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Well-Being of University Students as a Pillar of Educational Sustainability: A Case Study

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Abstract

In pursuit of educational sustainability and quality, the well-being of university students has become a critical area of focus, particularly as higher education institutions play a central role in shaping future professionals and socially resilient communities. The case study explores the well-being of university students within the context of ongoing global and societal challenges, including economic uncertainty and rapid social change. The study assesses key indicators of student well-being: subjective, psychological, and psychosocial well-being, as well as life satisfaction, emotional experiences, and flourishing using a validated methodology adapted from previous international research. Data have been collected from a sample of 130 Daugavpils University (Latvia) students in 2025 through standardized self-report instruments. Results indicate moderate to high levels of well-being overall, with notable variation across age groups. A general trend of increasing well-being with age has been observed, suggesting developmental factors in emotional and psychological resilience. Despite the presence of external stressors, students demonstrate more positive than negative evaluations of themselves and their lives. This case study underscores the need for higher education institutions to monitor student well-being, promote timely interventions, and prepare graduates to address contemporary challenges.

Keywords: Case study, higher education, students, sustainability, well-being.

Introduction

Sustainable development requires fundamental and transformative changes in society, with education playing a crucial role in building the capacities needed for this process. Education for Sustainable Development (ESD) is an integral component of quality education, enhancing the cognitive, social, emotional, and behavioral dimensions of learning. As a holistic and transformational approach, ESD encompasses learning content, outcomes, pedagogy, and the learning environment itself. Conceptualizing the world as an open, complex, and dynamically adaptive process is essential for achieving the Sustainable Development Goals (SDGs) and addressing both local and global challenges (Salite et al., 2021). The Futures of Education initiative by the United Nations Educational, Scientific and Cultural Organization (UNESCO) positions education as transformative not only because it responds to a changing world, but also because it actively contributes to transforming the world (UNESCO, 2020). However, the emotional dimension of learning is often overlooked, particularly in the context of higher education (Li, 2025; Nannings et al., 2025; O'Toole & O'Flaherty, 2022; Quinlan, 2016). Universities have increasingly prioritized academic advancement, research, and policy development, frequently at the expense of students' well-being (Riva et al., 2020). Since education plays a key role in enabling individuals to find their place in society, it is strongly associated with well-being (Stasulane, 2017). It is important to note, however, that well-being is central to SDG 3, Good Health and Well-being, which aims to ensure healthy lives and promote well-being for all people at all ages. The 17 SDGs, adopted at the 2015 Sustainable Development Summit, provide a holistic framework for addressing key global challenges such as poverty, hunger, equitable access to education for all social groups, the use of alternative energy sources, and climate change. They also emphasize the interconnectedness of these dimensions in advancing collective well-being (UNESCO, 2017).

In the context of ongoing changes within the European Union, the study of well-being has become increasingly significant, as persistent negative societal expectations continue to reinforce a sense of crisis and uncertainty (Oparina et al., 2025). International organizations, including the Organization for Economic Co-operation and Development (OECD), now treat well-being as a central policy indicator, adopting multidimensional measurement frameworks that span 11 key domains (OECD, 2025). Such approaches reflect a broader shift in policymaking, where well-being data is used to guide decisions across education, health, social welfare, and economic development. This trend is also evident in academic research, with well-being indicators increasingly applied across the social sciences (Oparina et al., 2025). Evidence consistently shows that during economic downturns, individuals face greater difficulty meeting basic needs, which in turn leads to a decline in well-being indicators (Legatum Institute, 2023).

The current research is being conducted during a time of global unrest and conflict, when people are confronted with challenges that affect both their basic needs, such as security and shelter, and the quality of mutual understanding among social groups, nationalities, and generations. These issues are not confined to conflict zones but are felt worldwide. The relevance of well-being has become increasingly evident, not only in the context of individual life change but also as a broader societal concern in an era characterized by accelerated pace and unpredictability (Usher et al., 2020).

Literature Review

Educational Sustainability

Emerging in the 1990s, ESD has since become a prominent focus in policy and research and a cornerstone of quality education in the 21st century. Recognized both as a key driver of the 2030 Agenda and its 17 SDGs, and through the UNESCO Recommendation on Education for Peace, Human Rights, and Sustainable Development, ESD plays a central role in reimagining education systems for sustainability. ESD equips learners with the knowledge, skills, values, and attitudes needed for critical thinking, conflict resolution, global citizenship, and ecological responsibility. Its ultimate goal is to foster inclusive and sustainable societies that live in harmony with the planet (UNESCO, 2020). The integration of the SDGs into educational settings is an urgent necessity to prepare new generations with the skills and competencies required to respond to global challenges (Bernárdez-Gómez et al., 2024).

The process of developing scenarios for the future of higher education toward 2050 has been informed by an analysis of literature and technical reports from diverse contexts, as well as data from consultation workshops and a synthesis of concept notes. One proposed scenario envisions ecologically sustainable higher education, where the primary role of universities is to foster care, sustainability, and the well-being of the planet. In this vision, higher education is regarded as a common good, shaped by mutual social relationships through which human beings enhance their well-being (Makoe, 2022).

Ongoing transformations in higher education, encompassing demographic changes, the growing mobility of students that calls for balancing internationalization with the preservation of diversity and indigenous knowledge, and the increasing participation of mature and adult learners, highlight the need for a renewed vision of higher education (UNESCO, 2023).

What is Well-Being?

Over the past several decades, with the development of positive psychology, the term “well-being” has gained a broader meaning within the science of psychology, extending beyond earlier descriptions focused mainly on economic prosperity. Well-being has gradually come to be understood as a complex construct concerning optimal human experience and functioning (Ryan & Deci, 2001). At the beginning of the 21st century, Edward Diener, one of the leading researchers writing in the field of psychological well-being, summarized that subjective well-being (SWB) refers to various types of evaluations, both positive and negative, that people make about their lives. It includes reflective cognitive evaluations, such as life satisfaction and work satisfaction, interest and engagement, as well as affective reactions to life events, such as joy and sadness. Thus, subjective well-being became an umbrella term for the different evaluations people make regarding their lives, the events happening to them, their bodies and minds, and the circumstances in which they live. During this period, other authors also developed

theories and measures that conceptualized well-being in terms of positive functioning, referring to this as psychological well-being (Ryff & Keyes, 1995; cf. Ryan & Deci, 2001). These differing definitions of well-being contributed to distinct lines of inquiry into its causes, consequences, and dynamics (Ryan & Deci, 2001).

It is difficult to define well-being, and even more challenging to measure it (Diener et al., 2008). Research conducted within positive psychology over the past few decades can be grouped into three main approaches, each emphasizing different components that describe an individual's well-being. Ryan and Deci's (2001) integrative review distinguished two major traditions in the field: one focusing on happiness and pleasure (hedonic well-being) and the other on meaning, personal growth, and optimal functioning (eudaimonic well-being). Later work in the field sought to integrate these two perspectives by examining well-being as a multidimensional construct that incorporates both hedonic and eudaimonic elements, thereby laying the foundation for a third, holistic approach to studying well-being.

Hedonic, Eudaimonic, and Holistic Perspectives on Well-Being

The hedonic approach focuses on happiness and defines well-being in terms of pleasure attainment and pain avoidance (Ryan & Deci, 2001), and is reflected in the stream of research on SWB (e.g., Diener, 1984). SWB emerged in the late 1950s from efforts to identify useful indicators of quality of life that could help monitor social change and inform public policy (Keyes et al., 2002). In practice, SWB is a more scientific-sounding term for what people usually mean by happiness, and although SWB research relies primarily on broad self-ratings that can be criticized on various grounds, its findings have proved to be plausible and coherent (Seligman & Csikszentmihalyi, 2000). SWB is often measured with a single item assessing a person's satisfaction with life, but the broader model includes not only satisfaction with life and its different domains, but also positive and negative affect and the balance between the two (Diener et al., 1999).

The eudaimonic approach focuses on meaning and self-realization, defining well-being in terms of the degree to which a person is fully functioning (Ryan & Deci, 2001). Keyes (2002) proposed that mental health is best understood as the combined presence of emotional, psychological, and social well-being. This tradition is reflected mainly in the stream of research on psychological well-being (Ryff, 1989) and social well-being (Keyes, 2006), both of which examine how effectively individuals perceive themselves to be functioning in life (Keyes, 2006). Ryff (1989) proposed the concept of psychological well-being (PWB) as a multidimensional construct consisting of six distinct facets: (a) a positive attitude toward oneself, (b) satisfying relationships with others, (c) independence and self-determination, (d) a sense of mastery and competence, (e) a sense of goal-directedness in life, and (f) a feeling of personal continued development.

Keyes and Magyar-Moe (2003) note that social well-being represents a primarily public phenomenon, focused on the social tasks adults encounter within their social structures and communities. This perspective builds on Keyes's earlier work, in which he developed five operational dimensions of social well-being: (a) social integration, (b)

social contribution, (c) social coherence, (d) social acceptance, and (e) social actualization (Keyes, 1998). Together, these elements indicate whether, and to what degree, individuals are functioning well within their social world.

Self-determination theory, as outlined by Ryan and Deci (2001), offers another perspective that embraces eudaimonia, or self-realization, as a central component of well-being. The theory seeks to clarify what it means to actualize the self and to identify the conditions under which such self-actualization can be achieved.

According to the holistic approach, well-being is viewed as a multidimensional construct that includes three main dimensions: subjective, psychological, and social well-being. These dimensions represent distinct forms or levels of overall well-being (Negovan, 2010). To assess all of these dimensions in a university student population, Negovan (2010) developed the Psychosocial Well-Being Inventory (PSWBI), which includes four subscales: Psychological Well-Being, Subjective Well-Being Related to Everyday Events, Subjective Well-Being Related to Faculty Events, and Social Well-Being. Negovan (2010) uses the term “psychosocial well-being” to describe a broad array of issues, including mental, emotional, social, physical, economic, cultural, and spiritual health, noting that the concept has consequently been defined in a variety of ways.

In 2008, Diener and Biswas-Diener developed a new measure of well-being, initially called the Psychological Well-Being Scale and later renamed the Flourishing Scale to better reflect its broader content, because the scale includes elements that go beyond narrowly defined psychological well-being and measures what is now understood as psychosocial flourishing. The term “flourishing” appears to be increasingly used to describe the desired state of a person (e.g., Huppert & So, 2013). Seligman (2011) even builds his well-being theory, also known as the PERMA model, around it, arguing that human flourishing is a goal that can be better achieved by increasing experiences of positive emotions, engagement, meaning, positive relationships, and accomplishment. He emphasizes that flourishing goes beyond the mere experience of happiness; it involves a clear sense of life purpose, inner fulfilment, and meaning.

Building on this framework, Butler and Kern (2016) developed the PERMA-Profiler, a brief instrument designed to assess well-being across the five core dimensions of the PERMA model. Their findings showed that the PERMA-Profiler adds to the range of well-being assessment tools by enabling individuals to monitor well-being across multiple psychosocial domains. Expanding further on the concept, VanderWeele (2017) proposed that flourishing encompassed multiple dimensions, including happiness and life satisfaction, physical and mental health, purpose and meaning, moral character and virtues, and high-quality social relationships. In a related study, Diener and colleagues (2018) demonstrated that individuals who regularly experienced positive affect tended to report greater happiness and life satisfaction. However, the experience of happiness is highly individual and shaped by personal values, beliefs, and the surrounding environment.

According to Schaie (2016) and Maddux (2018), true flourishing involves self-acceptance, autonomy, personal growth, positive relationships, a sense of purpose, and environmental mastery. In addition, socio-cultural theories emphasize the importance of external influences, particularly environmental conditions and cultural norms, in shaping

individual well-being (Stone et al., 2013).

Over time, conceptualizations of well-being have evolved from relatively simple formulations toward more complex and integrative models. The hedonic well-being model was developed to include the cognitive evaluation of life satisfaction (Das et al., 2020). Building on this premise, the life satisfaction model proposed by Larwin et al. (2020) incorporates not only situational factors and personality traits but also individuals' perspectives on time – how they reflect on the past, experience the present, and anticipate the future. In contrast, the eudaimonic well-being model emphasizes personal fulfilment and the pursuit of meaning in life.

Sustainable well-being is a fundamental human need (Stasulane, 2017). Lomas et al. (2024) explain the concept of “sustainable well-being” as a near-synonym for “flourishing”, emphasizing the ability to maintain well-being across multiple interconnected systems: (a) within the individual (physical, mental, social, and spiritual dimensions); (b) between the self and others (where both the individual and those around them thrive); (c) between people and the environment (where human well-being aligns with the well-being of nature); and (d) across time (well-being that is sustained in the present and into the future).

In summary, well-being is widely recognized as a complex and multidimensional construct, and researchers have developed several theoretical models to better understand and structure this phenomenon. Over the past several decades, the concept of well-being has evolved considerably. As the field has matured, scholars have acknowledged the difficulty of defining and measuring such a broad construct and proposed more integrative approaches. These developments highlight that well-being depends not only on individual emotions or functioning but also on cultural, environmental, and contextual influences. More recently, scholarship has introduced the idea of “sustainable well-being” that links flourishing to the capacity to maintain well-being across multiple interacting systems, including the individual, social relationships, environmental contexts, and time. This perspective emphasizes that optimal well-being requires alignment between personal growth, community thriving, and ecological sustainability. Altogether, it becomes evident that research on well-being has expanded significantly, from focusing primarily on positive and negative evaluations of one's life to incorporating broader environmental, social, and global contexts. Taken together, these models offer a comprehensive view of well-being, integrating both internal psychological processes and external contextual factors.

Higher Education Students' Well-Being

Research indicates a downward trend in university students' well-being worldwide (Neves & Hilman, 2018; Riva et al., 2020). The documented downturn in university students' well-being has made it increasingly necessary to examine well-being within the context of higher education. In studying students' well-being in higher education, most research relies on the three core dimensions of hedonic, eudaimonic, and social well-being (Barkham et al., 2019; Dodd et al., 2021). Hedonic well-being highlights pleasure,

positive emotions, and overall life, whereas eudaimonic well-being centers on optimal psychological functioning, personal growth, and the pursuit of a meaningful and fulfilling life. Social well-being refers to the quality of one's interpersonal relationships and the experience of belonging within a community. Taken together, hedonic, eudaimonic, and social well-being offer a comprehensive lens for understanding students' well-being, underscoring the importance of positive emotions, effective functioning, and meaningful social connections (Li, 2025; Zhao & Hua, 2025).

When analyzing previous studies on students' well-being and its intercorrelation with other factors relevant to student life, two main research areas emerge: (a) well-being in relation to academic engagement and achievement, and (b) well-being in association with personal psychological resources. Studies examining the links between well-being and academic achievement or engagement largely draw on Self-Determination Theory (SDT) (Deci & Ryan, 2000), which emphasizes the role of autonomy and intrinsic motivation and, therefore, supports teaching methods and higher education practices that foster these elements in the learning process (Neufeld & Malin, 2020).

Universities function as achievement-oriented environments in which academic demands can foster both personal development and psychological strain. Key academic influences on student well-being include workload, performance pressures, evaluation-related stress, levels of academic engagement, and the availability of instructional or institutional support (Li, 2025). Within higher education, SDT proposes that students' well-being is maintained when three fundamental psychological needs – autonomy, competence, and relatedness – are fulfilled when they are given opportunities for choice in their studies, receive supportive feedback that strengthens their sense of competence, and experience a sense of belonging among peers and faculty (Neufeld & Malin, 2020). Conversely, poor students' well-being has been shown to negatively affect academic performance (Geertshuis, 2019). Furthermore, insufficient resilience to protect well-being can diminish students' capacity to learn and fully engage, which may, in turn, hinder their persistence and academic attainment (Turner et al., 2017).

In examining students' well-being in relation to personal psychological resources within the university context, it is appropriate to draw on the concept of psychological capital. Psychological capital, which consists of self-efficacy, hope, optimism, and resilience, functions as a set of interconnected psychological resources that collectively support well-being (Luthans & Avolio, 2014). Research consistently shows that psychological capital is highly relevant in academic settings. Studies indicate that it mediates the influence of positive emotions, academic engagement, and teacher–student relationships on academic performance, while also directly predicting academic success, supporting students' adjustment to university life, and serving as a strong predictor of adaptive coping among university students (Carmona-Halty et al., 2021; Moreno-Montero et al., 2024; Ortega-Maldonado & Salanova, 2018).

Well-Being and Age

It is often concluded that well-being indicators decline with age due to various losses and deteriorations associated with aging (Lacey et al., 2006; Saadeh et al., 2020). However, more recent research suggests that well-being remains stable or even increases up to around age 70 (Biermann et al., 2022; Cheng et al., 2017). Most explanations for this pattern highlight factors such as lowering personal goals, adjusting aspirations to align with reality, and developing gratitude for what one already has rather than focusing on unattainable desires. Additionally, with age, people tend to become more tolerant and forgiving, which positively impacts their emotional state. Based on their life experience, older adults are better equipped to cope with challenging situations and exhibit less severe emotional reactions to adverse life events than younger adults (Beadle & De la Vega, 2019; Chopik et al., 2019). Most cross-sectional studies examining between-person differences in age report a U-shaped relationship, with well-being reaching its lowest point around midlife (Blanchflower et al., 2025; Graham & Ruiz Pozuelo, 2017).

Although multiple personal and contextual factors may influence students' well-being, the present study focuses specifically on age as a key demographic characteristic. Age has been selected as a central socio-demographic variable because, despite its well-documented relevance to well-being in the general population (Blanchflower et al., 2021; 2025), it has not been widely examined in the context of higher education, particularly among students of different age groups. Many existing studies treat university students as a relatively homogeneous age group, assuming that full-time higher education students typically fall within the 17–24 age range (Zhang, 2025; Zhao & Hua, 2025). This assumption overlooks meaningful developmental and life-stage differences that may influence well-being outcomes. Focusing on age, therefore, directly aligns with the research question of this paper, which seeks to address this gap by exploring how well-being may vary among students of different ages in higher education. While other socio-demographic factors (such as gender, socioeconomic status, and family background) can also affect well-being, age has been chosen as the primary variable due to its theoretical significance and its clear underrepresentation in previous research on university student populations.

Contemporary sustainability-oriented higher education emphasizes inclusivity, lifelong learning, and equitable support for diverse learner groups, principles reflected in the growing presence of mature and adult students in many universities (UNESCO, 2023). Age is, therefore, not treated simply as a demographic variable but as a factor that reflects the shifting demands and expectations placed on learners within a sustainable and inclusive higher education system. By exploring well-being across age groups, the study aligns with a broader goal of educational sustainability – to ensure that all learners, not only traditionally aged students, are supported in ways that promote resilience, personal development, and social participation.

The objective of the study is to determine the specifics of well-being in the student sample of Daugavpils University (Latvia) within the context of educational sustainability.

Research questions:

1. What are the overall levels of well-being among university students at Daugavpils University in terms of subjective, psychological, and psychosocial indicators, including life satisfaction, emotional experiences, and flourishing?
2. How do levels of student well-being vary across different age groups?

Materials and Methods

A Case Study

A case study approach has been considered appropriate for the present research because it enables a focused examination of students' well-being within the specific institutional and contextual setting. In this article, the term "case study" refers to an institutional case design, in which one university is examined as a bounded, context-specific setting.

Unlike large-scale quantitative surveys, which often generalize patterns at a macro level, the case study method allows for a holistic understanding of complex phenomena by capturing subjective, psychological, and psychosocial dimensions of well-being in a specific institutional setting. Following Zainal (2007), the case study design is particularly suited to this investigation because it facilitates the integration of multiple well-being indicators: life satisfaction, emotional experiences, and flourishing into a comprehensive framework, while also situating these findings within broader challenges such as economic uncertainty and rapid social change. The study, therefore, uses quantitative data to describe patterns within this specific institutional case. Although case studies often involve qualitative or mixed-method designs, quantitative descriptive analysis is appropriate in this investigation because the aim is to identify patterns of well-being across different age groups within the specific institutional context. This design allows for a clear overview of well-being characteristics within the bounded case of Daugavpils University and provides foundational evidence that can inform future qualitative or mixed-methods research.

Daugavpils University presents a particularly distinctive context for examining higher education students' well-being. Situated on Latvia's eastern frontier, at the external border of the European Union, the university operates within a region shaped by ongoing geopolitical tensions and close proximity to areas of conflict. This location, combined with the city's pronounced linguistic, ethnic, and cultural diversity, creates a learning environment where issues of identity, belonging, and social cohesion are especially salient. At the same time, the university is strongly committed to promoting sustainable education, embedding principles of responsibility, resilience, and social sustainability across its academic and institutional practices. The UNESCO Chair at Daugavpils University, established in 2013, has gradually been recognized as one of the most significant outcomes of the Decade of Education for Sustainable Development. Its creation has introduced internal structural changes that advanced both ESD research and the implementation of ESD initiatives from a broader perspective. Following the establishment of the Chair, efforts have been directed toward developing a platform to

position responsibility for ESD as a strategic objective of the entire university (Salite et al., 2016).

Participants

The study involved 130 students from Daugavpils University, including 14 men, 115 women, and one respondent who preferred not to disclose their gender. The study sample comprised students enrolled in Bachelor's ($n=94$), Master's ($n=33$), and Doctoral programs ($n=3$). Given the substantial imbalance between male and female respondents, as well as the uneven distribution of students across different levels of study, these variables did not provide sufficient group sizes for reliable statistical analysis. Therefore, they were excluded from further analyses.

Nearly half of the participants were aged 18–21 ($n = 51$), followed by 23 respondents in the 26–36 age group, 22 in the 37–45 age group, 18 aged 46 or older, and 16 students between 22 and 25 years old. To enable meaningful statistical comparisons, age categories were constructed to produce more balanced group sizes, as the distribution of respondents across ages was uneven. The cut-offs were, therefore, selected pragmatically to avoid categories with too few participants, ensuring that each group contained a sufficient number of students for analysis.

Due to rapid developments across most professions and the labor market more broadly, individuals of all ages increasingly feel the need to engage in further education – either to stay up-to-date within their existing profession or to retrain for a new career as previously acquired skills become obsolete. For this reason, the authors have chosen to investigate differences in well-being across various age groups within the student population.

Instruments and Measures

Satisfaction with Life Scale (SWLS; Diener, 1984). It is a 5-item scale measuring how satisfied people are with their lives in general. Responses are recorded on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), with higher scores indicating greater life satisfaction.

Flourishing Scale (FS; Diener et al., 2008). It is an 8-item scale designed to assess major aspects of social-psychological functioning from the respondent's own point of view. FS includes several items on social relationships: having supportive and rewarding relationships, contributing to the happiness of others, and being respected by others, an item on having a purposeful and meaningful life, and one on being engaged and interested in one's activities. Finally, the scale includes an item on feeling competent and capable in the activities that are important to the respondent. Responses are recorded on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), with higher scores indicating a greater level of flourishing and psychological well-being.

Scale of Positive and Negative Emotions (SPANE; Diener & Biswas-Diener, 2008) was

designed to assess subjective feelings of well-being and ill-being. This 12-item scale includes six items to assess positive feelings and six items to assess negative feelings. For both the positive and negative items, three of the items are general (e.g., positive, negative) and three per subscale are more specific (e.g., joyful, sad). Each item is rated on a 5-point Likert scale ranging from 1 (very rarely or never) to 5 (very often or always). A balance score (SPANE-B) is calculated by subtracting the negative affect score from the positive affect score, providing an overall indicator of emotional well-being.

The University Student Psychosocial Well-being Inventory (PSWBI; Negovan, 2010) is a 17-item scale with 4 subscales measuring different aspects of psychosocial functioning. The first subscale is subjective well-being related to everyday events (SWB). It measures students' evaluations of their satisfaction with life, happiness and interest in general (3 items). The second subscale is subjective well-being related to the faculty events (SWBF). It measures students' evaluations of their satisfaction with life, happiness and interest for the university (3 items). Next subscale is university student psychological well-being (USPWB), which reflects the six dimensions of psychological well-being, as identified by Ryff (1989). These comprise self-acceptance, positive relationships with other people, autonomy, environmental mastery, purpose in life, and personal growth. Two of the five items of social well-being identified by Keyes (1998) include social integration and social contribution (8 items). The fourth subscale is university student social well-being (USSoWB) that contains three items reflecting the three out of five dimensions of social well-being, as identified by Keyes (1998): a) social acceptance; b) social actualization; c) social coherence (3 items). The students were asked to indicate how often they experienced the feelings described in the statements over the past month, using a scale from 1 (never) to 5 (every day). Higher scores reflect enhanced psychosocial well-being. In further analyses, the authors distinguished between subjective well-being related to faculty events and overall subjective well-being, the latter encompassing both everyday experiences and faculty-related aspects.

Socio-demographic Questionnaire. Demographic and background variables such as gender, age, and level of education were recorded. However, for the purposes of this paper, only the age variable is analyzed.

Procedure

Data Collection

The study protocol, including its methodology and procedures, was prospectively approved in December 2024 by the Ethics Committee of Daugavpils University. Students voluntarily agreed to participate after being informed about the goal of the study and the intended use of the data. All data were collected anonymously, and participants were informed that they could withdraw from the study at any time. Data collection was conducted from March to May using Google Forms. An invitation with a brief description of the goal of the study was sent to all students of Daugavpils University. Participation in the study was voluntary. A total of 198 students participated in the survey; however, only 130 responses were complete and met the inclusion criteria for analysis. Incomplete questionnaires and cases with missing key variables were excluded

to ensure the reliability and validity of the results. The final sample, therefore, reflects those participants who provided full and usable data for the study. For context, the overall student number at Daugavpils University in the 2024/2025 academic year was 2607 students.

Data Analysis

Initially, the data collected via Google Forms were exported to an Excel spreadsheet and checked for accuracy. Subsequently, the data were imported into the Statistical Package for the Social Sciences (IBM SPSS, version 23.0) for analysis. To assess the internal consistency reliability of the scale, Cronbach’s alpha was calculated. Descriptive statistical analyses were then performed, followed by inferential statistical analysis using the Kruskal–Wallis test to examine differences in students’ well-being measures across age groups.

Results

To ensure the reliability of the instruments utilized in this study, internal consistency was assessed using Cronbach’s alpha coefficients. As shown in Table 1, all scales demonstrated acceptable to excellent reliability, with α values ranging from .703 to .909, indicating that the measures employed were suitable for assessing different dimensions of students’ well-being.

Table 1
Cronbach’s Alpha Coefficients for Scales Used in the Study

Scales	Number of items	Cronbach’s α
Satisfaction with Life	5	.897
Flourishing	8	.909
Positive Emotional Experience	6	.806
Negative Emotional Experience	6	.739
Emotional Experience Balance	12	.703
<i>University Student Psychosocial Well-Being Inventory (USPSWBI)</i>		
University Student Psychological Well-Being	8	.803
Subjective Well-Being (Overall)	3	.704
Subjective Well-Being Related to the Faculty Events	3	.829
University Student Social Well-Being	3	.823

Table 2 summarizes the descriptive statistics of well-being indicators among the students involved in the study.

Table 2
Descriptive Statistics for Well-Being Measures

Measures of well-being	Mean	SD
Satisfaction with Life (level)	4.04	1.157
Flourishing (level)	4.96	1.046
Positive Emotional Experience (sum)	19.96	3.666
Negative Emotional Experience (sum)	14.90	3.393
Emotional Experience Balance (sum)	5.06	6.235
University Student Psychological Well-Being (sum)	18.51	4.270
Subjective Well-Being (overall) (sum)	19.43	3.980
Subjective Well-Being Related to the Faculty Events (sum)	9.40	2.56
University Student Social Well-Being	14.23	3.884

Analysis of students' scores on the Satisfaction with Life Scale indicates that they fall within the range of slight satisfaction, given that the maximum score is 7 and the minimum is 1. This suggests that, while students are generally satisfied with their lives, they also perceive areas requiring improvement. For some, this reflects moderate dissatisfaction across several domains, whereas for others it may be driven by stronger concerns in one or two specific areas. Students' scores on the Flourishing Scale, which consists of eight items assessing key aspects of human functioning such as positive relationships, perceived competence, and a sense of meaning and purpose in life, were also at an average level. Students reported experiencing more positive than negative emotions, resulting in a generally favorable emotional balance. However, the high standard deviation indicates considerable variation among students. Measures of psychosocial well-being of the student sample show a high level of satisfaction only in overall subjective well-being, while other three subscales show moderate levels of well-being.

The Kruskal–Wallis test was conducted to examine differences in various psychosocial well-being measures across students' age groups (see Table 3).

Table 3

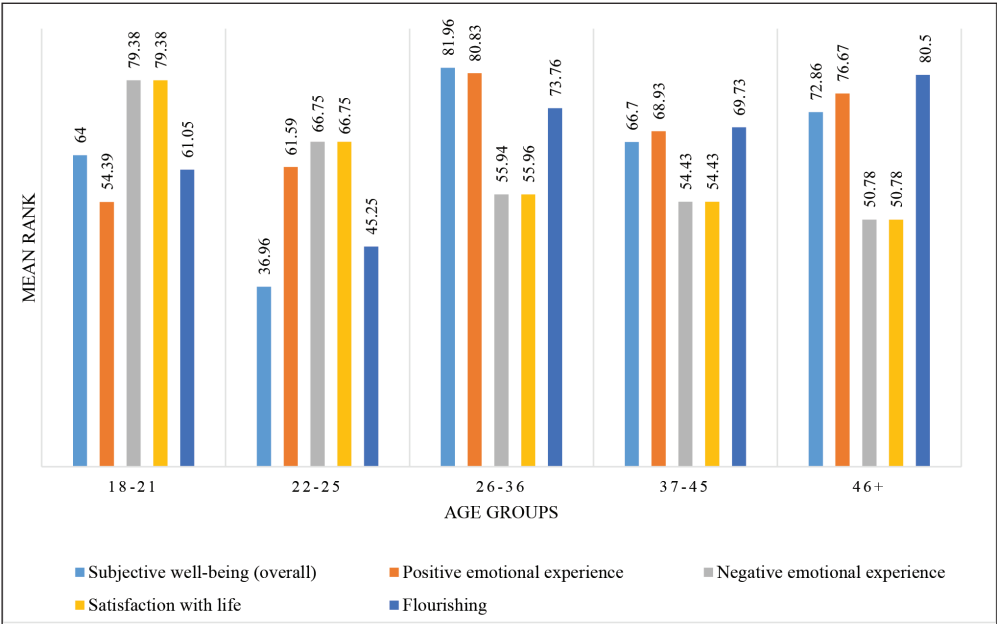
Kruskal–Wallis Test Results for Age Group Differences in Well-Being Measures

Variable	Test Statistic (H)	p-value
University student social well-being	5.446	0.244
University student psychological well-being	5.332	0.255
Subjective well-being related to faculty events	8.661	0.070
Subjective well-being (overall)	15.079	0.005

Variable	Test Statistic (H)	p-value
Positive emotional experience	10.274	0.036
Negative emotional experience	13.250	0.010
Satisfaction with life	13.558	0.009
Flourishing	9.609	0.048

A significant difference was found in subjective well-being (overall), positive emotions experience, negative emotions experience, satisfaction with life and flourishing indicating that these variables varied significantly across age groups. Figure 1 summarizes the mean ranks of these variables across age groups providing detailed information on these differences.

Figure 1
Mean Ranks for Variables Across Age Groups



Participants aged 26–36 years had the highest mean rank of subjective well-being (Mean Rank = 81.96), followed by those aged 46 and older (Mean Rank = 72.86) and

37–45 years (Mean Rank = 66.70). The 18–21-year group reported a lower level (Mean Rank = 64.00), while the 22–25-year group had the lowest mean rank (Mean Rank = 36.69). These results suggest that subjective well-being tends to increase with age, with a notable drop in the 22–25-year group. The data show an inverse relationship between positive and negative emotions across age groups. Younger students (18–21) report the lowest positive emotions and the highest negative emotions, indicating greater emotional distress in early adulthood. As age increases, positive emotions rise while negative emotions decline, with the 26–36 and 46+ groups showing the most favorable emotional profiles. However, satisfaction with life was highest among students aged 18–21 and showed a declining trend with increasing age, whereas flourishing generally increased across age groups, with some fluctuations observed.

Discussion and Conclusions

In response to the first research question on the overall levels of well-being among university students at Daugavpils University, which covered subjective, psychological, and psychosocial indicators including life satisfaction, emotional experiences, and flourishing, the findings indicate that students generally demonstrate moderate levels of well-being. Concerning the second research question on age-related differences, the results show that well-being varies across age groups, with some exceptions. Findings from this research align with those of the Global Flourishing Study (VanderWeele et al., 2025), which included 22 geographically and culturally diverse countries and found that flourishing remains essentially stable between ages 18 and 49, then increases thereafter. This pattern contrasts sharply with earlier research – primarily focused on life satisfaction – that suggested a more pronounced U-shaped relationship with age. Even life satisfaction according to the Global Flourishing Study is now more J-shaped than U-shaped.

The objective of the study has been to determine the specifics of well-being in the student sample of Daugavpils University (Latvia) within the context of educational sustainability. ESD seeks to equip students with the skills, values, and attitudes necessary for critical thinking, conflict resolution, global citizenship, and ecological responsibility, all of which are essential for ensuring a sustainable future for society (Salite et al., 2021). However, previous research on well-being indicates that low life satisfaction is positively correlated with social factors such as limited problem-solving and resilience, negative peer relationships, and experiences of victimization (Gál et al., 2021).

With the global focus on the SDGs, particularly SDG 3, major academic ranking systems, such as the Times Higher Education Impact Rankings, highlight the importance of “Good Health and Well-being”. This development emphasizes the need for higher education institutions to implement comprehensive systems for monitoring students’ well-being, enabling timely interventions and preparing graduates to navigate contemporary challenges as responsible global citizens (Khatri et al., 2024). Individuals who report higher life satisfaction are typically better integrated into society and demonstrate greater productivity (Avcu, 2021). Overall, the findings suggest that higher education institutions can play a more significant role in promoting students’ well-being, highlighting the need to better balance academic learning and emotional well-being.

Limitations

Since the Latvian student sample has been drawn from a single university, the findings cannot be generalized to the broader student population of Latvia. Further research involving a larger and more diverse sample is necessary to improve generalizability. Nevertheless, the results offer valuable insights for future efforts to develop and adapt reliable instruments for measuring and understanding the well-being of university students and the wider population.

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