ECONOMICS & Sociology

Kozová, K., Grenčíková, A., & Habánik, J. (2024). Building a sustainable future: Gender, education & workforce needs of Gen Z. *Economics and Sociology*, *17*(2), 209-223. doi:10.14254/2071-789X.2024/17-2/10

BUILDING A SUSTAINABLE FUTURE: GENDER, EDUCATION & WORKFORCE NEEDS OF GEN Z

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Received: June, 2023
1st Revision: March, 2024
Accepted: May, 2024

DOI: 10.14254/2071-789X.2024/17-2/10

ABSTRACT. This scientific article explores gender-related disparities in the perceptions of educational delivery and the significance of higher education for Generation Z students in Slovakia, considering their alignment with broader environmental, social, and governance (ESG) principles. The study uses a mixed-methods approach, focusing on sustainable and significant investments in education that support both economic growth and societal well-being. Correlation analysis is used to examine the relationship between public education spending and labor productivity in Slovakia and Finland. The findings reveal a robust positive correlation, emphasizing the pivotal role of investment in education. Furthermore, the study utilizes the chi-squared test to verify hypotheses derived from a survey. The results highlight significant gender-specific variations in the perception of educational delivery and the importance of higher education for future prospects. The research underscores the necessity for tailored strategies that address the relevance of educational methodologies within diverse student populations, fostering inclusive and environmentally responsible learning environments. Insights from the study have implications for educational institutions and policymakers, emphasizing the need for inclusive, responsive, and environmentally sustainable approaches to education that meet the unique needs of Generation Z students. In order to improve educational programs' efficacy, efficiency, and social responsibility - that is, to better prepare students for the demands of the modern workforce while emphasizing long-term sustainability and societal well-being - the study also calls for more research into teaching methodologies, curriculum design, and teacher training.

JEL Classification: A22, I23, J16, J24

Keywords: Generation Z, Gender Disparities, Higher Education Importance, ESG

Introduction

The landscape of higher education is continuously evolving, shaped by the aspirations and values of its student body. Students today demonstrate a deep comprehension of technology

innovations as well as social connections. Their communication styles and methods of learning differ greatly from those of their educators (Peter, 2020). This divergence underscores the evolving landscape of education, where the integration of technology is identified as a pivotal factor in enhancing students' motivation to engage in the learning process (Shatto & Erwin, 2016; Jackson & Konczos Szombathelyi, 2022). Research within this field have illuminated the revolutionary effects of technology on education, highlighting its influence on students' motivation and learning styles. A comprehensive study conducted in 2019 illuminated how individuals harness their learning potential within the context of their generational experiences. Most notably, Generation Z is a generation that is closely associated with the modern educational system and represents a generation that is leading the way in the internet of things (Persada et al., 2019). Often characterized as digital natives, members of Generation Z grow up immersed in the digital age, effortlessly navigating the intricacies of the technological landscape. Delving into historical perspectives, research has explored the evolving paradigms of learning that have brought forth substantial differences across generations. Baby boomers, for instance, relied on rudimentary tools like simple boards for their learning endeavors. Subsequent generations, such as Generation X, integrated technologies like projectors into their educational processes, marking a notable shift in pedagogical approaches (Muttappallymyalil et al., 2016). A significant milestone in the trajectory of technological dominance emerged with Generation Y, witnessing the advent of digital learning platforms, including but not limited to Web 2.0 and online courses. This era marked a transformative shift towards interactive and digitally mediated learning experiences. Finally, Generation Z epitomizes the pinnacle of technological integration in the learning sphere, utilizing sophisticated technologies deemed advanced in their educational pursuits (Naughton, 2016). However, Gen Z's educational aspirations extend beyond technological prowess. This generation is deeply invested in Environmental, Social, and Governance (ESG) principles, demanding education that reflects their commitment to sustainability, social justice, and ethical leadership. For example, they might seek universities offering courses on renewable energy or social entrepreneurship, actively participate in campus protests for social justice, or value institutions with transparent governance practices. Understanding how universities address these ESG factors resonates with Gen Z's values and shapes their perceptions of educational delivery methods. This exploration of generational shifts in learning paradigms and technological integration sets the stage for a deeper investigation into the dynamic relationship between contemporary students, their learning environments, and the role of technology in shaping educational experiences. As we navigate the complex interplay between generations and educational tools, it becomes imperative to discern the implications for pedagogical practices, fostering a nuanced understanding of the evolving educational landscape. Moreover, delving into the intersectionality of educational experiences, an essential dimension to consider is the influence of students' gender on their engagement with and response to evolving teaching methodologies and technological interfaces. By incorporating a gendered perspective into this exploration, we aim to uncover potential variations and unique challenges that individuals of different genders may encounter in their educational journeys.

1. Literature review

The current 21st century can be characterized by rapid technological progress. The internet has become an integral part of our daily lives, especially for representatives of Generation Z, who grew up with technology (Štimac et al., 2022). Deloitte (2018) conducted a survey indicating that more than 51% of individuals from this generation prefer working in the technology sector. Dimock (2019) argues that the introduction of the iPhone in 2007 and

subsequent evolution in the context of mobile technologies, including Wi-Fi networks and high-speed mobile networks, have granted this generation access to the internet and social networks. This access is possible from anywhere and at any time. It is said that this cohort is influencing how it interacts with the world around them because of the constant availability of information and the variety of communication alternatives available to them. Thanks to being directly connected to technology from a young age, this generation is adept at adopting most technological innovations and has no trouble using the internet for any purpose (Goh & Jie, 2019; Dąbrowski & Środa-Murawska, 2021). This is also why the term iGeneration was used in the past in the context of researching this cohort, but later the designation Generation Z was adopted (Arokiasamy, 2017; Hardey, 2007). Because of how intensively this generation uses the internet and technology, it is also referred to as global and cosmopolitan. This can be justified by the fact that these tools enable them to access global culture (Seemiller & Grace, 2018). For Generation Z, fluency in the world of social networking has become a key differentiator compared to previous generations (Dabija et al., 2017; Duffett, 2017). Today's world is highly dynamic, especially in the digital industry. It faces entirely new challenges and opportunities, and for its continued rise and success in addressing intergenerational diversity, effective leadership and management are crucial. As Generation Z enters the workforce, it is important to understand their unique characteristics, perspectives, and values, but also how they collaborate within the workplace as well as how they influence the field of leadership and management (Elayan, 2022). Increasingly, it is evident that understanding the views of Generation Z in relation to collaboration and transformation in the realm of contemporary digital business is more than necessary. This is because Generation Z is starting to play the crucial role in the workforce (Pînzaru et al., 2022; Mishchuk et al., 2021). This is especially true with the growing pace of technological development (Kersan-Škabić & Vukašina, 2023) and the challenges and opportunities that arise for organizations (Bilan et al., 2023; Lazar et al., 2023). Looking at the digital world as a whole, Generation Z represents a dynamic and complex topic in its context. This requires the study of its features, which are considered characteristic and also the principles of this emerging generation of employees (Aleksić & Nedelko, 2022). Organizations need to adapt to the changing nature of work in the digital world and also to the preferences inherent to Generation Z (Dolot, 2018), including peculiarities of job seeking and hiring via digital tools (Balcerak & Woźniak, 2021; Wübbelt & Tirrel, 2022). Members of this generation will significantly influence firms' business strategy, according to a 2019 study. Alongside this, the fourth industrial revolution is happening, which puts pressure on businesses to change their business models (Ayuni, 2019). Attention should also be focused on the nature of employment within digital business, which is changing (Gaidhani et al., 2019). Artificial intelligence and other new technologies are driving an increase in the demand for new skills and competencies. However, for businesses, this poses a challenge as they need to be prepared to provide their employees with continuous opportunities for development and learning (Vasilyeva et al., 2020). Currently, research in the context of the arrival of the new generation in the workforce explores how technologies influence the ways in which Generation Z collaborates, learns, and interacts. It also examines the consequences of these areas on leadership and management styles within the digital world. It can be said that the need for organizations to embrace digital transformation is increasingly recognized. If they do, they will remain competitive and relevant in a world that is more connected and digital every day (Pînzaru et al., 2022; Kowal-Pawul & Przekota, 2021). Numerous studies compare and contrast different generations in order to find variances in a range of life factors. These include opinions, goals, and habits. Findings indicate significant changes within Generation Z compared to previous generations. It can be concluded that Generation Z has entirely different characteristics, value systems, preferences, and attitudes (Fodor et al., 2017; Fodor et al., 2018;

Vidya Jha, 2021). This generation also brings new expectations to the workplace, emphasizing the need for flexibility, meaningful employment, and a healthy work-life balance. Additionally, they prioritize Environmental, Social, and Governance (ESG) factors, such as seeking out organizations that invest in renewable energy, promote diversity and inclusion initiatives, and operate with transparent governance practices. All these needs subsequently impact leadership and management, requiring companies to undergo changes to meet the demands of this generational cohort (Leslie et al., 2021). When we compare Generation Z to Generation Y, we find that this younger generation is brave, practical, intelligent, and does not understand the meaning of effort. Not to mention, they want to take the initiative. In addition, its members are more impatient and agile with the fact that they are constantly looking for new impulses and challenges (Bencsik et al., 2016). Estimates indicated that by 2020, the global share of Generation Z would be approximately 35%. Currently, it can be stated that this cohort has surpassed its predecessors (Generation Y), making it the largest generation on a global scale. Based on this, it can be said that the growing proportion of people belonging to this generation and the increasing number of research studies about them emphasize the necessity of a thorough analysis of all the knowledge that has been acquired so far. This will help identify key areas of interest and, at the same time, gaps in research, leading to a better understanding of Generation Z at various levels (Dąbrowski & Środa-Murawska, 2023).

2. Methodological approach

University students from Generation Z embody a dynamic and interconnected approach to education. Raised in the age of social media and instant information, they are adept at leveraging technology for both academic and social endeavors. With a strong emphasis on inclusivity, diversity, and a passion for social justice, Generation Z students bring a vibrant and forward-thinking energy to the university environment. The aim of this study is to examine gender-related disparities in the perception of educational delivery methods and to gain insights into the distinct perspectives of male and female students on the importance of higher education for their future. In this context, the first research question can be pointed out:

RQ1: To what extent do gender-specific variations influence the perception of educational delivery methods, preferred forms of education, and the importance of higher education for future prospects among students in Slovakia?

In the course of the study, methods such as correlation analysis and the chi-squared test were employed. The study utilized correlation analysis to investigate the association between two variables, specifically macroeconomic indicators like public education spending and labour productivity in Finland and Slovakia. The data were obtained from Eurostat for both countries (Eurostat, 2024). Based on this, the second research question was established:

RQ2: What is the relationship between public expenditure on education and labour productivity in Slovakia and Finland?

This study utilized an electronic questionnaire titled "Generation Z: Perspectives on Higher Education" to gather data on students' perceptions of higher education. The questionnaire, targeting Generation Z students born between 1995 and 2010, comprised 9 questions that primarily employed a Likert scale ranging from 1 (definitely no) to 5 (definitely yes) to capture student responses. Data collection ran from November 21, 2023, to February 7, 2024. The respondents were students of the Faculty of Social and Economic Relations at the

Alexander Dubček University of Trenčín. Based on the calculations related to the determination of the necessary survey sample, it can be said that a sample size of 220 or more respondents is needed to achieve a 95% confidence level with a margin of error of ±5%. A total of 230 respondents, comprising Generation Z students, participated in the survey. To investigate the specific relationships between gender and various student perspectives, the following hypotheses were established:

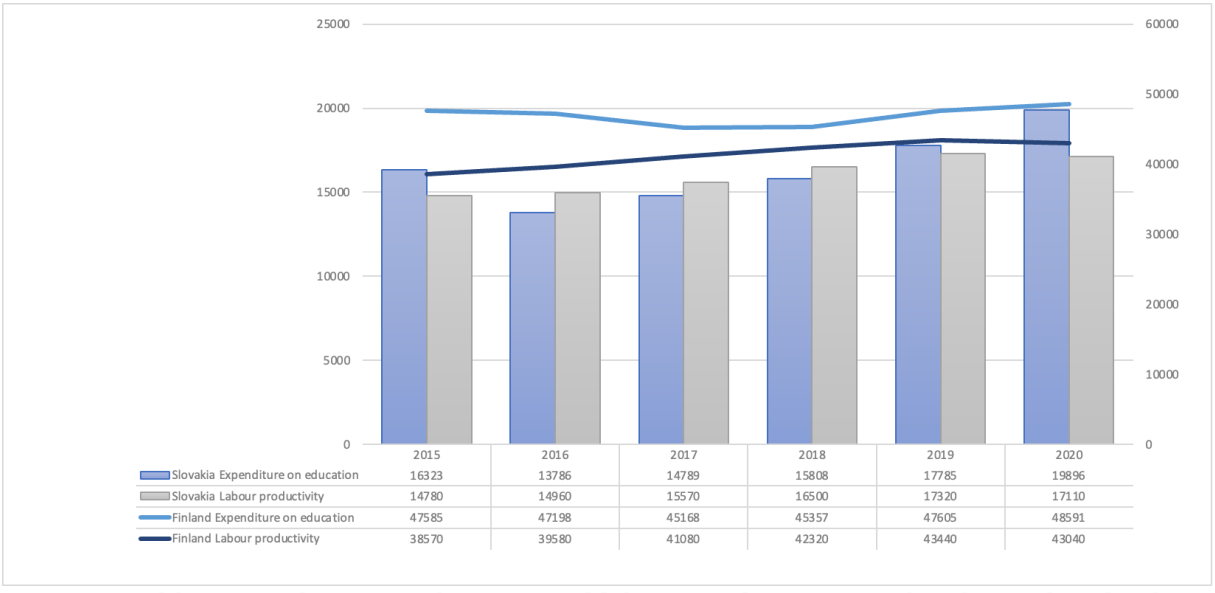
H1: There is a significant association between gender and the perception that the way education is delivered is considered outdated.
H2: There is a significant association between gender and the belief that higher education is important for the future.

To examine the validity of these hypotheses, the chi-square test was employed. This statistical analysis assesses the potential link between two categorical variables, in this case, gender and the student responses pertaining to their educational perceptions. By applying the chi-square statistic, conclusions were drawn regarding the presence or absence of statistically significant associations between the variables.

3. Results

The findings were divided into two interconnected levels. The first compares a few macroeconomic variables between Slovakia and Finland, namely labour productivity and public expenditure on education. The second level focused on examining the opinions of Generation Z students regarding the organization of education in Slovakia.

The results shown in Figure 1 are the result of our examination of macroeconomic variables related to labour productivity and public education expenditures in Slovakia and Finland.



	2015	2016	2017	2018	2019	2020
Slovakia Expenditure on education	16323	13786	14789	15808	17785	19896
Slovakia Labour productivity	14780	14960	15570	16500	17320	17110
Finland Expenditure on education	47585	47198	45168	45357	47605	48591
Finland Labour productivity	38570	39580	41080	42320	43440	43040

Figure 1. Public expenditure on education and labour productivity in Slovakia and Finland
Source: *Eurostat, own compilation*

In Slovakia, there is a general upward trend in expenditure on education, starting at 16,323 in 2015 and reaching 19,896 in 2020. This could indicate a commitment to investing in education over the years. However, despite this increase in spending, labour productivity shows

a fluctuating pattern, starting at 14,780 in 2015, peaking at 17,320 in 2019, but then decreasing to 17,110 in 2020. In contrast, Finland exhibits a relatively stable and higher level of expenditure on education compared to Slovakia. The expenditure in Finland starts at 47,585 in 2015, reaching 48,591 in 2020. Notably, Finland consistently maintains a higher level of labour productivity throughout the period, with an initial value of 38,570 in 2015 and reaching 43,040 in 2020. The comparison between Slovakia and Finland suggests that while Slovakia has increased its investment in education over the years, the corresponding improvement in labour productivity is not as consistent. Finland, with a consistently higher level of education expenditure, demonstrates a more stable and higher labour productivity. This may indicate that factors beyond education spending, such as the effectiveness of education systems, workforce skill development, and other socio-economic aspects, such as investments in sustainable infrastructure and technologies that support innovation and modern workforce skills, emphasis on social equality and inclusion within the education system, and effective governance and transparency practices, contribute to the observed differences in labour productivity between the two countries. In order to identify the dependence between public expenditure on education and labour productivity, a correlation analysis was carried out within these variables (Table 1).

Table 1. Public expenditure on education and labour productivity in Slovakia and Finland (correlation analysis)

	Expenditure on education	*Labour productivity*
Expenditure on education	1	
Labour productivity	0,991856397	1

Source: *Eurostat, own compilation*

The correlation coefficient in Table 1 reflect the analysis performed for both Slovakia and Finland. The methodology employed to summarize the data involved the annual expenditure on education in both countries, while in the case of labor productivity, it was GDP per capita, also in its annual terms. A correlation value of 0.9919 between expenditure on education and labour productivity suggests an extremely strong positive correlation between these two variables. This high correlation coefficient implies a robust relationship, indicating that as expenditure on education increases, there is a correspondingly substantial increase in labour productivity. This finding suggests that the financial investment in education is closely associated with the overall productivity of the labour force. The nearly perfect positive correlation implies that changes in education spending are consistently mirrored by changes in labour productivity. The observed correlation between expenditure on education and labour productivity prompts an examination of the potential underlying factors influencing this relationship, particularly regarding the quality of educational programs. Notably, Finland consistently maintains higher labour productivity levels compared to Slovakia, suggesting a potential connection to the educational system's efficacy. Finland is renowned for its education system, characterized by a student-centered approach, highly qualified teachers, and a focus on comprehensive learning. In order to promote a more diverse and productive learning environment, the nation strongly emphasizes giving all students, regardless of socioeconomic background, similar chances. The Finnish educational system places a strong emphasis on a comprehensive approach to learning, rewarding not only academic success but also the growth of critical thinking, problem-solving abilities, and creativity. In contrast, while Slovakia has increased its investment in education, the correlation between expenditure and labour productivity is less consistent. This raises questions about the efficiency and effectiveness of the educational programs in place. Potential factors contributing to this discrepancy may include variations in teaching methodologies, curriculum design, teacher training, and the overall alignment of the educational system with the demands of the contemporary workforce.

The analysis of survey responses regarding the perceived obsolescence of the educational delivery method, stratified by gender, yields nuanced insights into the divergent viewpoints held by male and female students (Figure 2).

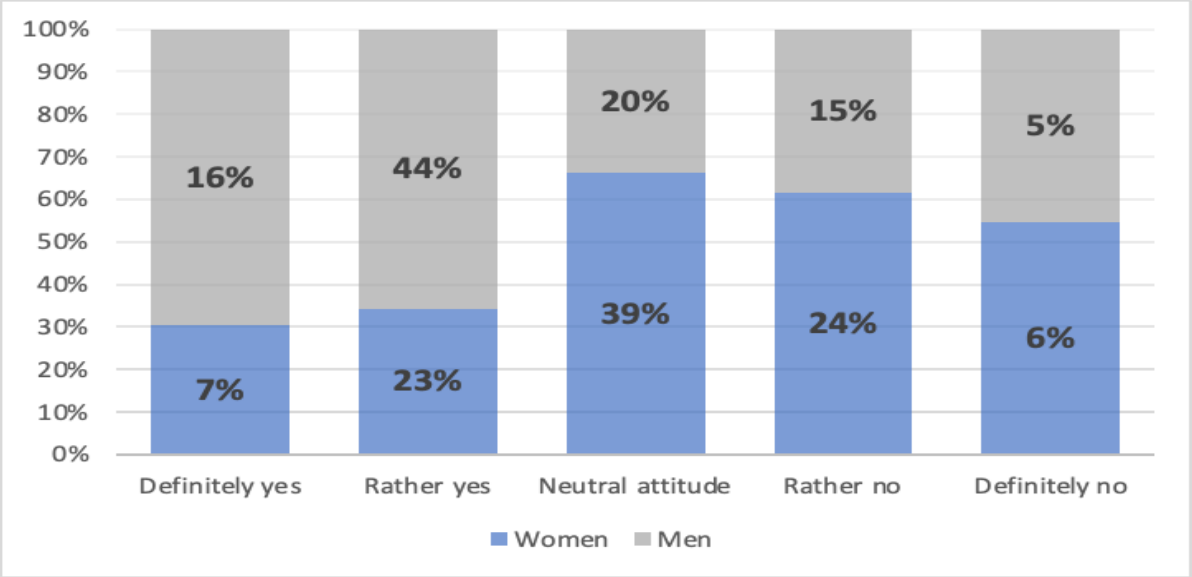


Figure 2. Education obsolescence in Slovakia
Source: *own compilation*

Within the female cohort, a modest 7% definitively deemed their education as outdated, while 23% leaned towards this perspective. A substantial 39% adopted a neutral stance, reflecting a diverse spectrum of opinions, and 24% inclined towards the belief that their education is not outdated. Notably, a minor yet significant 6% expressed a firm belief in the contemporaneity of their education. In contrast, male respondents exhibited a distinct distribution of responses. A higher proportion of 16% unequivocally considered their education outdated, with an additional 44% leaning towards this viewpoint. A smaller contingent (20%) maintained a neutral stance. Furthermore, 15% of male respondents leaned towards the belief that their education is not outdated, while a minority of 5% expressed a definite belief in the contemporaneity of their educational experience. These findings highlight gender-specific variations in the perception of educational delivery methods, underscoring the need for nuanced examinations of factors contributing to the perceived obsolescence or modernity of the educational experience within distinct gender groups. Such insights are crucial for formulating targeted strategies to address concerns related to the relevance of educational methodologies among diverse student populations.

In order to identify the dependence between gender and the perception of education as outdated, we conducted a chi-squared test:

H0: There is no significant association between gender and the perception that the way education is delivered is considered outdated.

H1: There is a significant association between gender and the perception that the way education is delivered is considered outdated.

A statistically significant association was observed between gender and the perception of outdated educational delivery methods ($\chi^2 = 26.469$, $p < 0.05$). This suggests that the null hypothesis of no association between gender and perception of outdated educational delivery methods can be rejected, while the alternative hypothesis of an association is supported.

Another component of our survey included gender-stratified responses about their preferred form of education (Figure 3).

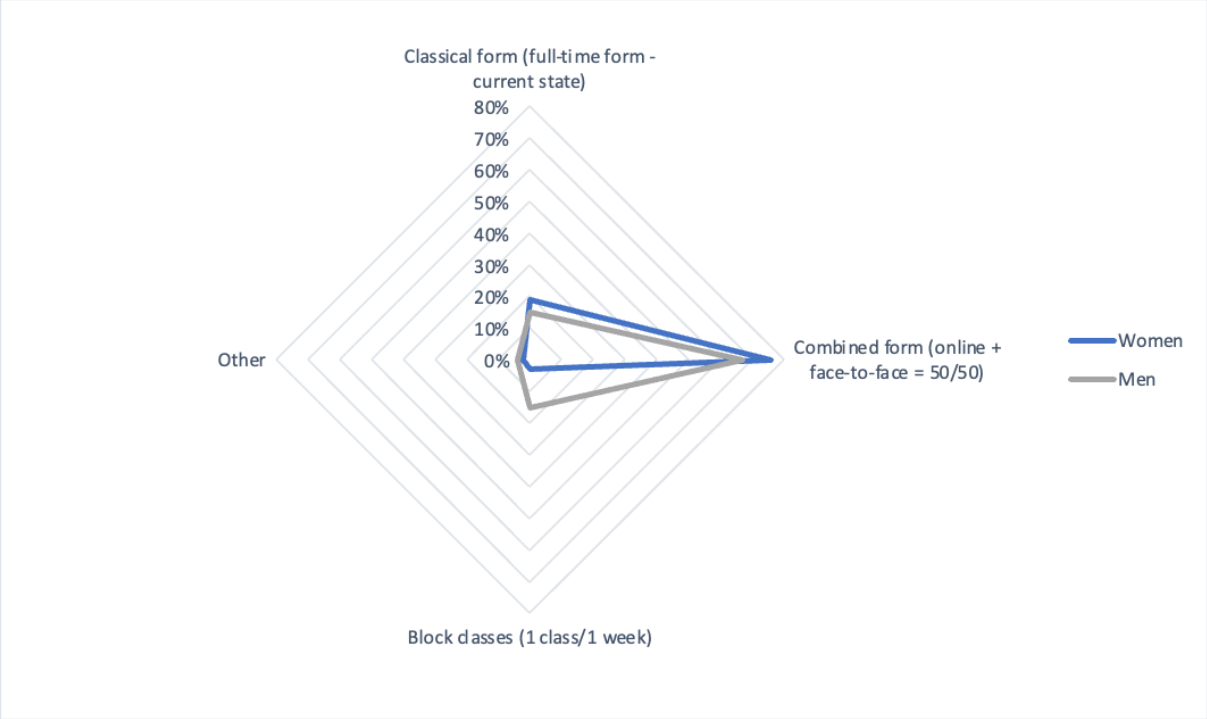


Figure 3. Preferred form of education in Slovakia
Source: *own compilation*

Among female respondents, a predominant inclination towards a blended education format is evident, with a significant 76% expressing a preference for a hybrid model combining online and face-to-face learning in a 50/50 ratio. In contrast, 19% favored the traditional full-time format (face-to-face), representative of the current educational paradigm. A modest 3% indicated a preference for block classes (1 class/1 week), while 2% expressed an interest in alternative education formats. Among male respondents, a parallel trend emerged, with 67% indicating a preference for the hybrid education format (online + face-to-face = 50/50). Another 15% favored block classes (1 class/1 week), and an additional 15% expressed a preference for the traditional full-time (face-to-face) format. Furthermore, 4% articulated a preference for alternative education formats. For educational institutions to adapt and offer a varied range of learning modalities that match the unique requirements and preferences of students, they must acknowledge and accommodate these choices. Additionally, considering factors beyond gender, such as sustainability concerns, accessibility and inclusion needs, and student expectations regarding communication and transparency, can further inform the development of learning formats. Exploring how these factors interact with and potentially influence the preferences of both male and female students can enable institutions to create truly equitable and sustainable learning environments that align with broader ESG principles.

The final finding, which breaks down the perceived value of a university education for future chances by gender, reveals students' complex views (Figure 4).

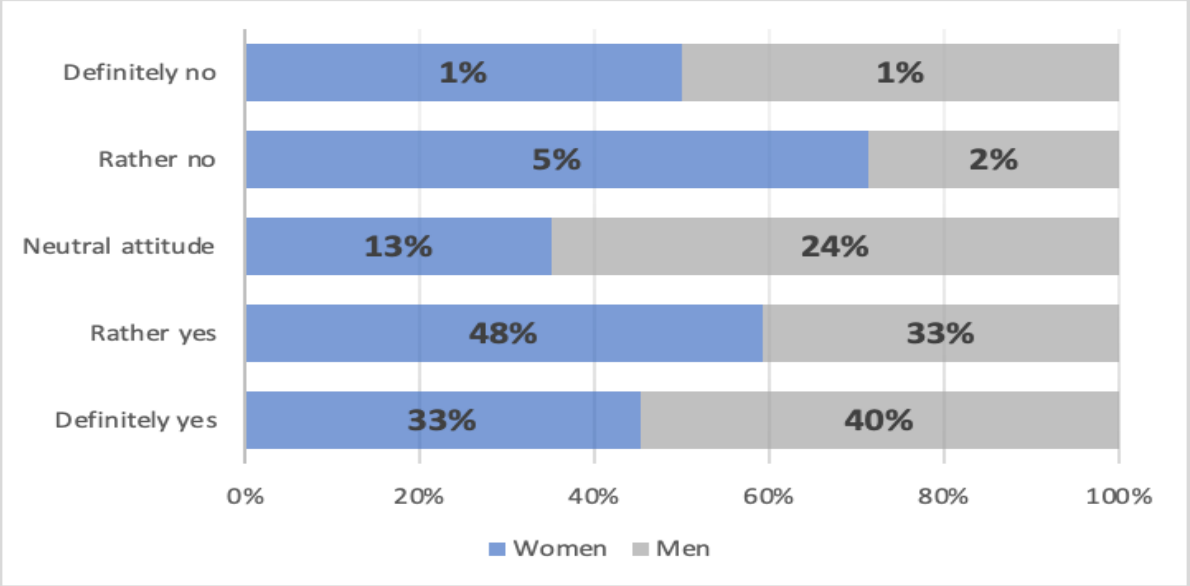


Figure 4. The importance of higher education for students in Slovakia
Source: *own compilation*

Female respondents exhibited a diverse range of perspectives, with 33% holding a firm belief in the significance of higher education for their future, and an additional 48% leaning towards this viewpoint. A noteworthy 13% assumed a neutral stance, while 5% inclined towards the belief that higher education is not essential for their future. A minimal 1% expressed a definite belief that higher education holds no importance for their future. In contrast, a slightly higher proportion of male students (40%) unequivocally acknowledged the importance of higher education for their future, and 33% leaned towards this perspective. A slightly higher proportion of 40% unequivocally acknowledged the importance of higher education for their future, and 33% leaned towards this perspective. A substantial 24% maintained a neutral stance, indicating a more diverse array of opinions compared to their female counterparts. Moreover, only 2% of male respondents leaned towards the belief that higher education is not crucial for their future, and a minimal 1% expressed a definite belief in the insignificance of higher education for their future. These findings underscore gender-specific disparities in the perception of the importance of higher education for future, highlighting the imperative for a comprehensive exploration of factors influencing individual perspectives within distinct gender groups. Such insights are essential for tailoring educational strategies that align with the diverse aspirations and beliefs held by male and female students regarding the significance of higher education in shaping their future trajectories.

In order to identify the dependence between gender and the belief that higher education is important for the future of the students, we conducted a chi-squared test:

H0: There is no significant association between gender and the belief that higher education is important for the future.

H1: There is a significant association between gender and the belief that higher education is important for the future.

An analysis revealed a statistically significant association between gender and the belief in the importance of higher education for the future ($\chi^2 = 7.541$, $p < 0.05$). This finding indicates that the null hypothesis of no association between gender and belief in the importance of future higher education can be rejected, while the alternative hypothesis of an association is supported.

4. Discussion

The aim of this study was to examine gender-related disparities in the perception of educational delivery methods and to gain insights into the distinct perspectives of male and female students on the importance of higher education for their future. Félonneau and Becker (2008) argue that topics related to the entry of the new generation into the labour market are relatively rarely considered, especially in the context of gender. Novotna and Gottwald (2018) also point out that employers should, within the recruitment process tailored to the characteristic features of Generation Z, find it exceptionally important to communicate their values in line with the expectations of this cohort, taking into account the diversity of this generation determined by gender. Considering the importance of exploring Generation Z entering the workforce from a gender perspective, the study addressed the following research question: To what extent do gender-specific variations influence the perception of educational delivery methods, preferred forms of education, and the importance of higher education for future prospects among students in Slovakia? Based on the questionnaire, the dependency between gender and the perception of education as outdated was investigated. The chi-squared test ($\chi^2 = 26.469$, $p < 0.05$) indicated a significant statistical dependence between these variables. These insights serve as a foundation for developing targeted strategies that address concerns related to the relevance of educational methodologies among diverse student populations. By recognizing and comprehending these differences, educators and legislators may put into practice more effective and inclusive strategies to meet the particular requirements and preferences of all genders, improving the quality of education for all students. Kalkhurst (2018) also pointed out that Generation Z students use technologies such as smartphones, TVs, and laptops for an average of 10 hours per day. This constant stimulation has led to their attention span lasting approximately 8 seconds. This is precisely why waiting for lectures within university spaces is a struggle for students belonging to this cohort. This raises the question of what form of education would be the most suitable and preferred for Generation Z. A preference for a hybrid form of education (online + face-to-face 50/50) was identified, with 76% of women and 67% of men supporting this option. An interesting observation is related to block teaching (1 class/1 week), where 3% of women and as many as 15% of men expressed a positive preference for this form of education. Emphasizing the importance of recognizing and accommodating individual preferences, particularly in the context of diverse learning modalities, is critical for educational institutions. Institutions may guarantee a more inclusive and customized approach to education that fits with the unique needs and preferences of students by recognizing and accommodating these preferences. This adaptability is essential for creating a dynamic and engaging learning environment, fostering a positive educational experience that caters to the diverse and evolving needs of the student body. Furthermore, exploring how these preferences align with sustainable learning practices and promote inclusivity for diverse learners would contribute to a more equitable and environmentally conscious educational landscape, reflecting the social and environmental aspects of ESG. The relationship between gender and students' belief in the importance of higher education for their future was also examined through the chi-squared test. Based on the obtained results ($\chi^2 = 7.541$, $p < 0.05$), a statistically significant dependence between these variables can be asserted. The identified gender-specific disparities in the perception of the importance of higher education for the future underscore the critical need for a comprehensive exploration of factors shaping individual perspectives within distinct gender groups. These findings emphasize the imperative of gaining insights into the diverse aspirations and beliefs held by male and female students regarding the significance of higher education in shaping their future trajectories. This knowledge is essential for developing instructional strategies that successfully address and meet

the distinct needs and goals of both genders, resulting in a more responsive and inclusive learning environment. This approach also ensures a more equitable and inclusive educational environment, ultimately fostering sustainable careers and societal well-being, which align with the core principles of ESG. Kim and Choksawatpaisan (2023) subsequently discuss that education has long been considered a crucial determinant of labour productivity, especially when viewed as the primary tool for investing in human capital. In the context of the presented study, the second research question was also addressed: What is the relationship between public expenditure on education and labour productivity in Slovakia and Finland? The examination of Slovakia and Finland reveals that although Slovakia has augmented its educational investments over time, the associated enhancements in labour productivity show less consistency. Finland, on the other hand, has more stable and higher labour productivity due to its constant high level of education spending. This suggests that factors beyond mere education spending, including the efficacy of education systems, workforce skill development, and various socio-economic elements, likely play a role in the observed variations in labour productivity between the two nations. The study found a strong positive correlation between education expenditure and labour productivity = 0.9919. This robust connection prompts an investigation into the potential factors influencing this relationship, particularly concerning the quality of educational programs. Noteworthy is the consistently higher labour productivity levels in Finland compared to Slovakia, suggesting a possible link to the effectiveness of the educational system. Finland, renowned for its education system, adopts a student-centered approach, boasts highly qualified teachers, and prioritizes comprehensive learning. These approaches support social mobility and employment readiness in addition to improving learning outcomes; they also contribute to a more just and resilient economy, which is in line with the social and governance elements of ESG. In order to promote a more inclusive and effective learning environment, the country places a high priority on offering equal opportunity for all students, regardless of socioeconomic background. The Finnish educational system takes a comprehensive approach, emphasizing not only academic success but also the development of critical thinking, creativity, and problem-solving abilities. In contrast, while Slovakia has increased its investment in education, the correlation between expenditure and labour productivity is less consistent. This raises questions about the efficiency and effectiveness of the educational programs in place. Potential factors contributing to this discrepancy may include variations in teaching methodologies, curriculum design, teacher training, and the overall alignment of the educational system with the demands of the contemporary workforce. Further research could explore how efficiently Finland utilizes its education spending to achieve these outcomes, identifying best practices that promote both productivity and environmental sustainability within the education system, contributing to all three aspects of ESG.

Conclusion

In conclusion, this study delved into gender-related disparities in the perception of educational delivery methods and the importance of higher education for the future among Generation Z students in Slovakia. The findings underscored significant variations between male and female students, emphasizing the need for tailored strategies to address concerns related to the relevance of educational methodologies within diverse student populations. The observed preference for a hybrid form of education, particularly among women, highlights the importance of accommodating individual learning preferences in creating a dynamic and engaging learning environment. Recognizing these preferences is crucial for institutions seeking to provide an inclusive, responsive, and environmentally and socially responsible educational experience that aligns with the unique needs of students. This could include

utilizing sustainable learning technologies, minimizing the environmental impact of educational facilities, promoting social justice and inclusion within the curriculum, and fostering responsible global citizenship among students. Furthermore, the study extended its analysis to explore the relationship between public expenditure on education and labour productivity in Slovakia and Finland. The strong positive correlation between education expenditure and labour productivity underscores the critical role of investment in education. The differences in labour productivity between Slovakia and Finland, however, indicate that factors other than spending itself—like the effectiveness of educational institutions, employee skill development, and socioeconomic characteristics—play a major role. Important concerns concerning the efficacy and efficiency of educational programs in Slovakia are brought up by the excellent example of Finland, whose continuously high labour production levels are credited to a holistic educational philosophy, highly qualified teachers, and a student-centered attitude. Additionally, Finland emphasizes lifelong learning opportunities, invests heavily in teacher training and professional development, and fosters strong collaboration between educational institutions and the private sector. These methods further fit with the concepts of social responsibility and sustainable development by making the workforce more flexible and future-ready. The study encourages further exploration into teaching methodologies, curriculum design, teacher training, and the overall alignment of the educational system with the demands of the contemporary workforce in order to enhance labour productivity. Additionally, investigating how these practices can be implemented sustainably and promote social equity would contribute to a more holistic approach to education aligned with all three aspects of ESG principles. Educational institutions may make sure they are not only preparing students for success in the modern workforce, but also making a positive impact on a more just, equitable, and sustainable future for all by implementing these principles. Further research and collaboration are crucial to translate these findings into concrete actions and policy changes that can benefit students, institutions, and society as a whole. In essence, this research contributes valuable insights into gender-specific perceptions of education and the intricate relationship between education expenditure and labour productivity. The implications of these findings extend beyond the confines of academia, emphasizing the necessity for targeted interventions and policy adjustments to foster an educational environment that is not only inclusive and effectively prepares students for the challenges of the modern workforce but also prioritizes sustainability, social responsibility, and equitable access to quality education, aligning with the broader goals of ESG principles.

Acknowledgement

This research work was created within the project „Value orientation and expectations of Generation Z in relation to higher education in the context of Alexander Dubček University of Trenčín “, code of project D07_2024, based on the financial support from the European Union within the call Early Stage Grants of the Recovery and Resilience Facility (Code of the project: 09I03-03-V05-00010, Component 9: More effective management and strengthening of research, development and innovation funding), and with the financial support of the Internal Grant Scheme of the Alexander Dubček University of Trenčín.

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