practically minimal in the response of Turkish youth (3.7%), while Hungarian youth are slightly more confident (8.8%).

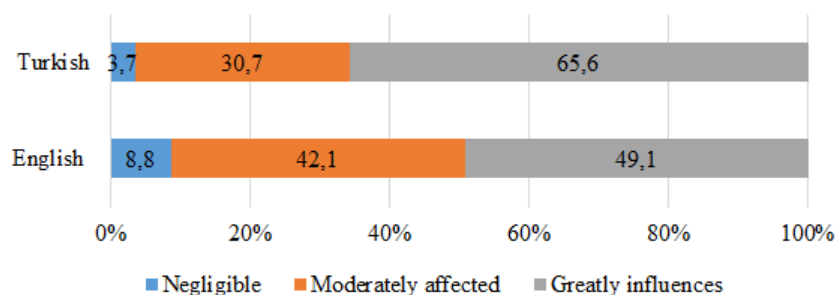


Figure 2. The impact of AI on job opportunities and the world of work, based on the views of the total sample

Source: own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

Table 1 presents the perception of the impact of AI on job opportunities and the world of work for Hungarian and Turkish youth by age group. According to the responses of young Hungarians, the medium to high perceived impacts increase as the age groups get older. Among 17-18 year olds, the perception of high impact is 57.6%, while among the youngest respondents it is 45.5%, similar to the over-18 age group (46.0%). Among Turkish youth, the proportion of those perceiving high impact is higher than among Hungarian respondents in all age groups. 72.2% of Turkish youth aged 17-18 and 69.6% of older youth (18+) believe that MI will significantly transform job opportunities in the future labour market. The table shows that Turkish youth have a slightly stronger perception of the impact of MI, with greater fears of its future dominance, especially in the middle age group. The results suggest that young people in both countries increasingly perceive that AI will have a significant impact on the world of work. To prepare for this situation, it is necessary to have the right competences, which the education system is designed to provide.

Table 1. Impact of MI on job opportunities and working life by age of young respondents

	English			Turkish		
	14-16	17-18	18+	14-16	17-18	18+
Negligible	11,6%	3,0%	10,0%	7,9%	0,0%	0,0%
Moderately affected	42,9%	39,4%	44,0%	31,6%	27,8%	30,4%
Greatly influences	45,5%	57,6%	46,0%	60,5%	72,2%	69,6%

Source: Own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

The Pearson Chi-square test allows us to assess whether there is a significant relationship between age and perceptions of the impact of MI on job opportunities. It can be seen that there is a correlation between the age of the respondents' perception of the future labour market impact of AI for both samples, i.e. age has an impact on the perception of the statement, as the value was below 5% in all cases.

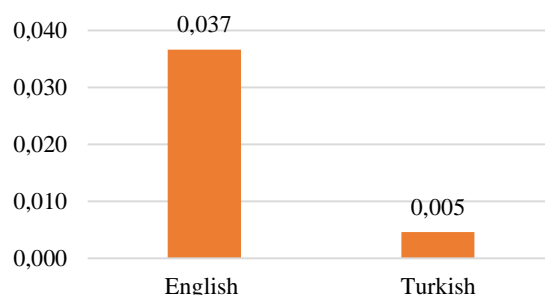


Figure 3. Pearson's chi-square between the influence of AI on the world of work and the age of respondents

Source: own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

Figure 4 shows the perception of artificial intelligence (AI) along "progress" or "dead end" dimensions, based on the opinions of the total sample of Hungarian and Turkish youth. The figure shows that young people in both countries overwhelmingly rate AI as a step forward, especially Turkish young people, who have the highest proportion of responses supporting progress. All these results are fully in line with previous findings that Turkish young people are more pro-AI than their Hungarian counterparts.

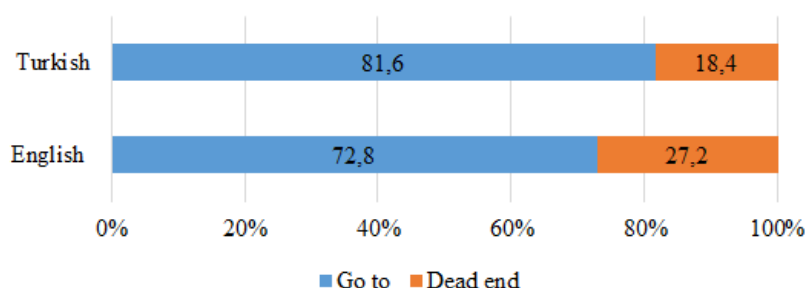


Figure 4. Perceptions of AI along two dimensions (progress, deadlock) based on the views of the total sample

Source: Own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

The table shows that Turkish young people have a higher rate of perceiving AI as an improvement in all age groups, especially in the 17-18 age group, where 88.9% rated it positively. Among Hungarian respondents, there is also a predominance of views in favour of progress, although more respondents in the over-18 group (34%)

see MI as a dead end, compared to 14-16 year olds (26.8%). It is also clear that for Turkish young people the category of progress is close to 80% for all age groups, compared to the opinion of Hungarian young people, where it is more around 70% (even less for the oldest age group). The breakdown by age group clearly shows the direction and awareness, which is also evident with a few years age difference.

Table 2. Perception of AI along two dimensions (progress, dead end) by age of young respondents

	English			Turkish		
	14-16	17-18	18+	14-16	17-18	18+
Go to	73,2%	77,3%	66,0%	78,9%	88,9%	82,6%
Dead end	26,8%	22,7%	34,0%	21,1%	11,1%	17,4%

Source: Own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

The picture conveyed by the figure above shows that the Pearson Chi-square value indicates that the age of respondents has no effect on their perception of the future of MI, as the values were all above 5% for the Hungarian and Turkish samples. Thus, the effect of age and opinion cannot be detected in any of the cases.

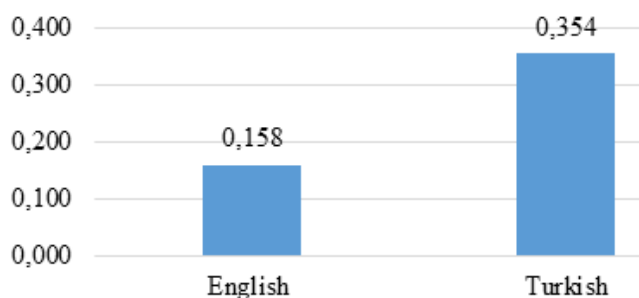


Figure 5. Pearson's Chi-square between the future of AI and the age of respondents

Source: Own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

Figure 6 shows the extent to which young people in Hungary and Turkey perceive artificial intelligence (AI) as a threat to humanity. Surprisingly, the values are almost identical for the two samples. Nearly 40% of Hungarian and Turkish young people perceive AI as a threat, with a slightly higher proportion of those who are sceptical about the issue (maybe response option). Those who feel completely safe are very few in the two samples, with the proportion of those who feel completely safe less than 20%.

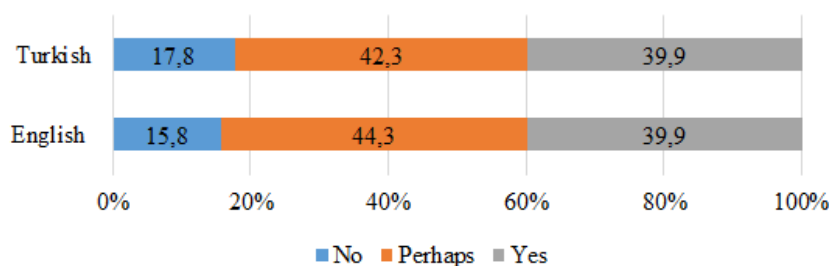


Figure 6. The threat of AI to humanity, based on the opinions of the total sample

Source: Own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

Table 3 shows how young people in Hungary and Turkey perceive the threat of AI at different ages. Among the Hungarian respondents, the proportion of "Yes" answers shows an increasing trend in the younger group (14-16 years old) (35.7%), in the 17-18 years old (39.4%) and the highest in the 18+ category (50%). This clearly shows the awareness of young people as they age. The proportion of "No" responses is lowest in the youngest age group (16.1%) and increases somewhat in the older age group (20.0%). In the Turkish sample, the proportion of "Yes" respondents also increases with age, with 42.1% for 14-16 year olds, 33.3% for 17-18 year olds and 39.1% for the 18+ category. In this case, the pattern of awareness that we have detected in the Hungarian sample is not evident. The proportion of "No" respondents is highest here for 17-18 year olds and decreases for the other age groups. Overall, it can be said that young people in both countries are uncertain about the danger of AI, and this picture varies very heterogeneously with age.

Table 3. The threat of AI to humanity by age of young respondents

	English			Turkish		
	14-16	17-18	18+	14-16	17-18	18+
No	16,1%	12,1%	20,0%	18,4%	22,2%	15,9%
Perhaps	48,2%	48,5%	30,0%	39,5%	44,4%	44,9%
Yes	35,7%	39,4%	50,0%	42,1%	33,3%	39,1%

Source: own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

Based on the Pearson's Chi-square value, the two dimensions (MI's dangerousness and age) show a clear relationship in the Hungarian sample. A correlation coefficient above 5% for the Turkish sample indicates that the two factors are independent of each other.



Figure 7. Pearson's Chi-squared between the riskiness of AI and the age of respondents

Source: Own research, 2023, N = 456 (Hungarian), N = 326 (Turkish)

Conclusions

Based on the results of the research, the impact of artificial intelligence (AI) along the dimensions investigated conveys a significant message value image in both Hungary and Turkey. The results show that the majority of young people in both countries believe that AI will have a significant impact on the labour market and job opportunities in the future. The perception of the impact of MI is stronger among young people in Turkey than among young people in Hungary, which is faithfully reflected in the results. Young Hungarians are slightly more sceptical about the future of MI, which is reflected in our figures. Moving by age groups, we see that there are significant differences of opinion between the groups. Young people aged 17-18 and over 18 in both countries perceive the impact of AI more strongly, while the impact is less pronounced among younger age groups (14-16). The biggest difference is seen for young people in Turkey, where higher proportions of all age groups perceive MI as having a significant impact on job opportunities and future prospects. The perception of AI as a "step forward" or a "dead end" also shows a different picture between respondents in the two countries. Young Turkish people have a higher proportion of young people who see AI as a way forward, especially among 17-18 year olds, while young Hungarians have a more mixed view of AI, especially among 18 year olds, where more see technological development as a potential dead end. Another important aspect of the research is the assessment of perceptions of the dangers of AI. The responses show that young people are uncertain about the threat of AI to humanity. In the Hungarian sample, the proportion of older young people who perceive AI as dangerous increased, while there was no such clear trend among Turkish young people. In conclusion, young people in both countries are increasingly aware of the impact of AI, but have different attitudes towards it. The results of the research highlight the key role of education and youth preparation in responding to future labour market challenges. New skills and competences that prepare young people to work with AI are important. It is important that the future generation is prepared to work with AI, to see it as a tool and to use it as such for their work and their success in the labour market.

Scientific Ethics Declaration

The authors declare that the scientific ethical and legal responsibility of this article published in EPES Journal belongs to the authors.

Acknowledgements or Notes

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