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MANAGEMENT OPPORTUNITIES FOR THE WELL-BEING OF GENERATION Z STUDENTS IN HIGHER EDUCATION: THE CASE OF LITHUANIA*

Kristina Samašonok^{1*}, Jūratė Patackaitė², Laima Paraukienė³

^{1*,2,3} Vilniaus kolegija/Higher Education Institution, Saltoniškių Str. 58, Vilnius, Lithuania

E-mails: ^{1*}k.samasonok@vvf.viko.lt (Corresponding authors); ²j.patackaite@vvf.viko.lt; ³l.paraukiene@vvf.viko.lt

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Abstract. In the context of scientific literature, this article presents an assessment of the factors determining the well-being of Generation Z students in higher education and discusses the possibilities for managing student well-being. The authors understand the management of Generation Z students' well-being in higher education as a unified process of planning, organising, implementing, and controlling, based on institutional coordination, participatory decision-making, and cooperation between the higher education institution and students. Such an approach creates preconditions for systematically reducing psychosocial risks and increasing students' engagement in the study process, considering the views of Generation Z learners. Research aim: to investigate the factors determining the well-being of Generation Z students in higher education and to identify the possibilities for its management. Analytical descriptive, quantitative, and statistical methods were applied. Using a quantitative research strategy, the attitudes of respondents (n=290) towards the factors determining Generation Z students' well-being in higher education were identified, and, based on participants' assessments, possibilities for managing the well-being of Generation Z students in the study process were outlined. The results showed that although more than two-thirds (74.1%) of respondents rated their well-being at their higher education institution as relatively high (scores 6–8) or very high (scores 9–10), one-quarter (25.9%) indicated feeling unwell, rating their well-being between 1 and 5 on a 10-point scale. Data analysis revealed that the organisation of the study process – clear and accessible study information provided through various channels, appropriate study pace and workload (alignment of tasks and time), and study content (lecture topics, materials, methods, etc.) – as well as good, collaborative relationships between teachers and students, are among the key factors determining the well-being of Generation Z students in higher education. The research found that diverse communication forms with teachers, attractive study methods, flexible opportunities to combine studies with work, and a modern, innovative study environment may be effective ways to enhance Generation Z students' well-being in higher education. Furthermore, clearly presented study process information, comprehensible teaching materials and assessment requirements, as well as clear and flexible assessment organisation (including timing and volume) and appropriate distribution of study workload, were evaluated by participants as essential measures for ensuring the well-being of Generation Z students. The study results provide valuable insights into the factors influencing the well-being of Generation Z students within the study process at the organisational level of higher education institutions. They also offer lasting value for academic discourse by outlining potential directions for managing the well-being of Generation Z students in higher education.

Keywords: generation Z; students; well-being; higher education; management; opportunities

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1. Introduction

Preparing members of society for professional activity is one of the indicators of successful societal development; therefore, in today's dynamic educational environment, it is crucial to understand the state and transformation of the higher education system and to continuously seek effective and efficient measures to ensure educational quality. Today's students belong to the new Generation Z, born after 1995 and often associated with rapid advances in information and communication technologies (Pečiuliauskienė, Valantinaitė & Malonaitienė, 2013). According to researchers, technological development has not only provided this generation with broad opportunities to develop and obtain relevant information using modern technologies (Pečiuliauskienė, Valantinaitė & Malonaitienė, 2013), shaped generational traits and behavioural patterns, but has also influenced learning habits, information search behaviour, comprehension of visual and audio-visual media, communication styles, and tendencies toward individualism (Pečiuliauskienė, Valantinaitė & Malonaitienė, 2013), as well as significant differences in attitudes, interests, and capabilities compared to previous X and Y generations (Hauschildt et al., 2024). Thus, Generation Z is evidently different, and the traditional educational model is no longer suitable for preparing them for professional activities. Meanwhile, the fast pace of life and the abundance of information increase stress and negatively affect individuals' quality of life, emotional state, and well-being. Therefore, in the context of technological development and globalisation, modelling the management perspective of Generation Z's learning quality and improving the functioning of the educational system requires continuous monitoring and analysis of the situation, identification of the learning environment and its processes, and the search for ways to ensure this generation's well-being. This is becoming increasingly important for every educational institution, including higher education institutions.

The conducted studies indicate that ensuring the quality of study process organization (study pace, workload, etc.) and the quality of relationships within the higher education community (students, lecturers, and administration) (Behr et al., 2020), together with the physical conditions for studying, a comfortable and safe learning environment, the accessibility and sufficiency of material resources used in the study process, and a coherent study structure (Černikovaitė, 2021), as well as the application of modern teaching methods and information technologies and software (Kazlauskienė, Jakubkytė & Ruzgailaitė, 2024), and the provision of knowledge and skills needed for professional preparation (Mouton, Zhang & Ertl, 2020), not only enhance the attractiveness of studies and promote active student engagement but also represent factors influencing study satisfaction and learning motivation (Samašonok, 2024). These aspects may also form prerequisites for managing the well-being of Generation Z students in the study process. Other authors link students' well-being during studies to their successful adaptation, particularly in the first year of study (Yu & Downing, 2012; Wu, Occhipinti & Watson, 2023; Rossato, Veloso Morotti & Scorsolini-Comin, 2024).

Equally significant are insights confirming the connection between the attractiveness of studies, well-being during studies, and success in preparing for future professional activities. Researchers argue, based on empirical findings, that perceiving studies as attractive and meeting students' expectations may lead not only to active engagement in the study process, increased learning motivation (Samašonok, 2024), or higher academic achievement (Casanova et al., 2018; Kehm, Larsen & Sommersel, 2019), as well as satisfaction with one's career choice and more successful preparation for professional, but may also contribute to ensuring students' well-being and emotional balance throughout their studies. Conversely, unmet expectations are identified as one of the factors associated with lower study attractiveness and dissatisfaction with studies (Mouton, Zhang & Bernhard, 2020), which may lead to passive engagement in learning when preparing for professional activity, lower academic performance (Kehm, Larsen, & Sommersel, 2019), and even an increased risk of dropping out (Behr et al., 2020; Samašonok, Kamienas & Juškevičienė, 2023), and may be a cause of poor well-being and emotional strain in higher education.

From a theoretical perspective, managing student well-being in higher education encompasses study policy, leadership decisions, resource allocation, and the shaping of organizational culture, all of which may directly contribute to reducing psychosocial risks experienced by Generation Z students and increasing their engagement in the study process. Therefore, the management of Generation Z student well-being in higher education can be conceptualized through the main management functions—planning, organizing, leadership, implementation,

and control—which allow systematic integration of well-being objectives into study policy, everyday organizational processes, and decision-making practices. It can be concluded that purposeful management of Generation Z student well-being requires an integrated approach, in which academic, administrative, and social decision-making are coordinated at the institutional level, and responsibility for students' emotional well-being becomes a shared organizational commitment (Khatri et al., 2024). From a public governance perspective, ensuring student well-being in higher education is seen as the result of collective responsibility and coordinated actions involving institutional leadership, academic staff, administration, student unions, and external partners (Swindell et al., 2023).

In this context, managing Generation Z student well-being transcends traditional hierarchical management boundaries and is based on networked collaboration and participatory decision-making models (Kallunki, Viseu & Silvén, 2025). For these reasons, identifying the factors that determine Generation Z student well-being in higher education, as well as searching for measures and/or opportunities to manage their emotional well-being, remains relevant and increasingly important. Although analyses of various aspects of Generation Z are not new, it must be acknowledged that, as generations change and higher education institutions prepare Generation Z youth for professional life, theoretical grounding on this topic remains insufficient, and there is still no consensus regarding the identification and evaluation of factors that determine well-being. Moreover, there is currently no single answer regarding the components and domains for evaluating well-being management in higher education studies, and the proposed evaluation indicators differ.

Research problem: what factors determine the well-being of Generation Z students in higher education? What are the possible ways to manage the well-being of Generation Z students during their studies?

The object of the study: factors determining the well-being of Generation Z students in higher education and the possibilities for its management.

The study aims to investigate the factors determining the well-being of Generation Z students in higher education and to identify the possibilities for its management.

The objectives of the study:

1. To conduct a theoretical analysis of the factors determining student well-being in higher education.
2. To empirically substantiate the factors determining the well-being of Generation Z students in higher education.
3. To compare the perspectives of students of different year levels and study modes on the factors determining well-being in higher education.
4. To identify management opportunities for enhancing the well-being of Generation Z students in higher education.

Originality / relevance of the study. Given the relevance and practical significance of this topic, this article applies quantitative data collection and ANOVA analysis to identify problematic areas and examine the expression of factors determining well-being in the study process among different year-level and study-mode groups of Generation Z students. This not only supplements previous research but also enables a more comprehensive understanding of the phenomenon and facilitates outlining directions for managing Generation Z students' well-being in higher education based on essential generational characteristics.

2. Theoretical Insights

Today's higher education students belong to the new Generation Z; therefore, analysing the learning characteristics of this generation in preparing young people for professional activity has received considerable scholarly attention. Looking retrospectively, it should be acknowledged that although Generation Z is widely examined from multiple perspectives, and discussions on the possibilities of managing this generation's learning in higher education are gaining increasing importance, the scientific literature still lacks research on the factors determining the well-being of Generation Z students at the organisational level of higher education institutions and on opportunities for managing that well-being. In this context, there is a growing need to explore the factors

that shape Generation Z's well-being in higher education, to analyse the possibilities for managing student well-being, and to seek solutions for ensuring students' positive emotional state and well-being during their studies.

Analysing the factors influencing well-being in the learning process and the phenomenon of well-being management in higher education, researchers increasingly emphasise that student well-being is *not* solely a matter of academic performance or mental health. According to international research, student well-being in higher education is shaped by multiple interconnected factors, including personal resources, social support, the learning environment, study content, workload, flexibility, access to information, and institutional support mechanisms. This is confirmed by international studies that identify key determinants of student well-being such as the quality of the learning environment, support from teachers and peers, clarity of study content, workload organisation, and opportunities to adapt to individual learning needs (Khatri et al., 2024; Paiva et al., 2025). A review of scientific literature also demonstrates that environmental conditions – teacher–student contact, access to information, and teaching quality – along with study workloads and available resources can improve student well-being, whereas excessive or uneven workload and limited support can diminish it. Financial difficulties increase stress and reduce students' ability to focus on learning, while flexible study modes are often associated with better well-being, though they may also present additional challenges (Muja et al., 2024; Konstantinidis, 2024). Meanwhile, data from the EUROSTUDENT international research consortium (2024) show that student well-being varies significantly across countries – students in Iceland report the highest overall well-being, whereas in other countries it is lower. Moreover, social and demographic factors (younger age, female gender, disability, limited family financial resources) are often associated with poorer well-being. Summarising the research findings, it becomes clear that understanding which factors have the greatest impact on student well-being and emotional state requires attention to three key areas: the learning environment and academic context (associated with the management function of planning), study content, workload, and access to information (associated with organisation, implementation, and control), and social relationships and sense of community (associated with leadership).

Learning Environment and Academic Context. Research analysing Generation Z students' experiences in higher education shows that the learning environment and organisation of the study process are key factors determining student well-being. Behr et al. (2020) note that well-structured studies, use of educational software and digital technologies, and lecturers' professionalism – combined with a shift away from strictly structured teaching – enhance study attractiveness, satisfaction, motivation, and student well-being. Other researchers emphasize additional aspects of study process organisation. Kehm, Larsen and Sommersel (2019) highlight the links between study structure and exam organisation and student well-being. According to Behr et al. (2020), institutional academic requirements can significantly influence not only student motivation but also their emotional state and overall well-being. Further studies identify the learning environment as a precondition for well-being management. Research indicates that not only academic demands but also the physical, social, and institutional environment directly affect students' psychological well-being. For example, research in Finnish universities showed that informal and flexible learning environments – spaces enabling independent work, collaboration, and adaptable use – positively affect student well-being and motivation (Valtonen et al., 2021). Students especially value campus infrastructure, technological resources, and the ability to choose where and when to study.

European analyses similarly show that physical conditions, social context, support systems, and institutional culture strongly influence student and staff well-being. Researchers emphasize that the learning environment, including infrastructure and organisational and social dimensions, directly correlates with psychological and academic well-being (Šćukanec Schmidt, Skledar Matijević & Anić, 2023; Olsson et al., 2024). Valtonen et al. (2021) also highlight a trend: modern students increasingly prefer flexible, informal learning environments that allow autonomy, freedom of choice, and social collaboration. They value opportunities to learn in different physical and virtual settings, combining individual and group work. Such environments not only improve learning quality but also contribute positively to well-being by giving students greater control over their learning process and encouraging meaningful social interactions. Conversely, traditional static classrooms no longer meet contemporary student needs; instead, students require flexible scheduling, accessible learning materials,

and versatile learning spaces, all of which are associated with higher motivation and engagement (Valtonen et al., 2021).

Study content, workload, and access to information. Research on Generation Z's well-being in higher education underscores the importance of study content, workload organisation, and information accessibility. European studies show that clearly structured courses, balanced workloads, and well-distributed tasks reduce stress and enhance motivation and well-being. Similar findings emerge from Nordic studies showing that student well-being depends on workload, living conditions, and the learning environment. Bumbacco and Scharfe (2020) highlight that heavy physical and emotional workloads contribute to burnout and poor well-being and may even increase the likelihood of dropping out. Other scholars (Mostert & Pienaar, 2020) note that burnout during studies undermines both well-being and satisfaction with studies. The research of Mouton, Zhang and Ertl (2020) and Behr et al. (2020) confirms that excessive academic demands that exceed students' competencies diminish emotional well-being, while unevenly distributed workload is linked to elevated stress. Information accessibility is another major factor influencing well-being. Researchers point out that clear, reliable, and easily accessible information about courses, schedules, assessments, and administrative requirements improves satisfaction and reduces stress (Kümmel et al., 2020). Other studies emphasize the importance of digital technologies, particularly when working with Generation Z students, as access to study materials through various IT tools increases satisfaction and well-being (Urbonienė, Bartuševičienė & Puidokaitė-Savickienė, 2019). Meanwhile, Lehnchen et al. (2025) highlight the significance of clarity in content and teaching methods, showing that students who perceive study material as clear, relevant, and well-structured report greater engagement and higher self-esteem.

Social relationships and community in higher education. Social relationships with peers, teachers, and administrative staff, as well as a sense of community, are consistently identified as crucial determinants of student well-being. A UK study found that social integration and a sense of belonging enhance self-esteem and reduce stress (Tett et al., 2025). Finnish studies indicate that mentorship programmes and peer support significantly improve engagement and well-being (Valtonen et al., 2021; Skaniakos, Penttinen & Lairio, 2014). Research evidence shows clear links between the quality of interpersonal relationships in the academic community and students' well-being and engagement. Supportive and positive relationships with lecturers, inclusion in group work and collaborative projects contribute to positive attitudes towards studies, satisfaction, and improved well-being. A UK study confirmed that lecturer–student relationships, course engagement, and intercultural integration help create a supportive environment for student well-being, and Tett et al. (2025) highlight that lecturer well-being and student well-being are interrelated. European research indicates that student integration, interpersonal connections, and community support are directly associated with better psychological well-being. Data from the EUROSTUDENT Report (2024) similarly show that social support – from peers, teachers, and institutions – is a key determinant of student well-being, with Icelandic students reporting the highest overall well-being. Other authors underline that both academic support and material support (Behr et al., 2020) are crucial for well-being management. Studies by Fourie (2017, 2020), Larmuseau, Desmet and Depaepe (2019), and Mostert and Pienaar (2020) indicate that support from lecturers and peers significantly affects satisfaction with studies and well-being.

In summary, factors such as the quality of social relationships and sense of community, a supportive learning environment, optimal study workload, and accessible information across channels are essential for student well-being in higher education. According to EUROSTUDENT (2024), student well-being is strongly linked to accessible and flexible study environments, adequate academic and financial support systems, living costs, and the ability to balance studies with work. Therefore, a supportive learning environment, appropriate workload, accessible information, strong community ties, mentorship initiatives, and peer-support structures can all serve as foundational elements for managing the well-being and emotional state of Generation Z students in higher education.

3. Research Methodology

Sample size. The study involved Generation Z students from a Lithuanian higher education institution (n=290). Most respondents were first-year students (n=217; 74.8%), while the smallest groups consisted of third-year

($n=27$; 9.3%) and fourth-year students ($n=7$; 2.4%). The quantitative study aimed to include students from different modes of study. The distribution shows that the majority were full-time students ($n=225$; 77.6%), while a smaller share consisted of part-time (session-based) students ($n=50$; 17.2%) and part-time students ($n=15$; 5.2%). The substantial differences in the number of respondents across year levels and study modes represent a limitation of the study. Nevertheless, the data are analysed and presented both for the total sample and through comparative analysis across groups of students of different year levels and study modes. For future research, in order to achieve greater representativeness and formulate statistically significant conclusions regarding the examined phenomenon, it would be advisable to repeat the study with an expanded sample. Additionally, future studies could apply mixed methodologies and supplement the findings with other data collection methods (e.g., interviews, focus groups).

Research organisation. The study was organised following a systematic logic: 1) analysis of scientific and methodological literature relevant to the research topic, as well as a review and synthesis of prior empirical studies. This step informed the construction of the research instrument. 2) implementation of a diagnostic study, which examined participants' perspectives on the factors influencing student well-being in higher education and identified potential management strategies for Generation Z student well-being. The questionnaire was administered online using Office 365. Quality control procedures were applied during data collection, including checks for completeness, internal consistency, and duration of completion. Questionnaires that were incomplete or filled out carelessly (e.g., identical responses in all items) were excluded from analysis. A total of 290 questionnaires were deemed suitable for statistical analysis. 3) formulation of conclusions based on the literature review and empirical findings, identifying the factors influencing Generation Z students' well-being in higher education and outlining management opportunities at the institutional level.

Research ethics. The study adhered to the principles of social research ethics. The introduction to the questionnaire informed participants about the purpose of the study, its organisers, and the intended use of the collected data. Participation was anonymous, and results were processed and presented in an aggregated form. No identifying information (such as name or surname) was collected, thus ensuring confidentiality and data protection. Participation was voluntary. Completion of the questionnaire was considered consent to participate. Respondents were informed that they could withdraw at any stage by requesting the exclusion of their data from further analysis. For confidentiality reasons, the name of the higher education institution where the study was conducted is not disclosed.

Research Methods. Analytical descriptive method. This method was applied to theoretically examine the factors influencing Generation Z students' well-being in higher education and analyse the possibilities for managing well-being within the study process. *Quantitative method.* A quantitative survey was conducted. The questionnaire was developed based on theoretical insights and criteria identified in the scientific literature. The instrument assessed: 1) students' self-evaluation of their well-being during studies; 2) attitudes towards factors determining well-being in higher education; 3) evaluation of management possibilities for enhancing Generation Z students' well-being. Responses were measured using a five-point Likert scale, where 5 indicated strong agreement and 1 indicated strong disagreement. Results were obtained by summing the numerical values of responses. *Validity and reliability.* Cronbach's alpha was calculated for each subscale. The overall internal consistency of the 27-item scale was high (Cronbach's alpha = 0.9045), with values ranging from 0.9058 to 0.8979. The subscale Attitudes towards factors determining well-being (11 items) demonstrated good internal consistency (Cronbach's alpha = 0.8037; range 0.7765–0.7981). The subscale Evaluation of well-being management opportunities (16 items) demonstrated very high consistency (Cronbach's alpha = 0.9272; range 0.9257–0.9210). Given that Cronbach's alpha values above 0.60 are considered suitable for research (Pakalniškienė, 2012), the obtained values indicate coherent item groups and confirm that the questionnaire items appropriately reflect the constructs under analysis. *Statistical Data Analysis.* Statistical analysis was performed on the collected data. Since the questionnaire included ordinal and nominal scales, absolute and percentage frequencies as well as mean scores of scales were calculated. Likert-scale variables were described using means (M) and standard deviations (SD). Differences in means across more than two groups were examined using analysis of variance (ANOVA, F-test). Differences were considered statistically significant when $p < 0.05$. Data analysis was performed using SPSS (Statistical Package for Social Sciences), version 17, and MS Excel 2016.

4. Analysis of Research Results

When analysing how participants generally assessed their well-being in higher education, the results (see Figure 1) show that more than half of the respondents belonging to Generation Z (51.4%) rated their well-being at a *moderate* level (6 to 8 points out of 10). Slightly fewer than one-quarter (22.7%) evaluated their well-being with the *highest* scores (10 points – 11.7%; 9 points – 11.0%). Meanwhile, as many as one-quarter (25.9%) of Generation Z students participating in the study rated their well-being between 1 and 5 points, indicating *poor well-being*. The overall mean score was $M=6.81$ out of a maximum of 10.

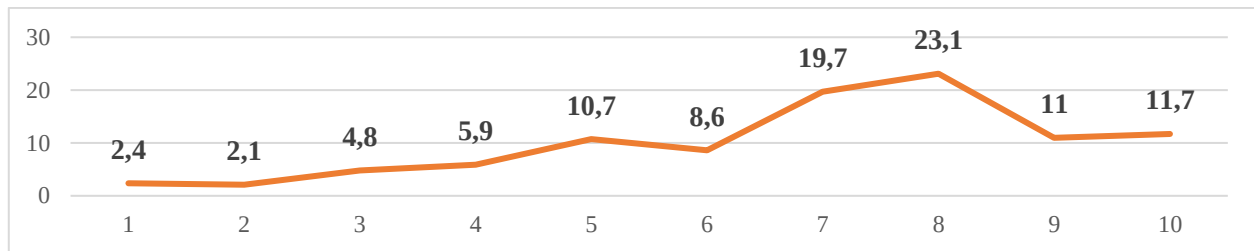


Figure 1. Evaluation of Generation Z Students' Well-Being in Higher Education (n=290; %)

In summary, although more than two-thirds of respondents evaluated their well-being in higher education as moderately high or high, the participants' assessments also show that one-quarter of Generation Z students feel unwell during their studies. Considering that poor well-being during studies may lead to a lack of learning motivation, dissatisfaction with studies, and may even become a risk factor contributing to intentions to drop out, the results highlight the need to identify measures and interventions that could improve the well-being of Generation Z students in higher education.

Factors determining generation Z students' well-being in higher education: student evaluation. When examining the features of the educational process and their importance for individual well-being, scientific literature most frequently emphasises the external environment and the learning conditions created within it. Based on this, the present study sought to explore Generation Z students' perspectives on the factors influencing their well-being in the study process and to identify opportunities for improvement. The questionnaire therefore covered key elements such as: organisation of the study process, study environment and access to necessary equipment and resources, quality of relationships with peers and academic staff, etc.

Analysis of the overall sample revealed the highest mean scores (see Figure 2), showing that, according to Generation Z students, their well-being in the study process is most strongly influenced by: clarity and accessibility of information provided by the higher education institution (emails, websites, social media, etc.) ($M=4.64$), study pace and workload organisation (timetable, assignments and time allocated, assessments) ($M=4.60$), study content (subjects, lecture topics, materials, teaching methods, etc.) ($M=4.58$). Additionally, relatively high mean values indicate that students associate their well-being with personal characteristics, such as self-confidence and self-esteem ($M=4.47$), as well as financial situation ($M=4.37$). Relationships with lecturers and study coordinators were also identified as an important factor ($M=4.39$) influencing Generation Z students' well-being. Thus, the results suggest that students' professional or personal expectations related to the organisation of the study process, study pace and workload, and the quality and relevance of study content – along with supportive lecturer–student relationships and collaboration, personal traits, and available financial resources – are perceived as key determinants of improved well-being among Generation Z students in higher education. These findings suggest that balanced and well-distributed study workload, clear communication across various channels, and study content aligned with labour market needs, as well as the use of diverse and innovative teaching methods, could contribute to improved well-being among Generation Z students.

The results also show that: study equipment and resources (computers, software, printed/digital books) ($M=3.90$), and relationships with administrative staff (study department, heads of units, deans, vice-deans) ($M=3.81$) are not strongly associated with factors determining well-being. These variables had the lowest mean scores (see Figure 2).

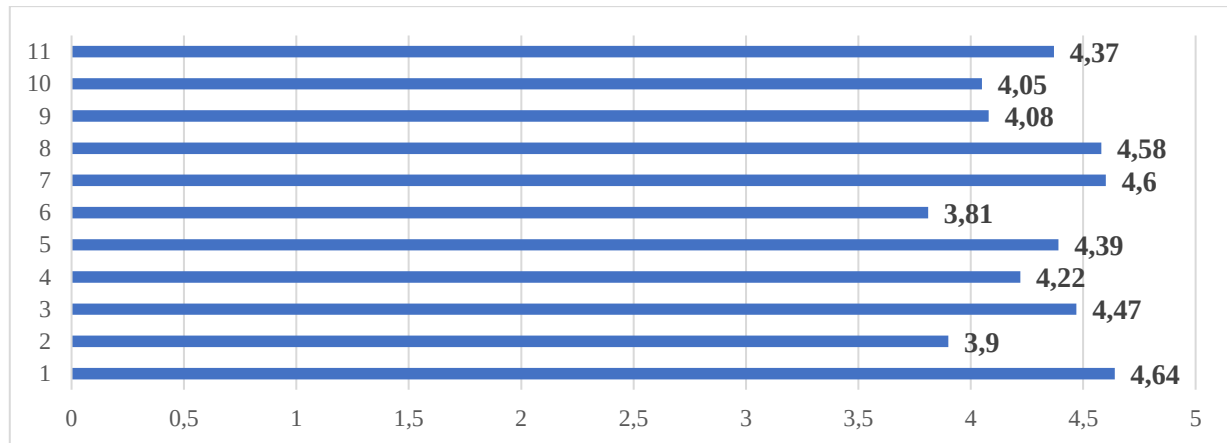


Figure 2. Evaluation of Factors Determining Generation Z Students' Well-Being in Higher Education (n=290; M (mean values); max=5)

Note:

1. Clarity and accessibility of information at the higher education institution (emails, websites, social networks)
2. Study equipment and resources (computers, software, printed and digital books)
3. Self-confidence and self-esteem (level of knowledge and skills, professional and personal expectations, etc.)
4. Relationships with peers
5. Relationships with lecturers and study coordinators
6. Relationships with administrative staff (heads of study departments and academic units, deans, vice-deans, etc.)
7. Study pace and workload organisation (timetable, study tasks and time allocated, assessments)
8. Study content (subjects, lecture topics, materials, teaching methods, etc.)
9. Changed lifestyle (new place of residence, homesickness, planning time for studies and leisure)
10. Study environment (lecture rooms, laboratories, leisure spaces, lighting, ventilation)
11. Financial situation (personal funds for studies and living expenses)

A more detailed data analysis confirmed that the vast majority of Generation Z participants identified several factors as very important or important for their well-being in higher education (see Table 1). Students most frequently emphasised the clarity and accessibility of information provided by the higher education institution, with 69.7 percent of respondents considering this factor very important and 26.9 percent considering it important. The organisation of study pace and workload was also highlighted as significant, with 66.6 percent of respondents rating it as very important and 27.2 percent as important. Another strongly emphasised factor was study content – which includes study subjects, lecture topics, learning materials and teaching methods – with 64.1 percent identifying it as very important and 30.7 percent as important. Only a small share of respondents considered these factors unimportant or not important at all for ensuring well-being in higher education (see Table 1).

Further analysis showed that some factors were considered less important for ensuring the well-being of Generation Z students. Study equipment and resources – such as computers, software and printed or digital books – were rated as very important by 33.1 percent of respondents and important by 38.3 percent. Relationships with administrative staff, including heads of study departments, deans and vice-deans, were considered very important by 27.6 percent and important by 40.0 percent of participants. Likewise, the study environment – which includes classrooms, laboratories, leisure spaces, lighting and ventilation – was rated very important by 41.0 percent and important by 35.9 percent. Since a smaller proportion of respondents associated these elements with ensuring their well-being in higher education, it can be assumed that these factors are perceived as less essential for Generation Z students compared to those related to information accessibility, study pace and study content.

Table 1. Evaluation of Factors Determining Generation Z Students' Well-Being in Higher Education (n = 290; number of respondents (%))

	Very important	Important	Neither important nor unimportant	Unimportant	Not important at all	I don't know / cannot answer
Clarity and accessibility of information at the higher education institution (emails, websites, social networks)	202 (69.7)	78 (26.9)	7 (2.4)	2 (0.7)	-	1 (0.3)
Study equipment and resources (computers, software, printed and digital books)	96 (33.1)	111 (38.3)	56 (19.3)	17 (5.9)	5 (1.7)	5 (1.7)
Self-confidence and self-esteem (level of knowledge and skills, professional and personal expectations, etc.)	164 (56.6)	102 (35.2)	22 (7.6)	1 (0.3)	1 (0.3)	-
Relationships with peers	134 (46.2)	103 (35.5)	41 (14.1)	8 (2.8)	3 (1.0)	1 (0.3)
Relationships with lecturers and study coordinators	154 (53.1)	106 (36.6)	23 (7.9)	4 (1.4)	1 (0.3)	2 (0.7)
Relationships with administrative staff (heads of departments, deans, vice-deans, etc.)	80 (27.6)	116 (40.0)	66 (22.8)	19 (6.6)	4 (1.4)	5 (1.7)
Study pace and workload organisation (timetable, study tasks and time allocated, assessments)	193 (66.6)	79 (27.2)	17 (5.9)	-	1 (0.3)	-
Study content (subjects, lecture topics, materials, teaching methods, etc.)	186 (64.1)	89 (30.7)	13 (4.5)	1 (0.3)	1 (0.3)	-
Changed lifestyle (new place of residence, homesickness, planning time for studies and leisure)	129 (44.5)	99 (34.1)	40 (13.8)	8 (2.8)	5 (1.7)	9 (3.1)
Study environment (classrooms, laboratories, leisure spaces, lighting, ventilation)	119 (41.0)	104 (35.9)	49 (16.9)	7 (2.4)	3 (1.0)	8 (2.8)
Financial situation (personal funds for studies and living expenses)	173 (59.7)	75 (25.9)	28 (9.7)	7 (2.4)	3 (1.0)	4 (1.4)

Summarising the results, it can be stated that Generation Z students associate their well-being in higher education with the organisation of the study process, particularly when information about studies is presented clearly and is accessible through various channels. According to the participants' evaluations, study pace and workload organisation – when assignments and the time allocated for their completion are well balanced – together with study content, including lecture topics, learning materials and selected teaching methods, as well as positive and collaborative relationships between lecturers and students, are among the key factors influencing well-being in higher education. The findings therefore reveal that organising the study process in a way that meets the needs and expectations of Generation Z students, ensuring high-quality communication and providing comprehensive study-related information, along with aligning study content with the current labour market, and coordinating assessments, tasks and the time required for their completion, may constitute essential approaches to managing student well-being in higher education.

When analysing the expression of factors influencing well-being across different year-levels of Generation Z students, statistically significant differences were observed in only one of the eleven statement categories (see Table 2). The results of the analysis of variance showed that the study environment – classrooms, laboratories, leisure spaces, lighting and ventilation – was significantly associated with students' year of study ($F=4.34$, $p=0.005$). Based on these results, it can be concluded that the learning environment provided by the higher education institution, including well-equipped classrooms, laboratories and leisure areas, is a factor influencing the well-being of first-year students ($M=4.18$, $SD=0.96$) to a greater extent than it is for second-year ($M=3.69$, $SD=1.44$) and third-year students ($M=3.56$, $SD=1.31$). Meanwhile, comparative analysis across year-level groups showed that clarity and accessibility of information (emails, websites, social networks) ($F=0.38$, $p=0.767$), study equipment and resources (computers, software, printed and digital books) ($F=0.563$, $p=0.64$),

relationships with peers ($F=0.339$, $p=0.797$), relationships with lecturers and study coordinators ($F=0.391$, $p=0.759$), and relationships with administrative staff (heads of departments, deans, vice-deans, etc.) ($F=1.308$, $p=0.272$) did not differ significantly across study years. This indicates that these factors are viewed similarly by Generation Z students regardless of their year of study (see Table 2). In addition, ANOVA results showed that variables such as study pace and workload organisation (timetables, assignments and time allocated for their completion, assessments) ($F=0.805$, $p=0.492$), study content (study subjects, lecture themes, materials, teaching methods) ($F=0.258$, $p=0.855$), financial situation (personal funds for studies and living expenses) ($F=0.536$, $p=0.658$), and changes in lifestyle (new place of residence, homesickness, planning time for studies and leisure) ($F=1.635$, $p=0.218$) are evaluated at similar levels by students across different study years. These factors are therefore not statistically associated with the students' year of study (see Table 2).

Table 2. Evaluation of Factors Determining Well-Being During Higher Education Studies Across Generation Z Student Groups by Year of Study, Mean Scores (M; max = 5), Standard Deviations (in parentheses), and ANOVA Results ($p < 0.05$) (n = 290)

	1st year (n=217)	2nd year (n=39)	3rd year (n=27)	4th year (n=7) *	F	p
Clarity and accessibility of information at the higher education institution (emails, websites, social networks)	4.65 (0.63)	4.59 (0.72)	4.67 (0.48)	4.86 (0.38)	0.38	0.767
Study equipment and resources (computers, software, printed and digital books)	3.91 (1.05)	3.72 (1.36)	4.0 (0.96)	4.14 (1.07)	0.563	0.64
Self-confidence and self-esteem (level of knowledge and skills, professional and personal expectations, etc.)	4.46 (0.72)	4.59 (0.55)	4.37 (0.56)	4.57 (0.53)	0.655	0.581
Relationships with peers	4.21 (0.9)	4.15 (1.06)	4.33 (0.73)	4.43 (0.53)	0.339	0.797
Relationships with lecturers and study coordinators	4.41 (0.76)	4.31 (1.2)	4.3 (0.61)	4.57 (0.53)	0.391	0.759
Relationships with administrative staff (heads of departments, deans, vice-deans, etc.)	3.08 (1.09)	3.72 (1.12)	3.78 (0.8)	4.57 (0.79)	1.308	0.272
Study pace and workload organisation (timetable, study tasks and time allocated, assessments)	4.58 (0.66)	4.69 (0.57)	4.56 (0.58)	4.86 (0.38)	0.805	0.492
Study content (subjects, lecture topics, materials, teaching methods, etc.)	4.56 (0.66)	4.62 (0.59)	4.63 (0.49)	4.71 (0.49)	0.258	0.855
Changed lifestyle (new place of residence, homesickness, planning time for studies and leisure)	4.12 (1.11)	4.18 (1.12)	3.63 (1.45)	3.86 (1.46)	1.635	0.218
Study environment (classrooms, laboratories, leisure spaces, lighting, ventilation)	4.18 (0.96)	3.69 (1.44)	3.56 (1.31)	4.0 (1.53)	4.343	0.005
Financial situation (personal funds for studies and living expenses)	4.33 (1.05)	4.51 (0.68)	4.48 (0.64)	4.29 (1.5)	0.536	0.658

Note: * excluded from data analysis due to the small number of respondents

Discussing the expression of students' attitudes towards the factors determining well-being in higher education among Generation Z participants enrolled in different study modes, the statistical analysis showed (see Table 3) that only three out of the eleven examined factors are associated with the study mode. The analysis revealed that the clarity and accessibility of information at the higher education institution (emails, institutional website, social networks), as a factor influencing well-being in the study process, is significantly associated with students' study mode ($F=5.205$, $p=0.006$). The findings indicate that clearly presented information that can be accessed through various channels – for example, via email – is more strongly associated with the well-being of students in the full-time (session-based) study mode ($M=4.9$, $SD=0.3$) than for students in the full-time ($M=4.59$, $SD=0.67$) or part-time studies ($M=4.6$, $SD=0.51$). A statistically significant higher mean score was also identified in the full-time (session-based) study mode group ($F=3.211$, $p=0.042$), suggesting that for these students, the pace of studies and workload organisation (timetables, study tasks, time allotted for their completion, assessments) ($M=4.8$, $SD=0.45$) is a more pronounced factor influencing well-being in higher education compared to students in full-time or part-time studies, whose mean scores were lower ($M=4.55$, $SD=0.67$ and $M=4.6$, $SD=0.51$, respectively). Meanwhile, the analysis of variance (ANOVA) revealed a statistically significant difference ($F=16.853$, $p=0.001$) showing that students enrolled in the full-time study mode ($M=4.24$, $SD=0.88$) more strongly associate the study environment – classrooms, laboratories, leisure spaces, lighting, and ventilation – with their well-being in higher education than students in the part-time studies ($M=3.8$, $SD=1.01$) or full-time (session-based) ($M=3.3$, $SD=1.59$) study modes.

When comparing mean scores across study modes using ANOVA, it was found that study equipment and resources (computers, software, printed and digital books) ($F=2.027$, $p=0.134$), relationships with peers ($F=2.162$, $p=0.117$), relationships with lecturers and study coordinators ($F=0.077$, $p=0.926$), and relationships with administrative staff (heads of departments, deans, vice-deans, etc.) ($F=1.113$, $p=0.33$) are evaluated similarly regardless of the study mode and are therefore not statistically associated with it (see Table 3). Furthermore, the study results indicate that several other factors determining well-being in higher education are also unrelated to study mode. These include study content (subjects, lecture topics, materials, teaching methods) ($F=0.806$, $p=0.448$), self-confidence and self-esteem (level of knowledge and skills, professional and personal expectations) ($F=0.125$, $p=0.882$), financial situation (personal funds for studies and living expenses) ($F=1.226$, $p=0.295$), and changes in lifestyle (new living arrangements, homesickness, planning time for studies and leisure) ($F=1.387$, $p=0.251$). These factors are evaluated at similar levels across study mode groups and are not statistically associated with study mode (see Table 3).

Table 3. Evaluation of Factors Determining Well-Being During Higher Education Studies Across Generation Z Student Groups by Study Mode, Mean Scores (M; max = 5), Standard Deviations (in parentheses), and ANOVA Results ($p < 0.05$) ($n = 290$)

	Full-time studies (n=225)	Full-time (session-based) studies (n=50)	Part-time studies (n=15)	F	p
Clarity and accessibility of information at the higher education institution (emails, websites, social networks)	4.59 (0.67)	4.9 (0.3)	4.6 (0.51)	5.205	0.006
Study equipment and resources (computers, software, printed and digital books)	3.96 (0.95)	3.62 (1.59)	4.0 (0.93)	2.027	0.134
Self-confidence and self-esteem (level of knowledge and skills, professional and personal expectations, etc.)	4.46 (0.69)	4.5 (0.71)	4.53 (0.52)	0.125	0.882
Relationships with peers	4.27 (0.85)	3.98 (1.19)	4.27 (0.46)	2.162	0.117
Relationships with lecturers and study coordinators	4.38 (0.79)	4.38 (0.99)	4.47 (0.52)	0.077	0.926
Relationships with administrative staff (heads of departments, deans, vice-deans, etc.)	3.78 (1.01)	3.82 (1.34)	4.2 (0.77)	1.113	0.33
Study pace and workload organisation (timetable, study tasks and time allocated, assessments)	4.55 (0.67)	4.8 (0.45)	4.6 (0.51)	3.211	0.042
Study content (subjects, lecture topics, materials, teaching methods, etc.)	4.56 (0.66)	4.68 (0.51)	4.6 (0.51)	0.806	0.448
Changed lifestyle (new place of residence, homesickness, planning time for studies and leisure)	4.13 (1.11)	3.92 (1.38)	3.73 (1.1)	1.387	0.251
Study environment (classrooms, laboratories, leisure spaces, lighting, ventilation)	4.24 (0.88)	3.3 (1.59)	3.8 (1.01)	16.853	0.001
Financial situation (personal funds for studies and living expenses)	4.41 (0.9)	4.22 (1.28)	4.13 (1.06)	1.226	0.295

Summarising the research findings, it is evident that the study environment – classrooms, laboratories, leisure spaces, lighting and ventilation – may serve as a key factor in ensuring the well-being of first-year students and those enrolled in the full-time study mode. Furthermore, the analysis of variance (ANOVA) revealed that the clarity and accessibility of information provided by the higher education institution (emails, websites, social networks), as well as the pace of studies and the organisation of workload (timetables, study tasks and allotted time, assessments), are more strongly expressed as factors influencing well-being among students in the full-time (session-based) study mode compared to students enrolled in full-time or part-time study modes. This suggests that when working with full-time (session-based) students, it is particularly important to ensure high-quality information dissemination through multiple channels and to distribute the pace and workload of studies in a way that reflects students' needs and capabilities.

Management Opportunities for Enhancing the Well-Being of Generation Z Students in Higher Education. To identify opportunities for managing the well-being of Generation Z students during the study process, responses were summarised into several categories: organisation of the study process, creation of a supportive study environment and provision of necessary study resources, ensuring high-quality communication with academic

actors (lecturers and administration), and opportunities for informal (extracurricular) activities that promote communication and self-awareness.

According to participants' evaluations, the highest mean scores (see Figure 3) indicate that clearly provided information about schedules and study subjects ($M=4.38$), along with clearly presented teaching materials (lecture recordings, assignments) and information about assessments ($M=4.32$), are among the most effective ways to ensure the well-being of Generation Z students in higher education. Clearly and flexibly organised assessments – through coordinated timing, appropriate distribution of workload and reasonable volume of assessments – were similarly evaluated as important opportunities for managing student well-being ($M=4.32$). Respondents also emphasised that a diversity of communication forms with lecturers – such as electronic communication or individual consultations ($M=4.16$) – as well as attractive study formats, including guest lectures, interactive sessions and visits to organisations ($M=4.17$), and flexible opportunities to balance work and studies ($M=4.14$), may contribute to improved well-being in the study process. Analysis of well-being management opportunities further showed that the study environment is considered an important factor. A modern, innovative study environment – comprising classrooms, equipment and other material resources ($M=4.13$) – as well as spaces for resting during breaks, working individually or completing group assignments ($M=4.13$), may serve as tools for ensuring student well-being. The results indicate that a large share of respondents prioritise high-quality communication with those involved in the study process and the creation of a supportive study environment. Participants also linked well-being management opportunities with effective organisation of the study process, clearly presented information about ongoing studies (timetables, subjects) and lecturer professionalism in presenting teaching materials and assessment information clearly. By contrast, certain elements were evaluated with lower mean scores. Entertainment or activities during breaks – such as background music or film screenings ($M=3.49$) – regular student debates aimed at addressing emerging issues or discussing relevant topics ($M=3.45$), and extracurricular activities (such as student organisation events) ($M=3.67$) were least associated with opportunities for managing Generation Z students' well-being, as reflected in the lowest mean values (see Figure 3).

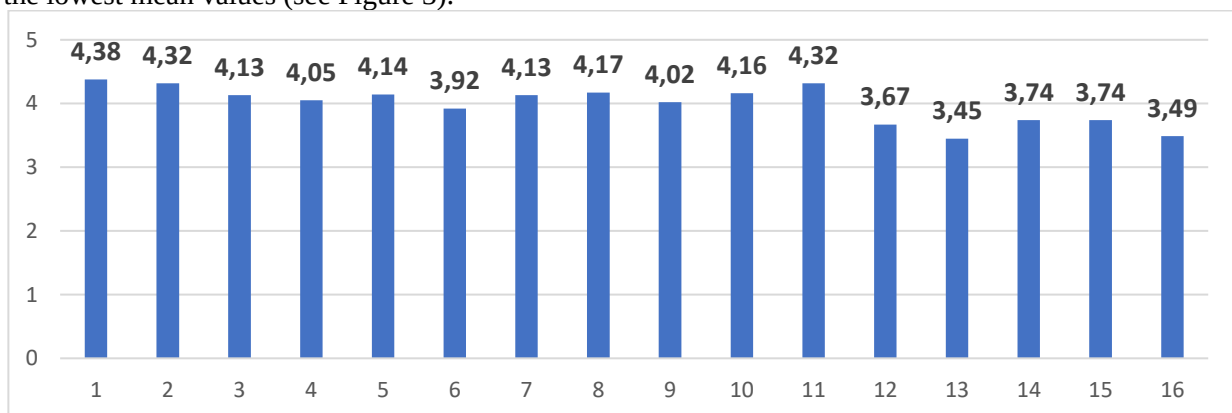


Figure 3. Evaluation of Management Opportunities for Enhancing Generation Z Students' Well-Being in Higher Education ($n=290$; M (mean values); $\max=5$)

Note:

1. Clearly presented information (timetables, study subjects)
2. Clearly presented teaching materials (lecture video recordings, assignments) and information about assessments
3. Modern, innovative study environment (classrooms, equipment and other material resources)
4. Regularly updated study resources (learning materials, literature, library collections, etc.)
5. Flexible opportunities to combine studies and work
6. Informal interaction with classmates (joint events, excursions, team-building activities, etc.)
7. Spaces for resting during breaks, independent study or group work ("quiet" rooms, swings, etc.)
8. Attractive study formats (guest speakers, interactive lectures, visits to organisations)
9. Opportunities for monitoring personal and professional progress (support from psychologists, mentors, career counsellors, etc.)
10. Diversity of communication forms with lecturers (electronic communication, individual consultations, etc.)
11. Clear and flexible organisation of assessments (coordination of timing and number of assessments, appropriate workload distribution, etc.)
12. Interesting extracurricular activities (variety of student organisations)
13. Regular student debates (for addressing student issues or discussing other relevant matters)
14. Virtual advisor for first-year students to discuss study-related or other relevant questions
15. Extended opening hours of independent study spaces (libraries, IT rooms)
16. Variety of activities during breaks (background music, film screenings, etc.)

Summarising the empirical findings from the overall sample, a clear tendency emerges: Generation Z students associate the management opportunities for ensuring their well-being during studies with factors existing at the institutional level, the specifics of study process organisation, and the quality of relationships with members of the higher education community. These variables received the highest mean scores. The results also showed that respondents link the possibilities for managing Generation Z students' well-being with a professionally and clearly administered study process. Furthermore, the diversity of communication forms with lecturers and the importance of flexible study arrangements that enable students to balance studies and work were highlighted as key ways to ensure student well-being in higher education. Additionally, the results revealed the significance of the material and methodological resources available at the institution, a modern and innovative study environment, and the use of contemporary teaching methods and attractive study formats – such as guest lectures, interactive sessions and visits to organisations – as means of fostering the well-being of Generation Z students. By contrast, students did not associate well-being management opportunities with informal extracurricular activities, regular debates aimed at addressing student issues or other relevant matters, or the variety of activities offered during breaks.

When analysing differences in mean scores related to the evaluation of Generation Z well-being management opportunities across student groups enrolled in different study modes, the data are presented in Table 4. Statistical analysis (see Table 4) revealed a significantly higher mean score ($F=2.855$, $p=0.05$) in the group of students in full-time studies ($M=4.0$, $SD=1.05$), suggesting that these students more strongly associate well-being management opportunities with informal interaction with classmates, joint events, excursions, team-building activities and similar forms of engagement than students in full-time (session-based) ($M=3.64$, $SD=1.14$) or part-time studies ($M=3.67$, $SD=1.11$). Moreover, a significantly higher mean score ($F=9.311$, $p=0.001$) among full-time students ($M=4.26$, $SD=0.93$) indicates that they more strongly identify well-being management opportunities with the creation of spaces where students can rest during breaks, study independently or complete group assignments (such as quiet rooms or relaxation areas), compared to students in full-time (session-based) ($M=3.66$, $SD=0.98$) and part-time studies ($M=3.73$, $SD=1.22$). Meanwhile, clear and flexible organisation of assessments – through coordinated timing, distribution of workload and volume of assessments – was rated higher by students in full-time ($M=4.36$, $SD=0.86$) and full-time (session-based) ($M=4.32$, $SD=1.08$) study modes, while students in part-time studies assigned a lower mean score ($M=3.73$, $SD=1.16$). ANOVA results showed that the evaluation of this factor as a potential prerequisite for managing well-being in higher education is statistically significantly associated with the chosen study mode ($F=3.351$, $p=0.036$). At the same time, the comparative analysis across study modes revealed that attractive extracurricular activities (such as the variety of student organisations) ($M=3.76$, $SD=1.0$) and extended opening hours of independent study spaces (libraries, IT rooms) ($M=3.84$, $SD=1.0$) were evaluated with higher mean scores in the full-time student group. In contrast, these variables were assigned significantly lower scores among students in full-time (session-based) studies (respectively: $M=3.34$, $SD=1.27$; $M=3.44$, $SD=1.03$) and part-time studies (respectively: $M=3.47$, $SD=0.83$; $M=3.33$, $SD=1.05$) (see Table 4).

The ANOVA analysis also showed that clearly presented information (timetables, study subjects) ($F=0.334$, $p=0.716$), clearly presented teaching materials (lecture recordings, assignments) and assessment information ($F=0.184$, $p=0.832$), a modern, innovative study environment (classrooms, equipment, material resources) ($F=1.551$, $p=0.214$), and regularly updated study resources (learning materials, literature, library collections) ($F=0.449$, $p=0.6392$) were evaluated at similar levels regardless of the chosen study mode. The differences were minor and not statistically significant. Additionally, the results showed that regardless of study mode, respondents evaluated factors such as attractive study formats (guest lectures, interactive lectures, organisational visits) ($F=1.806$, $p=0.166$), diversity of communication forms with lecturers (electronic communication, individual consultations) ($F=0.35$, $p=0.705$), opportunities for monitoring personal and professional development (psychological, mentoring or career counselling support) ($F=0.059$, $p=0.943$), and the possibility to combine studies with work flexibly ($F=2.529$, $p=0.082$) at similar levels. Furthermore, analysis across study modes revealed no statistically significant differences in how students evaluated regular student debates (aimed at solving problems or discussing relevant issues) ($F=2.088$, $p=0.126$), a virtual adviser for first-year students ($F=0.301$, $p=0.74$), and activities during breaks (background music, film screenings) ($F=1.963$, $p=1.42$). This suggests that the evaluation of these factors remains consistent across study modes and does not significantly

depend on the type of studies respondents are enrolled in. The mean values for well-being management opportunities across study modes are presented in Table 4.

Table 4. Evaluation of Management Opportunities for Generation Z Students' Well-Being in Higher Education Across Study Mode Groups, Mean Scores (M; max = 5), Standard Deviations (in parentheses), and ANOVA Results ($p < 0.05$), (n = 290)

	Full-time studies (n=225)	Full-time (session-based) studies (n=50)	Part-time studies (n=15)	F	p
Clearly presented information (timetables, study subjects)	4.4 (0.81)	4.3 (1.02)	4.33 (0.82)	0.334	0.716
Clearly presented teaching materials (lecture video recordings, assignments) and information about assessments	4.33 (0.76)	4.32 (1.02)	4.2 (1.01)	0.184	0.832
Modern, innovative study environment (classrooms, equipment and other material resources)	4.17 (0.87)	4.04 (0.86)	3.8 (1.01)	1.551	0.214
Regularly updated study resources (learning materials, literature, library collections, etc.)	4.03 (0.89)	4.16 (0.98)	4.07 (0.88)	0.449	0.639
Flexible opportunities to combine studies and work	4.11 (0.93)	4.4 (1.01)	3.87 (1.3)	2.529	0.082
Informal interaction with classmates (joint events, excursions, team-building activities, etc.)	4.0 (1.05)	3.64 (1.14)	3.67 (1.11)	2.855	0.05
Spaces for resting during breaks, independent study or group work ("quiet" rooms, swings, etc.)	4.26 (0.93)	3.66 (0.98)	3.73 (1.22)	9.311	0.001
Attractive study formats (guest speakers, interactive lectures, visits to organisations)	4.22 (0.92)	4.04 (1.14)	3.8 (1.08)	1.806	0.166
Opportunities for monitoring personal and professional progress (psychologist, mentor or career counsellor support, etc.)	4.03 (0.95)	3.98 (1.08)	4.0 (1.2)	0.059	0.943
Diversity of communication forms with lecturers (electronic communication, individual consultations, etc.)	4.16 (0.89)	4.22 (0.86)	4.0 (1.13)	0.35	0.705
Clear and flexible organisation of assessments (coordination of timing and volume, appropriate workload distribution, etc.)	4.36 (0.86)	4.32 (1.08)	3.73 (1.16)	3.351	0.036
Interesting extracurricular activities (variety of student organisations)	3.76 (1.0)	3.34 (1.27)	3.47 (0.83)	3.627	0.028
Regular student debates (to address student issues or discuss relevant topics)	3.52 (1.04)	3.18 (1.22)	3.33 (1.11)	2.088	0.126
Virtual adviser for first-year students (for study-related or other relevant questions)	3.74 (1.07)	3.78 (1.23)	3.53 (0.99)	0.301	0.74
Extended opening hours of independent study spaces (libraries, IT rooms)	3.84 (1.0)	3.44 (1.03)	3.33 (1.05)	4.462	0.012
Variety of activities during breaks (background music, film screenings, etc.)	3.56 (1.2)	3.24 (1.13)	3.2 (1.01)	1.963	0.142

Summarising the results of the comparative analysis across groups of respondents who had chosen different study modes, it was found that the evaluation of factors determining the well-being of Generation Z students in higher education is significantly associated with study mode for five out of the sixteen variables examined. The ANOVA results revealed that factors such as attractive extracurricular activities (the variety of student organisations), spaces available for resting during breaks, independent study or group work (such as quiet rooms or relaxation areas), informal interaction with classmates (joint events, excursions, team-building activities), extended opening hours of independent study spaces (libraries, IT rooms), as well as clear and flexible organisation of assessments (coordination of timing and volume, appropriate distribution of workload), were more strongly associated with well-being management opportunities by students in full-time studies. These factors were evaluated with significantly lower scores by students in full-time (session-based) and part-time studies. However, the comparative analysis also revealed that the evaluation of eleven out of the sixteen variables did not differ significantly across study modes. This indicates that most factors related to the management of Generation Z students' well-being in higher education are assessed at similar levels, with only minor differences, regardless of the study mode chosen.

Drawing on the scientific literature and empirical findings, it can be concluded that the management of Generation Z students' well-being in higher education is a complex phenomenon encompassing various

dimensions: the learning environment and academic context, the organisation of the study process, the conditions provided, and the quality of study content; as well as access to information, the quality of social relationships, and the implementation of a sense of community. At the same time, after categorising the factors influencing well-being into management functions, these factors appear through the functions of planning, organising and implementation, leadership, and control. The planning function includes clear and flexible organisation of assessments, appropriate distribution of study workload, and structuring of study content. The organising and implementation functions include attractive extracurricular activities, such as the variety of student organisations, extended opening hours for independent study spaces, and suitable places for rest or group work, such as quiet rooms or relaxation areas. The leadership function is reflected through informal communication with classmates, joint events, excursions, and team-building activities, all of which enhance student engagement and support well-being. The control function includes monitoring the accessibility of resources and evaluating the effectiveness of organisational decisions, for example through student feedback on study spaces or workload, in order to adjust measures and ensure an optimal study experience. Overall, the factors identified at the institutional level stand out as significant components in ensuring the emotional well-being of Generation Z students and constitute key prerequisites for managing well-being in the study process.

Conclusions

1. The theoretical analysis of scientific literature showed that a supportive learning environment and academic context, an appropriate study workload, and convenient access to information through modern technologies and up-to-date software, as well as systematically developed and maintained institutional community-building and peer-support structures, may serve as important prerequisites for managing the well-being and emotional state of Generation Z students in higher education.
2. The highest mean scores indicate that clarity and accessibility of information in higher education (emails, institutional websites, social networks, etc.), the pace and organisation of the study workload (timetables, study tasks and time allocated, assessments), study content (subjects, lecture topics, materials, teaching methods, etc.), and relationships with lecturers and study coordinators are among the key factors determining the well-being of Generation Z students in higher education. Meanwhile, study equipment and resources (computers, software, etc.) and relationships with administrative staff were least associated with students' well-being during their studies.
3. ANOVA results revealed that first-year students and those enrolled in full-time studies associate the study environment (classrooms, laboratories, leisure spaces, lighting, ventilation) with good well-being in higher education. Furthermore, clarity and accessibility of information (emails, websites, social networks) and the pace and organisation of study workload (timetables, study tasks, time allocated, assessments) were among the key factors influencing well-being for students in full-time (session-based) studies.
4. Clearly presented information about study process organisation, well-structured teaching materials and assessment requirements, as well as flexible and coherent assessment planning – including coordinated timing, reasonable volume of assessments, and balanced workload distribution – were evaluated by the overall sample as essential study process management measures for ensuring the well-being of Generation Z students in higher education. According to respondents, a diversity of communication forms with lecturers (electronic communication, individual consultations, etc.), student-centred teaching methods (interactive lectures, guest speakers, visits to organisations), flexible opportunities to balance studies and work, and strategic investments in a modern and innovative study environment may be considered meaningful study process management practices contributing to the well-being of Generation Z students in higher education.

References

- Behr A., Giese M., Kamdjou H. D. T., & Theune K. (2020). Motives for dropping out from higher education –An analysis of bachelor's degree students in Germany. *European Journal of Education*, 56(2), 325-343. <https://doi.org/10.1111/ejed.12433>
- Bumbacco, C., & Scharfe, E. (2020). Why Attachment Matters: First-Year Post-secondary Students' Experience of Burnout, Disengagement, and Dropout. *Journal of College Student Retention: Research, Theory & Practice*, 0(0), 1-14. <https://eric.ed.gov/?id=EJ1360363>
- Casanova, J. R., Cervero, A., Núñez, J. C., Almeida, L. S., & Bernardo, A. (2018). Factors that determine the persistence and dropout of university students. University of Minho and University of Oviedo. *Psicothema*, 30(4), 408-414. <https://orcid.org/10.7334/psicothema2018.155>
- Černikovaitė, M. E. (2021). Studentų įsitraukimo veiksniai į nuotolines studijas COVID-19 pandemijos metu. In *COVID-19 poveikis studentų akademiniam ir socialiniam gyvenimui: elektroninis konferencijos pranešimų rinkinys*, 39-43. <https://cris.mruni.eu/server/api/core/bitstreams/00bf1f94-0a50-41c8-8147-e54164638ebb/content>
- Fourie, C. M. (2017). The Role of Academic and Non-Academic Factors on the Development of a Sense of Belonging among First-Year Students. In *Collaboration, Communities and Competition: International Perspectives from the Academy* (edited by S. Dent, L. Lane, and T. Strike), 143-167. https://doi.org/10.1007/978-94-6351-122-3_9
- Fourie, C. M. (2020). Risk factors associated with first-year students' intention to dropout from a university in South Africa. *Journal of Further and Higher Education*, 44(2), 201-215. <https://doi.org/10.1080/0309877X.2018.1527023>
- Hauschildt, K., Gwosć, Ch., Schirmer, H., Mandl, S., & Cordelia, M. (2024). Social and economic conditions of student life in Europe: EUROSTUDENT 8 Synopsis of Indicators 2021-2024. <https://doi.org/10.25656/01:31932>
- Kallunki, J., Viseu, S., & Silvén, P. (2025). Network governance in Finnish higher education and science policy, 2012–2021. *Higher Education*. <https://doi.org/10.1007/s10734-025-01557-2>
- Kazlauskienė, R., Jakubkytė, A., & Ruzgailaitė, L. (2024). Studijų patrauklumą lemiantys veiksniai ir jo didinimo galimybės. *Science & Processes of Education/Mokslas ir edukaciniai procesai*, 1(38), 5-21. Šiauliai, ISSN 2345-068.1 <https://vb.vtdko.lt/object/elaba:206380260/>
- Kehm, B. M., Larsen, M. R., & Sommersel, H. B. (2019). Student dropout from universities in Europe: A review of empirical literature. *Hungarian Educational Research Journal*, 9(2), 147-164. <https://doi.org/10.1556/063.9.2019.1.18>
- Khatri, P., Duggal, H. K., Lim, W. M., Thomas, A., & Shiva, A. (2024). Student well-being in higher education: Scale development and validation with implications for management education. *The International Journal of Management Education*, 22(1), 100933. <https://doi.org/10.1016/j.ijme.2024.100933>
- Konstantinidis, A. (2024). An integrative review of the literature on factors influencing student well-being in the learning environment. *International Journal of Educational Research Open*, 7, 100384. <https://doi.org/10.1016/j.ijedro.2024.100384>
- Kümmel, E., Moskaliuk, J., Cress, U., & Kimmerle, J. (2020). Digital learning environments in higher education: A literature review of the role of individual vs. social settings for measuring learning outcomes. *Education Sciences*, 10(3), 78. <https://doi.org/10.3390/educsci10030078>
- Larmuseau, C., Desmet, P., & Depaepe, F. (2019). Perceptions of instructional quality: Impact on acceptance and use of an online learning environment. *Interactive Learning Environments*, 27, 953-964. <https://doi.org/10.1080/10494820.2018.1509874>
- Lehnchen, J., Helmer, S. M., Heinrichs, K., Burian, J., Deptolla, Z., Heumann, E., & Stock, C. (2025). Assessment of study conditions, needs for action and students' mental health in Germany – results from the cross-sectional StudiBiFra study. *Journal of Public Health*. <https://doi.org/10.1007/s10389-024-02387-9>
- Mostert, K., & Pienaar, J. (2020). The moderating effect of social support on the relationship between burnout, intention to drop out, and satisfaction with studies of first-year university students. *Journal of Psychology in Africa*, 30(3), 197-202. <https://doi.org/10.1080/14330237.2020.1767928>
- Mouton, D., Zhang, H., & Ertl, B. (2020). German university student's reasons for dropout. Identifying latent classes. *Journal for Educational Research Online*, 12(2), 190-224. <https://doi.org/10.25656/01:20977>
- Muja, A., Menz, C., Danaii, D., Hauschildt, K., van Mensvoort, C., & Cuppen, J. (2024). Student well-being: The role of socio-demographic background, contextual conditions, and study demands and resources on the well-being of students in the European Higher Education Area (EUROSTUDENT thematic report). EUROSTUDENT. https://www.eurostudent.eu/download_files/documents/EUROSTUDENT_2024_student_well_being.pdf?utm_source=chatgpt.com

Olsson, T. M., Broberg, M., Frisk, S., Wackenhut, A. F., Kjellin, D., Gullstrand, S., Rost, S., & Skoog, T. (2024). Health-promoting learning environments in higher education: A scoping review of structural interventions to protect student mental health. *European Journal of Education*, 59(4). <https://doi.org/10.1111/ejed.12772>

Paiva, U., Cortese, S., Flor, M., Moncada-Parra, A., Lecumberri, A., Eudave, L., Magallón, S., García-González, S., Sobrino-Morras, Á., Piqué, I., Mestre-Bach, G., Solmi, M., Arrondo, G. (2025). Prevalence of mental disorder symptoms among university students: An umbrella review. *Neuroscience & Biobehavioral Reviews*, 175, 106244. <https://doi.org/10.1016/j.neubiorev.2025.106244>

Pakalniškienė, V. (2012). Tyrimo ir įvertinimo priemonių patikimumo ir validumo nustatymas. Metodinė priemonė (Determining the reliability and validity of research and evaluation tools. Methodological tool). Vilnius: Vilniaus Universiteto leidykla. https://www.vu.lt/leidyba/images/knygos/Filosofija/Tyrimo_ir_%C4%AFvertinimo_priemoni%C5%B3_patikimumo_ir_validumo_nustatymas.pdf

Pečiuliauskienė, P., Valantinaitė, I., & Malonaitienė, V. (2013). *Z karta: kūrybingumas ir integracija*. Vilnius: Edukologija. <https://www.lituanistika.lt/content/82779>

Rossato, L., Veloso Morotti, C. A., & Scorsolini-Comin, F. (2024) Transition and Adaptation to Higher Education in Brazilian First-Year Nursing Students. *Journal of Latinos and Education*, 23(1), 2-12. <https://doi.org/10.1080/15348431.2022.2102499>

Samašonok K., Kamienas E., & Juškevičienė A. (2023). Factors determining dropouts from higher education institutions. *Entrepreneurship and Sustainability Issues*, 10(3), 151-169. [https://doi.org/10.9770/jesi.2023.10.3\(11\)](https://doi.org/10.9770/jesi.2023.10.3(11))

Samašonok, K. (2024). Z kartos studentų mokymosi motyvacijos aukštojoje mokykloje valdymo galimybės. Possibilities of ensuring the learning motivation of generation z students in higher education. *Science & Processes of Education / Mokslas ir edukaciniai procesai*, 1(38), p. 5-22. Šiauliai, ISSN 2345-0681 https://www.salumeda.lt/wp-content/uploads/2025/04/MEPDec_2024.pdf

Skaniakos, T., Penttinen, L., & Lairio, M. (2014). Peer group mentoring programmes in Finnish higher education – mentors' perspectives. *Mentoring & Tutoring: Partnership in Learning*, 22(1), 74-86. <https://doi.org/10.1080/13611267.2014.882609>

Swindell, N., Thomas, J., Tree, J., Hill, D., Hudson, J., & Stratton, G. (2023). Understanding (in)formal health and wellbeing networks within higher education: A mixed method social network perspective. *Higher Education*, 88, 1037-1058. <https://doi.org/10.1007/s10734-023-01158-x>

Šćukanec Schmidt, N., Skledar Matijević, A., & Anić, Z. (2023). Linking quality assurance and the social dimension of higher education, NESET report. Luxembourg: Publications Office of the European Union. <https://en.iro.hr/wp-content/uploads/2024/03/linking-quality-assurance-and-the-social-dimension-NC0722853ENN.pdf>

Tett, L., Riddell, S., Christie, H., King, R., & Shan, S. (2025). University students' sense of belonging and the impact of commuting. *Research in Post-Compulsory Education*, 1-21. Advance online publication. <https://doi.org/10.1080/13596748.2025.2522547>

Urbonienė, J., Bartuševičienė V., & Puidokaitė-Savickienė R. (2019). Studijuojančiųjų poreikiai e. studijoms Lietuvos aukštosiose mokyklose. *Įžvalgos*, 2, 71-86. <https://www.lituanistika.lt/content/99306>

Valtonen, T., Leppänen, U., Hyypiä, M., Kokko, A. K., Manninen, J., Vartiainen, H., Sointu, E., & Hirsto, L. (2021). Learning environments preferred by university students: A shift toward informal and flexible learning environments. *Learning Environments Research*, 24(3), 371-388. <https://doi.org/10.1007/s10984-020-09339-6>

Wu, X. I., Occhipinti, S., & Watson, B. (2023). Mainland Chinese students' psychological adaptation to Hong Kong: an intergroup communication perspective. *Journal of Multilingual and Multicultural Development*, 46(8), 2342-2357. <https://doi.org/10.1080/01434632.2023.2287045>

Yu, B., & Downing, K. (2012) Determinants of international students' adaptation: examining effects of integrative motivation, instrumental motivation and second language proficiency. *Educational Studies*, 38(4), 457-471, <https://doi.org/10.1080/03055698.2011.643111>

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KRISTINA SAMAŠONOK, Doctor of Social Sciences (Educology), Associate Professor of the Faculty of Business Management of Vilniaus kolegija/Higher Education Institution. Research interest areas: social exclusion risk for adolescence adaptation, institutional development and adaptive behaviour modelling, the first-year students' adaptation to the study process, motivation factors for choosing studies, developing students' creative thinking in a higher school.

ORCID: <https://orcid.org/0000-0002-8985-6942>

JŪRATĖ PATACKAITĖ, Head of the Foreign Languages Centre at Vilnius kolegija/Higher Education Institution and lecturer of German language, President of the Language Teachers' Association of Lithuania. Research interests: foreign language pedagogy, professional language, language teaching methodologies, multilingual education, and improving the quality of language learning in higher education.

ORCID: <https://orcid.org/0000-0003-0526-4841>

LAIMA PARAUKIENĖ, Head of the Training and Cooperation Development Division of the Faculty of Business Management of Vilniaus kolegija/Higher Education Institution and lecturer of the Innovation Management Department. Research interest areas: entrepreneurship, entrepreneurial competences, business process management.

ORCID: <https://orcid.org/0009-0007-6233-8313>

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