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Assessment of Student Quality of Life in Relation to University Campus

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Abstract: Background: There exists a scarcity of comprehensive studies on educational campuses, which integrate the effects of built environment satisfaction, university life experiences, and personal characteristics on QoL. The study's main research problem is to investigate the extent, direction, and sequence of the influence of university life satisfaction (encompassing academic, social, and administrative perception)—as well as the university's built environment of university (including both indoor and outdoor attributes of educational, social, recreational, and residential settings), in conjunction with student characteristics—on students' QoL and the interactions among these factors. **Aim**: The main objective is to comprehensively analyze the impact and dominance of the built environment and various dimensions of university life, in addition to personal variables on student QoL, and explore the interaction between them. The sub-aims are to determine the dimensions that have the greatest effect on QoL and to make comparisons between them. **Methodology**: In line with the aim, a specific index for measuring student QoL on a university campus was developed, and a survey was conducted using a questionnaire developed based on the index. The case study is made in Bursa Uludag University, one of the oldest universities in Bursa, Turkey, which is known for being included in the UNESCO World Heritage List. Data were recorded and analyzed by utilizing statistical analyses via SPSS (statistical package for social sciences) for Windows 22 and IBM AMOS 24.0 programs. **Results**: The data collected from the evaluation of questionnaires administered to 685 participants reveal that the sub-dimensions with the most-to-least impact on students' QoL are satisfaction with campus life, education spaces, academic development, socio-physical amenities, social perception, administrative management, accessibility, transportation, and accommodation. **Conclusions**: QoL is a multidimensional judgment through which university students' QOL perceptions are affected through the interaction between the university's built environment, university life, individual characteristics, as well as administrative management.

Keywords: quality of life; university campus; built environment; university life; educational space; spatial quality; environmental quality; student QoL

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1. Introduction

The concept of quality of life (QoL) refers to the assessment made by individuals regarding the various opportunities available to them during a specific timeframe. This assessment is influenced by physical and psychological well-being, social connections, and an individual's interaction with their immediate surroundings [1]. QoL refers to how individuals view and assess their overall life circumstances, considering their aspirations, ambitions, standards of living, cultural context, and personal values [2]. In this particular context, QoL is a complex and multi-dimensional structure encompassing various components as a direct appraisal of human life [3–5]. It is linked to happiness, aging well, well-being, and health, and it is considered to be a topic of study that involves multiple disciplines [6,7]. QoL, a concept that has a singular definition, is intricately connected to overall satisfaction. This encompasses the overall livability of the environment, the usefulness of life within that environment, the ability of an individual to lead a fulfilling life, and

the level of appreciation for life itself [4]. Various studies have identified several factors that influence an individual's well-being and QoL, including physical and psychological health, any disabilities or diseases they may have, the reasons behind the changes in their health status, the socio-physical environment they live in, and their lifestyle choices [8–13]. The studies on defining QoL and determining indicators also focus on the ideas of welfare and life satisfaction [1,4]. QoL is a comprehensive evaluation of an individual's entire state of well-being and satisfaction across several aspects of life, including physical and mental health, social connections, financial situations, and the surrounding environment. In recent times, there has been an interaction of developments in QOL theory and concept, with an emphasis on contextual variables, person-centered support, and community rights [13]

Due to its multidimensionality, the definition of QoL is subject to variation among various disciplines in terms of terminology and measurements. Within this paradigm, the notion has been linked to domains like physical and psychological health, economic prosperity, pleasure with life, and environmental conditions [14–16]. While health is crucial, mobility, social relations, environment, spirituality, religion, and personal beliefs are important determinants of QoL. It is also influenced by relationships with family and friends, emotional well-being, work and productive activities, material well-being, being part of a local community, personal safety, and environmental quality.

The built environment is one of the key elements that significantly influences people's QoL. Research on the relationship between QoL and the environment can be conducted using either a multidisciplinary approach [3] or by examining various aspects of the environment [14,17,18]. The design, functionality, efficiency, and aesthetics of the built environment significantly impact human well-being, social interactions, and overall happiness. The research on QoL in the built environment encompasses the influence of socio-cultural and built factors on QoL, the correlation between QoL and health, satisfaction with spaces, houses, and neighborhoods, the quality of housing and neighborhoods, daily living environment, urban QoL, office buildings, educational buildings, and environmental quality [19–24] According to research, the factors that shape the human QoL related to the environment are the following: individual variables [14,17,25,26], the characteristics of daily and urban environment [14,15,18], the characteristics and upkeep of the green-recreational areas, social facilities and accessibility [17,18,27], access to public/urban services [17,19,27–29], attachment and sense of belonging [14,30,31], local administration [27,28], social relations, culture and environment [14,15,18,19,27], security [14,19,27,32], the economic characteristics of the region [18,19], comfort [19], and the user satisfaction/perception of these factors [14,15,19,25,32].

QoL is influenced by the perception of the physical and social environment, as well as physical, intellectual, and psychological health status [12,33]. Social, economic, and environmental aspects are in interaction with QoL assessment in relation to coping behavior [34]. Places with a high QoL are those where individuals can establish a sense of connection, belonging, and identity and where they can form memories [35]. A sense of belonging is essential for QoL. The varying scales of the built environment can influence QoL assessments by positively impacting the socio-cultural context, while they can also negatively affect factors relating to the indoor environment [19,36]. The built environment can also enhance QoL and well-being by supporting control and multi-sensory experience [37].

Research on QoL has been undertaken, as can be found in the literature, focusing on topics such as housing, residential areas, urban environment, human ecology, environmental quality, neighborhood quality, urban QoL, urban evolution, and different environmental scales [14,15,17,18,25,32,38,39]. Furthermore, some of the research on educational buildings focuses on issues such as indoor environmental quality, building performance, classroom layout, and environment, while others focus on issues such as the correlation between health and spatial characteristics, well-being, and comfort [40–47]. There is some research on quality of life (QoL) in educational buildings, which focuses on general perceptions of QoL, health, and life satisfaction or examines various aspects of the built environment. However, comprehensive QoL studies are scarce in educational campuses, which evaluate

the concept, considering the interaction between built environment satisfaction, university life, personal characteristics, and perceptions of administration. Nonetheless, there is insufficient research that particularly investigates how university campuses' physical infrastructure and environment influence students' QoL in interaction. The QoL may vary based on geographical location, changing socio-physical settings, campus architecture, administrative mechanisms governing these factors, and students' lifestyles. In this context, QoL research conducted on campuses with varying geographical and socio-demographic variables, physical environments, and policies will retain their uniqueness due to the influence of evolving circumstances and time. Concurrently, the study examines Bursa Uludag University, the oldest university in Bursa, one of Turkey's major cities, where no such research of this scope has occurred before. Although research on QoL in educational buildings focuses on health and life satisfaction or perceptions of the built environment, there exists a deficiency in comprehensive studies that integrate the effects of built environment satisfaction, university life experiences, and personal characteristics, including perceptions of administrative support on QoL. This research aims to address the gap by investigating how the environment of and life on university campuses influence students' overall QoL, while considering personal variables based on these multi-faceted factors through a conceptual model. The primary research problem of the study is to investigate the extent, direction, and sequence of the influence of university life satisfaction (encompassing perceptions of academic and social experiences, alongside administrative policies)—as well as the university's built environment (including both indoor and outdoor attributes of educational, social, recreational, and residential settings) in conjunction with student characteristics—on students' QoL and the interactions among these factors. The case area is Bursa Uludag University, which is one of the oldest universities in Turkey. Bursa is recognized as one of the cities included in the UNESCO World Heritage List. Bursa Uludag University (BUU), a research university, is one of the leading universities in Turkey. It is located in Görükle Campus and recently celebrated its 50th anniversary.

The physical infrastructure of a university campus, including educational, administrative, and recreational spaces as well as open spaces, plays a vital role in influencing the overall satisfaction of university students. Based on this framework, the main research questions can be stated as follows: "How do the built environment of the university and students' satisfaction with life on the university campus, together with their personal characteristics and perception of the university, affect students' QoL, and how do they interact with each other? What is the extent, direction, and order of the impacts of these dimensions on QoL?"

The emerging research questions can be listed as follows:

- What is the influence of the university's built environment and students' satisfaction with campus life on QoL, given students' personal characteristics, and how do these factors interrelate?
- What is the influence of the indoor and outdoor areas of the university campus on student QoL? Which spaces have a more significant impact on QoL, and how does satisfaction with these spaces correlate with each other, as well as with academic achievement and social life?
- What is the extent and orientation of the influence of education spaces on academic progress, contentment with campus life, perception of administrative management, and QoL?
- What impact do social and recreational facilities on the university campus have on students' satisfaction with their social life, academic growth, and general perception of QoL?
- How does the quality of the housing environment affect the satisfaction, social life, and QoL of the students?
- What factors influence students' perception of academic achievement and administrative management, and how do they affect QoL?

This study aims to comprehensively analyze the impact of the built environment from a micro to macro scale (including classroom spaces, education buildings, recreational facilities, indoor and outdoor spaces for social activities, green areas, housing facilities, and transportation) and university life (including academic, social, and administrative perception) by incorporating personal variables on QoL of students. The sub-aims can be mentioned so as to determine the dimensions that have the greatest effect on QoL and make comparisons among these dimensions as well as analyze the relationship between campus life and campus environment. The findings would provide valuable insights that can be used to analyze the effect of the built environment on student life and to promote academic performance, student satisfaction, and overall QoL by guiding improvements in university campus architecture and facilities management. The study's objective will be achieved by surveying students through a specific QoL index developed, which is intended for university students.

Based on the research questions and aim, the literature focusing on QoL measurement in campus spaces and the literature focusing on satisfaction with the built environment of university campuses is investigated in Section 2. It is determined that research in universities either focuses on life satisfaction and overall QoL, health, and personal characteristics or focuses mainly on satisfaction with built environment parameters such as university facilities (housing, dining areas), green and recreational areas, and classroom space. It can be stated that there is a deficiency of research combining the built environment from the micro-scale to the macro-scale with satisfaction with different aspects of university life, including personal characteristics. Based on a conceptual model, this research aims to contribute to the literature by addressing this gap by examining how the campus environment, along with personal variables and different dimensions of university life, influence students' overall QoL.

2. Literature Review Regarding Life Satisfaction, Health and Built Environment Satisfaction in University Campuses

The environment plays a crucial role in influencing an individual's life. Multiple factors, including the socio-physical environment, environmental policies, natural and built environment, safety, lifestyle, housing space and environment, access to public services, and environmental adaptation, shape the relationship between the environment and QoL. The satisfaction level with each of these components also contributes to this interaction and the overall QoL [3,14,28,34]. Therefore, individuals' personal assessment of their QoL is influenced by their everyday experiences and their assessment of their surroundings [3,14,28].

University campuses are an important environmental scale that constitutes a special and long phase of life for the QoL of students, where most of the time is spent during university life. The impact of university campuses on QoL is determined by various factors, including satisfaction with the physical and built environment, availability of physical and socio-cultural facilities, quality of social relationships, efficiency of administrative staff and processes, overall university experience, and feelings of belonging and safety. Since this research focuses on both the impact of university life satisfaction and indoor and outdoor spaces of university campuses on students' QoL, the scope of the literature review proceeds as follows: (i) Research on a holistic approach to the QoL perception of university students; (ii) The impact of university facilities on QoL; (iii) The satisfaction with natural and built environment of university campuses; (iv) Spatial attributes of classrooms and effects of these on learning, academic performance and satisfaction of students (Table 1).

2.1. Overall QoL and Healthy Life at University

Firstly, in this context, research on the relationship regarding overall QoL perception might be approached by examining health, personal characteristics, or specific aspects of university life. One of the researchers that addresses the QoL of students holistically investigates satisfaction with academic and social life and overall Qo. As a result of the study, it is observed that satisfaction with university life is related to satisfaction with

academic and social aspects on campus. However, it is concluded that satisfaction with academic and social aspects is related to satisfaction with the facilities and services of a university [48]. According to Martin [49], exploring the order of importance of life dimensions in addressing QoL and its interaction with the environment is important. In this framework, models and scales are developed or accepted and used as methods in most studies. The model by Sirgy et al. [48], which is one of the most comprehensive models produced to investigate the quality of student life at university, covers different dimensions such as education, campus facilities, and recreational and social activities, and it contributes to the determination of the questions and methodology of our research. Also, the research by Dodd. et al. [45] contributed to our research, evaluating student priorities and university characteristics that affect student well-being and QoL. These include a supportive academic environment, social interactions, and networks, financial independence, health services, academic and personal life, as well as physical surroundings.

Rodrigues et al. [50] developed a multi-dimensional model to assess and enhance the QoL on university campuses that can serve as a decision-support tool in campus planning and management. The study highlights the need to consider the university campus as an urban area and concludes that the safety dimension is a significant variable in the perception of the QoL on the university campus. Hajrasouliha, as an opposing view on the treatment of university campuses as an urban space, states that the campus cannot be seen as a city and that the campus should be considered as an expansive structure including campus design, environmental sustainability, and residential facilities [51].

Ramon-Arbues et al. [52] conducted a comprehensive study examining Spanish university students' QoL and identifying the elements that influence their QoL. The researchers gathered data from 868 university students using the WHOQOL-BREF QoL scale, along with self-esteem, physical activity, healthy eating, alcohol intake, and sleeping indexes established by the authors. The study found that academic achievement satisfaction, sleep quality, and a healthy diet affect participants' QoL, body mass index, and age [52]. In another study, it was determined that personal standards, general health, optimism, a positive attitude, and life satisfaction are significant predictors of students' QOL [53].

2.2. Satisfaction with Food-Beverage Areas and Residence Life on University Campus

Botha et al. [54] examine the factors that influence the satisfaction of university students with on-campus residence life in South Africa. The results indicate that factors such as the type of housing, the quality of the residential environment, drug and alcohol problems, and the safety of the campus and residence all substantially impact student satisfaction. Although no significant disparities were observed among racial and gender groups, the pleasure, calmness, and cleanness of the residential setting contribute to heightened satisfaction with housing-life. Also, the safe walking on campus and the safety of the residence rooms are the factors increasing satisfaction [54]. Noh et al. specifically examined campus food and beverage facilities and analyzed the elements influencing satisfaction. According to the results, location and price are considered to be the most important factors for satisfaction with food and beverage facilities at the university campus, followed by price, service quality, and ambiance [55].

2.3. Effect of Personal Characteristics on Life Satisfaction

Several areas of research examining the correlation between personality characteristics and QoL have found that socioeconomic status and age are linked to satisfaction and the overall QoL. Students with higher socio-economic status have a greater grade point average and higher success in academic life, including self-esteem, social interactions, and living conditions. Consequently, these factors contribute to overall life satisfaction among university students [56]. Age is another factor that can affect life satisfaction among university students, suggesting that maturity and life experiences in older ages can contribute to an increase in life satisfaction [57]. Furthermore, relationships and social

connectivity reduce the impact of stress on the QoL of university students and yield positive effects on QoL [58].

2.4. Research Regarding Effects of Green Areas and Recreational Facilities on Health and Life Satisfaction

Research on the built environment satisfaction on campuses differs in aspects such as open areas, learning environment, indoor comfort, transportation, and environmental conditions. Research on green areas indicates that green spaces significantly influence health, QoL, and academic achievement [51,59–62]. The impact of green spaces on health is influenced by factors such as their size, appeal to diverse persons, safety, and aesthetic aspects [63]. Research on varying sizes and locations of green spaces reveals that their utilization patterns vary across different settings [64]. It is possible to consider that this refers to the university campus. An urban study in England indicates that participants who visit nature frequently experience increased happiness. Regularly engaging oneself in the natural environment is a fundamental element of life that enhances overall well-being, surpassing the impact of other life components. Connecting with nature is crucial for individuals to uphold their overall well-being [65]. Human beings need to connect to nature, which is a significant component of a healthy, happy, and productive life [66]. As adults, using green spaces in close proximity can improve health-related QoL of children between 0–12 ages [67]. There is also evidence of the good benefits of green spaces on mental health [68]. Green areas significantly impact health by promoting physical activity, reducing obesity, and discouraging smoking and alcohol consumption. Physical activity in natural environments is associated with a lower risk of poor mental health than indoor physical activity. Also, there is a correlation between the frequency of open space use and decreased mental disorder risks [69].

Based on the research on green spaces, the presence of indoor and outdoor sports areas on the university campus can be considered as a supportive factor for student satisfaction. In his study, Hajrasouliha [51] states that the physical qualities of campuses have a meaningful impact on student life. Research indicates that campuses that are well-designed, including green spaces and recreational facilities, have a favorable impact on students' academic achievements, mental well-being, and overall university experience. In a different study, it was similarly found that user perception of university campuses is related to the functional and visual quality of green spaces. The behavior and pleasure of students are influenced by campus accessibility, landscape furniture, and the spatial organization of the campus. The visual quality of a location, such as cleanliness, comfort, atmosphere, entertainment options, landscape design, and security, also has a direct impact on the senses and perception of the overall environment [70]. Ellis et al. [61] studied health and campus recreation services in relation to six health and QoL indicators. The study demonstrates a correlation between health, QoL, and satisfaction with university. Another research conducted in the United States reveals that students who express that their campuses have abundant and rejuvenating green spaces experience a higher QoL [60]. Participating in campus green space activities, such as walking or exercising, is connected to improved mood, enhanced QoL, and reduced perceived stress among students [59]. University students who frequently utilize green spaces experience a higher QoL. These spaces significantly enhance the overall pleasure and well-being of students who utilize them often [62].

2.5. QoL Regarding Transportation

Some research in Bangkok discusses the spatial effects of the built environment through GIS (geographical information systems), deep learning (OCRNet), and face-to-face interviews on user QoL related to transportation. In the research that used QoL-related transportation indicators, built environments related to transportation systems such as bicycle paths, bus stops, elevated train stations, ease of access to stops, utilities, road spaces, traffic lights, and signs are found to affect the environment and transportation-related QoL [71].

2.6. Parameters Affecting Satisfaction with Built Environment in University

The impact of spatial characteristics on academic life and university life is another prominent result in the literature related to the campus's built environment. Hamad [72] examines the impact of the built environment on female students' academic QoL in Saudi Arabia. In the study, the interaction of the built environment with QoL within the scope of academic self-management, self-efficacy, affilation, and communication is discussed. According to the results, built environment satisfaction affects the quality of academic life, and the inefficient indoor aspects of the built environment on the campus negatively affect female students' perception of where females study in separate sections.

Kim et al. [73] discussed the issue by surveying to examine the space choices of university campus students. The study associates the activities of students with their choices and rejections of spaces. The study in Hong Kong with 330 students emphasizes that for students' satisfaction, environmental performance, user capacity, locational accessibility, and equipment condition are important. The significance of this is also evident in a study conducted in Istanbul, Turkey, indicating that students' satisfaction with their experiences is adversely affected by high levels of dissatisfaction with the university environment [74].

2.7. Satisfaction and Academic Performance Regarding Classroom Spaces

One of the studies within the scope of a learning environment deals with the effects of classroom comfort conditions in terms of learning and student performance. The study analyzed the data of undergraduate students in the learning process, which evaluated the comfort conditions of light, sound, and temperature. The study revealed that uncomfortable environments obstructed listening performance and temperature and distorted sound from detrimental room acoustics affected the performance significantly [75]. In a different study observing the multidimensional impact of space on student performance, it was seen that students' cognitive, affective, and behavioral processes and academic development interacted with the space. In addition, environmental organizations supporting active learning instead of traditional were found to be supportive of student outcomes and engagement [76]. In another study, six spatial dimensions, such as aesthetics, spatial factors, light, noise, color, and temperature, were examined. According to the results, well-designed, visually appealing settings with enough space and arrangement encourage focus and learning. In addition, natural lighting, low noise levels in spaces with better acoustics, psychological effects of colors, and appropriate temperatures affect students' concentration, academic achievement, and well-being [77].

According to the literature review, certain studies on university campuses examine the perception of QoL, life satisfaction, and health in relation to personal characteristics. In contrast, others investigate recreational facilities, built environment satisfaction, or spatial parameters influencing learning. Additionally, certain research investigates the effect of green spaces on health (Table 1). Nonetheless, social life, sense of belonging, administrative policies, and students' perceptions of these factors impact the QoL, yet there is a deficiency in comprehensive studies assessing the effects and predominance of the built environment with these parameters on the QoL in an inclusive manner. The study seeks to address the existing gap in the literature by examining the influence of various dimensions regarding students' lives in the university and the university's built environment on student QoL in a multi-faceted and interactive manner through the conceptual model developed. These dimensions include the following: (i) Different scales of the built environment; (ii) University life, including perceptions regarding academic development, social perception, and administrational processes; (iii) Students' personal characteristics.

Table 1. Research addressing life satisfaction, health, and built environment in university campuses.

Area of Focus	Author	Aim/Focus	Methodology	Findings
Overall QoL and healthy life at university	**Sirgy et al. 2007** [45,48]	To investigate satisfaction with academic and social life, university facilities, and overall QoL	Survey of students using the developed QoL model, which assessed their satisfaction with various aspects of college life (such as social, academic, and service satisfaction) in the US.	Satisfaction with college life is related to satisfaction with academic and social aspects on campus, which emerges as related to satisfaction with the facilities and services of college.
	Dodd et al. 2024 [45]	To explore the priorities of students and how different components of the university campus (physical, social, and academic) contribute to the overall QoL of students	Survey of students through a conceptual model that integrates different components of the university environment (physical, social, and academic) and their impact on student well-being.	A supportive university environment, with high-quality physical spaces, strong social networks, and effective academic support, as well as financial independence, enhances students' QoL.
	Rodrigues et al. 2009 [50]	To develop a model to assess university campus life quality and to help university management analyze and improve public spaces, facilities, and structure of campuses.	To propose a multi-dimensional analysis of campus QoL from user opinions. A model is developed to evaluate future campus interventions. A web-based system monitored the QoL at the university in Portugal.	The system demonstrated its utility as a decision-making tool by allowing campus managers to compare the effects of different planning scenarios on QoL dimensions. Safety is emphasized as a significant variable in the perception of QoL.
	Ramón-Arbués et al. 2022 [52]	To evaluate the QoL of a group of Spanish university students and investigate the sociodemographic, behavioral, and academic factors that impact their QoL	Survey with 868 Spanish students using the WHOQOL-BREF questionnaire, as well as self-esteem (Rosenberg Self-Esteem Scale), physical activity (International Physical Activity Questionnaire), diet (Spanish Index of Healthy Eating), alcohol consumption (CAGE questionnaire), and sleep quality (Pittsburgh Sleep Quality Index)	Personal variables such as body mass index and age, as well as satisfaction with academic performance, sleep quality, and a healthy diet, substantially impact the QoL. Also, students who are younger and have better academic performance have enhanced QoL.
	Tavakoly et al. 2021 [53]	To examine how subjective norms, general health, optimism, and attitude affect life satisfaction and QoL in university students.	A questionnaire was applied to students in five universities in Iran	Subjective norms, general health, optimism, and attitude significantly predict students' QoL. General health and life satisfaction showed the strongest association with QOL.

Table 1. *Cont.*

Area of Focus	Author	Aim/Focus	Methodology	Findings
Effect of personal characteristics on life satisfaction	**Chow, 2005** [56]	To examine the life satisfaction of university students	A questionnaire survey was conducted with 315 university students exploring social relationships, academic experience, and socio-economic status	Life satisfaction included higher socio-economic status, better academic performance, self-esteem, and good relationships with family and significant persons. Additionally, satisfaction with their living environment and living conditions also contributed to higher levels of life satisfaction.
	Hong and Giannakopoulos, 1994 [57]	To examine differences in life satisfaction based on age, sex, and university status	Satisfaction With Life Scale developed by Diener et al. (1985) was administered to participants.	No significant differences in life satisfaction were detected by sex or university status. However, life satisfaction was higher in 30–40-year-olds. Age, sex, and university status did not interact significantly. The findings indicate that maturity and age affect life satisfaction more than sex or academic rank.
	Al-Shaer et al. 2024 [58]	To investigate how religiosity and social connectedness influence the mental health and overall QoL of university students with disabilities	Surveys measuring religiosity, levels of social connectedness, mental health (using standardized mental health scales), and QoL (using the WHOQOL-BREF scale) were administered to students with disabilities at various universities.	Religion and social connection significantly decreased the mental health and QoL impacts of disability. Religious and socially connected students had superior mental health and QoL scores. Religion provided emotional resilience, whereas social connectedness reduced loneliness, improving mental health.
Satisfaction with on-campus residence life	**Botha et al. 2015** [54]	To identify the determinants of student satisfaction with their campus residence life and to assess how these factors contribute to overall student well-being and academic success.	The 2011 Quality of Residence Life (QoRL) Survey was utilized with approximately respondents at a South African university. The characteristics of the residential environment, drugs and alcohol, safety, and individual characteristics are addressed.	Housing type, residential environment quality, drug and alcohol problems, and campus and residence safety all affect student satisfaction. The pleasure and peacefulness of the home environment, along with its well-maintained and clean surroundings, increase housing-life happiness, even if no significant differences were found by race or gender. Safe campus walks and safe residence rooms increase residence-life satisfaction.

Table 1. *Cont.*

Area of Focus	Author	Aim/Focus	Methodology	Findings
Satisfaction with food—beverage	**Noh et al. 2023** [55]	To investigate the key factors influencing student satisfaction with food services	A survey was distributed to students at the UiTM Puncak Alam campus in Malaysia. The survey was based on the DINESERV instrument, which evaluates multiple service quality dimensions such as food quality, service quality, ambiance, and price.	Convenience of location is the most important factor affecting satisfaction with food and beverage facilities, followed by price, service quality, and ambiance.
Effects of green areas on health	**Giles-Corti and Donovan, 2002** [63]	To examine the relative influence of individual, social, and physical environmental factors on recreational physical activity, assessing the importance of recreational facilities.	A community survey was conducted to assess individual (e.g., motivation, demographic factors), social (e.g., social support), and physical environmental (e.g., access to recreational facilities) determinants of physical activity in Australia.	Individual and social environmental factors were the strongest predictors of physical activity with the physical environment. The impact of green spaces on health is influenced by factors such as their size, appeal to diverse persons, safety, and aesthetic aspects. The findings suggest that strategies to promote physical activity should address not only environmental access but also individual motivation and social support systems
	Lachowycz and Jones, 2013 [64]	To clarify the mediators and moderators involved in the relationship between greenspace and health, such as physical activity and psychological well-being, while addressing gaps in the existing literature	By reviewing existing empirical studies on the effects of green space exposure, drawing on social-ecological theories to identify potential mediators (use of greenspace, perceptions of the living environment) and moderators (gender, socio-economic status, greenspace type), a conceptual framework is proposed.	Mediators like the use of greenspace and perceptions of the environment drive the association between greenspace and both physical and psychological health. Moderators such as socio-economic factors, greenspace type, and living context can influence the strength of these relationships.

Table 1. *Cont.*

Area of Focus	Author	Aim/Focus	Methodology	Findings
Effects of green areas on health	**White et al. 2017** [65]	To examine the impact of the quality and proximity of green spaces on people's frequency of visits and their well-being	A nationally representative survey of urban and peri-urban residents in England was conduced. The study assessed three types of exposure to natural environments: neighborhood exposure, frequency of visits, and specific visits.	The study found that visit frequency to natural environments was associated with higher eudaimonic well-being, and a specific visit to nature was linked to higher positive experiential well-being.
	Andreucci et al. 2019 [68]	To illustrate how urban green–blue infrastructure can support mental health and healthy aging	A review of case studies from international projects that focus on "mental health-sensitive" open space design is made to investigate the contribution of nature to mental health, particularly for elderly people diagnosed with mental disorders.	Well-designed urban green–blue infrastructure can significantly support mental health and the overall well-being of elderly populations.
	Mitchell, 2013 [69]	To investigate if regular physical activity in natural environments is associated with better mental health outcomes compared to physical activity in non-natural environments	Data from the 2008 Scottish Health Survey was utilized, which included information on the environments in which respondents were physically active.	Physical activity in natural environments is associated with a significantly lower risk of poor mental health compared to physical activity in other environments.
Recreational facilities of campus environment	**Hajrasouliha, 2017** [51]	To develop and validate the Campus Score index to measure the quality of university campuses in terms of urbanism, greenness, and on-campus living and to assess how these are related to educational outcomes	Campus Score was calculated using three latent variables: Urbanism, Greenness, and On-Campus Living, with 10 indicators. The index was applied to universities in the US.	The quality of a university's physical campus environment can have a measurable impact on student success. The campus score index developed in this study establishes a design framework that highlights the physical attributes necessary for generating secure and sustainable campus environments.
	Aydin and Er, 2008 [70]	To assess the quality of the university campus as an outdoor space, exploring its role in providing individual and social benefits for campus users.	A survey was conducted with students in Turkey, inquiring about their use of outdoor campus spaces, the qualities they valued, and their purposes and frequency of campus usage.	Well-maintained, accessible, and aesthetically pleasing outdoor spaces significantly contribute to enhancing user experience.

Table 1. *Cont.*

Area of Focus	Author	Aim/Focus	Methodology	Findings
Recreational facilities of campus environment	**Ellis et al. 2002** [61]	To examine how frequently participating in campus recreation services correlates with health and QoL among university students.	Survey data were collected from a random sample of students from a Western university. The survey assessed six measures of health and QoL, including satisfaction with life, time usage, university experience, energy levels, and how emotional and physical health affected social functioning.	Students who participated more frequently in campus recreation had better overall satisfaction with life and social functioning. There is a correlation between health and QoL and satisfaction with the university.
	Hipp et al. 2016 [60]	To explore the relationship between students' perceptions of the greenness and restorative qualities of their university campus and how these perceptions affect their QoL.	A survey was conducted with students measuring the perceived greenness of their campus, the perceived restorativeness of campus environments, and their QoL using the World Health Organization QoL Scale.	Students who perceived their campus as greener reported higher levels of QoL.
	Holt et al. 2019 [59]	To explore the relationship between different types of green space usage and indicators of health and well-being among university students	A survey was conducted with undergraduate students at a university with accessible green spaces.	Students who frequently engaged with green spaces actively reported higher levels of QoL, better overall mood, and lower levels of perceived stress.
	McFarland et al. 2008 [62]	To investigate how the use of campus green spaces correlates with university students' perceptions of their overall QoL, including factors like life satisfaction and satisfaction with the university environment	A survey was conducted with undergraduate students at a university in Texas, gathering data on their frequency of use of campus green spaces and their QoL using a questionnaire.	Students who frequently used campus green spaces reported higher levels of QoL compared to those who rarely used them.
Transportation	**Iamtrakul et al. 2023** [71]	To explore how the built environment influences transportation-related QoL in an urban setting, using a case study in Bangkok, Thailand.	The study utilized GIS for spatial analysis and deep learning techniques with face-to-face interviews using a questionnaire survey to evaluate the built environment's impact on QoLT.	Satisfaction with transportation-related QoL was significantly influenced by the built environment, including accessibility to transport systems, safety, and transport costs.

Table 1. *Cont.*

Area of Focus	Author	Aim/Focus	Methodology	Findings
Satisfaction with Built Environment in University	**Hamad, 2019** [72]	To assess the impact of the university's built environment on female students' quality of academic life, particularly focusing on a Saudi university context.	A case study was made involving surveys and observations of female students.	The quality of the built environment, particularly academic space availability and design, significantly influenced student satisfaction with academic life. Well-designed spaces improved academic achievement and well-being, while poor design or inadequate facilities adversely affected students.
	Kim et al. 2018 [73]	To understand the relationships between students' space choices, space rejections, and their overall satisfaction with campus facilities.	Surveys and post-occupancy evaluations from 330 university students to gather data about their daily activities and space preferences on campus. The data analysis identified patterns of space use, rejection, and satisfaction, focusing on various types of campus spaces.	Factors like space layout, environmental performance, and equipment adequacy influenced the satisfaction with space.
	Jasić and Kaludjerović, 2015 [74]	To assess the QoL of students at the University of Tuzla by analyzing various dimensions such as physical and psychological health, independence, social relationships, and environmental factors	A survey that measured students' self-assessments of their QoL using Cummins' four domains of life quality was conducted.	QoL is adversely affected by high levels of dissatisfaction with the university environment.
Effects of classroom spaces on learning	**Marchand et al. 2014** [75]	To examine whether environmental comfort factors in classroom settings, when set either within or outside of a comfort zone, would influence undergraduate student learning, mood, and perceptions of the classroom's impact on their performance	An experimental study was conducted that manipulated classroom environmental conditions. Participants were undergraduate students who engaged in listening and reading tasks, and their performance on these tasks was assessed.	Optimal classroom environmental conditions are essential for improving student performance and well-being.

Table 1. *Cont.*

Area of Focus	Author	Aim/Focus	Methodology	Findings
Effects of classroom spaces on learning	**Scott-Webber et al. 2013** [76]	Using a post-occupancy evaluation method to assess whether an intentionally designed active learning environment would influence student engagement compared to traditional classrooms.	An evaluation instrument was used to measure student engagement before and after implementing new learning spaces designed for active learning.	New active learning environments had a positive impact on student engagement.
	Dyck, 2002 [77]	To examine the impact of the physical characteristics of the space on student outcomes	Review of the literature and observations considering six spatial dimensions: aesthetics, spatial factors, light, noise, color, and temperature	Well-designed facilities with enough space and arrangement facilitate learning. Natural lighting, minimal noise, color psychology, and suitable temperatures affect students' concentration, academic performance, and well-being.

3. Case Study

This part provides a comprehensive overview of the specific material and the methodology employed in the study, which are presented in separate sections. The initial one delineates the descriptions and criteria for selecting the topic matter. The second one encompasses the methods and processes utilized to evaluate the data.

3.1. Study Area

The university campus, which is the study area of the research, is the campus of Bursa Uludag University (BUU), Bursa, Turkey. Bursa is a city recognized as part of the UNESCO World Heritage List, where the Ottoman Empire was founded (https://whc.unesco.org/en/list/1452/, accessed on 7 August 2024). Founded in 1975, BUU consists of a total of 15 faculties, two colleges, fifteen vocational schools, one conservatory, four institutes, twenty-seven application and research centers, one research center, and five departments that operate under the supervision of the rectorate. While there are certain faculties and vocational schools scattered across the city, the main campus and the Rectorate of the University are situated in the Gorükle neighborhood of the Nilüfer district. The study area includes the educational and social spaces and open areas in BUÜ. The participants consist of students of the Faculties of Medicine, Economics and Administrative Sciences, Engineering, Architecture, Agriculture, Education, Science & Literature, Fine Arts, and Sport Sciences, which are located within the central campus (Figures 1–3). The following subsections delineate the study area by examining features pertinent to student life at the university and the university's built environment, encompassing both common spaces and those utilized by certain student groups.

Figure 1. Bursa Uludag University campus [78].

Figure 2. Case university campus map (adapted from [78]).

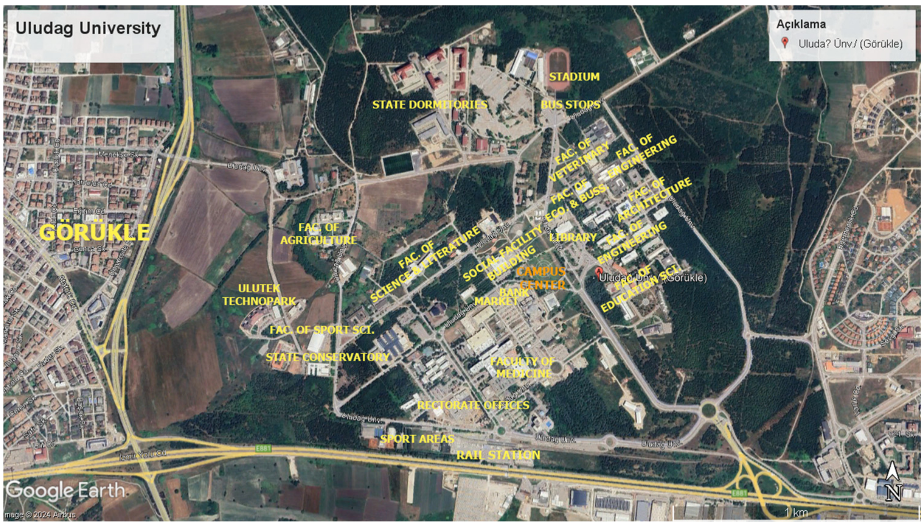

Figure 3. Google aerial image of case university campus.

3.1.1. Student Life on University Campus

The social factors within the scope of social perception influencing student life on campus include social activities and connections, their sense of belonging, and perception of safety, whereas the physical factors in terms of student life, except the built environment, can be mentioned as social facilities, transportation, and accommodation facilities. Regarding social perception, social activities, club facilities, student events, multicultural diversity, and security are effective in student life. Based on social perception, it is observed that student groups are not actively functioning, and students prefer departmental communities over common clubs. Another finding pertains to student events. Despite being conducted annually until a decade ago, the institution has not hosted student spring festivals in the last ten years; the only events now arranged are brief grassland music performances and annual foreign student meetings. Within the context of social relationships, international students are esteemed at universities due to the prioritization of internationalization in government policies. National policies supporting internationalization increase multicultural diversity on the BUU campus. In the past decade, a distinct quota for Syrian students has been established in addition to the existing quota for foreign nationals at the university.

A crucial component of social life is the perception of safety. Although the campus is secure during daylight hours, its large area and green fields make it less secure after dark. Campus safety threats include the end of lessons at 17:30, unrestricted access for visitors to the Faculty of Medicine Hospital at all hours, and insufficient street lighting. The safety threats primarily affect students residing in dorms in the evening, as they generally walk to their accommodations, unlike those who leave the campus after lessons.

Within the scope of physical factors under personal characteristics, most students at BUU reside in dormitories or apart flats on campus and in Görükle, which is located on the periphery of the campus (Figure 4). Furthermore, students reside in many districts of the city, including Nilüfer, Osmangazi, and Yıldırım (Figure 5). Nilüfer is Bursa's most prestigious residential district, developed with better urban planning, where Bursa Uludağ University is located. Most of Nilüfer's inhabitants belong to the upper middle socio-economic class, followed by the lower middle and higher classes. Nilüfer, a more recent residential area compared to the districts of Yıldırım and Osmangazi, has been developed through more planned policies. Osmangazi is located in the center of Bursa. It is home to many historical and cultural locations in Bursa, which are included in the UNESCO World Heritage List. Osmangazi is predominantly preferred by residents with moderate incomes. Yıldırım is a neighborhood in Bursa where there is socio-economic segregation, a lower quality of urban life, and worse living conditions. Yildirim, which has received intense Syrian migration, is mostly preferred by the residents who are heterogeneous and predominantly low and middle-income [79–81]. Consequently, it can be asserted that students residing in Yıldırım experience inferior living circumstances in their neighborhoods relative to other districts.

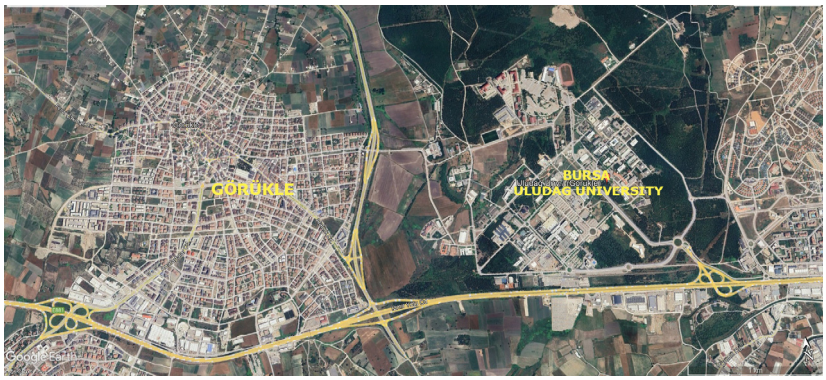

Figure 4. Location of Bursa Uludag University and Görükle.

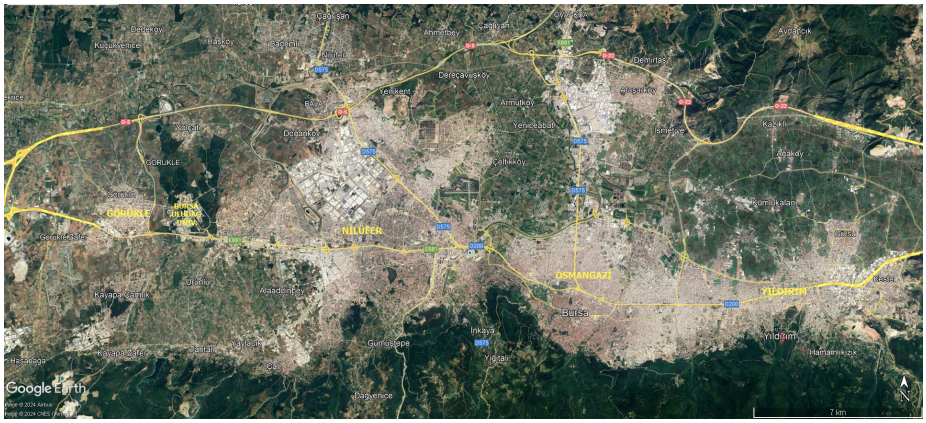

Figure 5. Location of Bursa Uludag University, Görükle, Nilüfer, Yıldırım.

Within the scope of accessibility to the university from different districts in the city, The university is easily accessible from many city districts via public transportation, including the rail system and buses. (Figure 6). On-campus transportation can be provided by walking or private car. The interviewees indicated that transportation services from Görükle, where the majority of students reside, are insufficient during weekday mornings and evenings, whereas the rail system operates more efficiently and quickly during peak hours.

Figure 6. Images from the rail system station and bus stops.

3.1.2. Built Environment of University Campus: Socio-Cultural and Recreational Facilities

The socio-cultural and recreational facilities encompass a social facility building, a library, two banks, two markets, one coffee chain, one restaurant, one patisserie, and small contracted cafés offering snacks. The aging social facility building, with its dark atmosphere devoid of sunlight, is largely unoccupied. The building includes club spaces that fail to meet the clubs' requirements, along with a health center and dining hall (Figure 7). Although aged, the dining hall adjacent to the campus center offers affordable prices. In contrast to the dining hall, the cafés provide the flexibility to consume food and beverages at any hour of the day in many areas across the campus (Figure 8). Despite the central placement of the principal social facility building, library, banks, and marketplaces on campus, as seen in Figure 9, the distribution of faculties across disparate locations makes them inaccessible to students whose faculties are not within walking distance during limited breaks. Similarly, the library located in the campus center (Figure 10) does not have enough spatial capacity to serve all faculties as a workspace. The university lacks sufficient facilities to accommodate the study requirements of different disciplines and research activities, except for the reading halls in the library.

Figure 7. Images from the social facility building.

Figure 8. Images from different cafe spaces.

Figure 9. Images from the center of campus.

Figure 10. BUÜ central library.

Regarding the sports facilities, the university's sports facilities include one football field, two artificial turf fields, two basketball/volleyball courts, two gymnasiums, one fencing hall, one sports center, two indoor/two outdoor/four clay tennis courts, and one wellness track under the management of Sports Directorate (Figure 11). However, these do not have enough capacity for so many students, and they are located on the periphery of the campus, far from most faculties (Figures 2 and 3). Overall, the university campus is abundant in green spaces; however, it can be stated that utilization of these areas is not sufficiently efficient (Figure 9).

Figure 11. Indoor/outdoor sport facilities.

3.1.3. Built Environment: Education Buildings

Within the built environment, the majority of the faculty buildings (Faculties of Medicine, Economics and Administrative Sciences, Architecture, Veterinary Medicine, Agriculture, Education, Science & Literature, Fine Arts, and Sport Sciences) are older, inadequate, and poorly maintained, with some being as old as 30–40 years (Figure 12).

Figure 12. Faculties of Medicine, Agriculture, and Veterinary Medicine buildings (from left to right).

Therefore, over time, according to the priorities determined by the university administration, a number of faculty buildings have been renovated. Within this scope, the Economics and Administrative Sciences, Medicine, and Science & Literature faculties have undergone partial renovations. Faculty of Engineering buildings are reconstructed, which are the most recently constructed structures on campus, with an average age of 3 to 8 years. Alongside the variations in construction years, the number of students in the faculties has also evolved and increased throughout time. This circumstance has resulted in the insufficient capacities of the buildings, which could not be replaced promptly. The Faculty of Architecture is the most notable facility with inadequate capacity, necessitating expansive workshops, and spaces for collaborative student study and activity. In the facility, a single classroom has accommodated 170 individuals due to the rising enrollment, although there is no design atelier available for students to engage in individual or group work, nor one that remains open after regular hours. The faculty of Architecture, despite its high student enrollment and number of students, has a very limited capacity in terms of spatial size, organization, and appropriate technological infrastructure (Figure 13). The circumstances are similar in the Faculty of Fine Arts. In contrast, the Faculty of Economics and Administrative Sciences and the Faculty of Engineering have had renovations in recent years. The renovation enhanced the internal comfort and organization of the Faculty of Economics and Administration (Figure 14). Likewise, the Faculty of Engineering has recently constructed modern facilities, encompassing well-equipped classrooms, training areas, and laboratories (Figure 15). Some departments within the Faculties of Medicine and Arts & Sciences have undergone renovations, and enhancements have been made to the front façade of the Faculty of Arts & Sciences.

Figure 13. Images from the Faculty of Architecture.

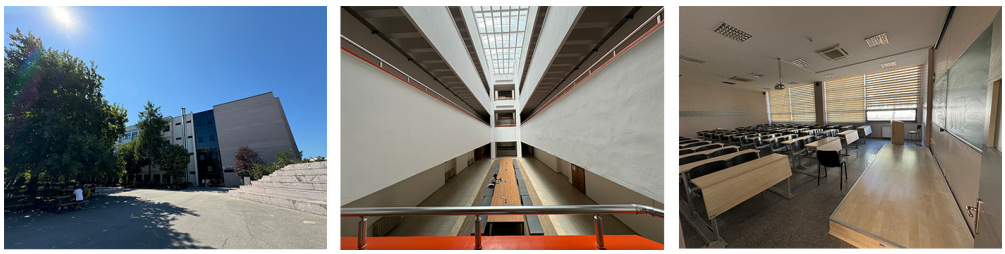

Figure 14. Images from the Faculty of Economics and Administrative Sciences.

Figure 15. Images from the Faculty of Engineering.

3.1.4. Built Environment in University: Accommodation Facilities

When evaluating accommodation choices, it can be stated that the majority of the facilities are located on the university campus and Görükle. Accommodation options include

state-owned or private dorms. Apartments may be included within private dormitories. State-owned dorms are far more cost-effective than private dormitories. Nevertheless, the rate of occupancy of these dormitory rooms is exceedingly high. Despite having rooms designed for a maximum of four individuals, five or even six persons are being accommodated by adding bunk beds (Figure 16). Conversely, despite their elevated cost, the accommodations in private dormitories have single or double occupancy, designated study and relaxation areas (Figure 17), housekeeping services, and the comfort of prepared meals.

Figure 16. Images from the state-owned dorms.

Figure 17. Images from private dorms.

The impact of aforementioned campus facilities and student life on the perception of QoL is discussed in the following sections within the framework of student QoL in line with the QoL scale addressed in detail in the methodology in Section 3.2.

3.2. Methodology

Two research challenges in planning and social sciences are the definition and measurement of QoL and identifying indicators to evaluate QoL change. It is crucial to investigate the connections between life segments and the particularly noteworthy dimensions, as holistic perception results from the interconnections between various aspects of life. It is important to reveal the characteristics of a settlement and the significance of these characteristics to the users in the context of QoL measurement. In this context, it is a valid method to request that participants complete a QoL scale to determine the critical aspects of their QoL in relation to environmental measurements [49]. Considering such perceptual and behavioral indicators in measuring the QoL of a place reflects the actual quality based on the experiences of the people living in that place and creates an opportunity to examine the relative importance of the spatial qualities [82]. QoL measurements are required to achieve a balance between obtaining critical statistical data and the representation of individuals'

perspectives on their lives [49]. To effectively monitor health and well-being in the built environment, we must improve our ability to define the metrics and indicators that must be monitored [83]. Indicators have benefits in explaining, simplifying, measuring, communicating, and encouraging action [84]. The indicators must be comparable to general conditions in a global world and coincide with local life [82]. The research should include local characteristics during the adaptation of the index to be used from different indexes. Thus, a scale system for the proposed research can be determined by grounding the subject in a specific theoretical framework and the research aim.

In the context of the framework of this research, university campuses encompass faculty buildings, social and recreational facilities, dormitories, cafes, shops, common areas, green spaces, and pedestrian and vehicle roads. As seen in the literature (Section 2), the campus environment plays a crucial role in enhancing the students' spatial satisfaction, academic performance, social interactions, and physical and mental health. The main aim of this research is to comprehensively analyze the impact and dominance of the built environment and various dimensions of university life, in addition to the personal characteristics of student QoL, as well as explore the interaction between them. The sub-aims can be stated as follows: (i) To determine the effect of the built environment on student life satisfaction and QoL; (ii) To determine the dimensions that affect the QoL related to personal characteristics, education, campus life, and administrative processes; (iii) To elucidate the interaction between these dimensions; (iv) To analyze the dimensions of university life that affect the QoL the most. The target of the study is to contribute to the literature by inclusively exploring the effect of several aspects of the built environment of the university (including transportation, housing, green spaces, recreational amenities, indoor and outdoor areas, classroom environments, and comfort conditions) with campus life (including academic performance, social perception, and administrative management) on students' QoL, taking into account individual characteristics. In line with the aim, a specific index for measuring student QoL on the university campus was developed, and a survey was conducted using the questionnaire that was developed based on the index.

The QoL index and survey questions are developed based on the research questions in the introduction, Section 1. In developing these research questions, the dimensions examined in QoL research and university campus literature [45,48,50,51,55], case-specific variables, and on-site observations were utilized. The index is constructed in two phases: first, addressing primary question areas such as the built environment and university life, followed by exploring sub-dimensions within these study domains. The conceptual model illustrates how personal characteristics and the built environment interact in a reciprocal relationship, wherein the individual and their surroundings continuously influence each other. However, since personal characteristics influence university life, the university environment also restructures the student's personality. The conceptual framework argues that the university's built environment and university life interact with each other, and these characteristics collectively shape the overall assessment of the quality of life (QoL) (Figure 18).

The dimensions of the QoL scale developed can be mentioned: (i) Personal characteristics, including demographic characteristics, accommodation, neighborhood of residence, transportation preference, faculty studied, the reason for university preference, the reason for faculty/profession preference; (ii) Dimensions regarding the built environment of university; satisfaction with education spaces, satisfaction with socio-physical and recreational facilities, satisfaction with accessibility and public transportation satisfaction, satisfaction with dormitory/housing; (iii) Dimensions regarding satisfaction with university life; academic development, social perception, satisfaction with campus life, satisfaction with administrative management.

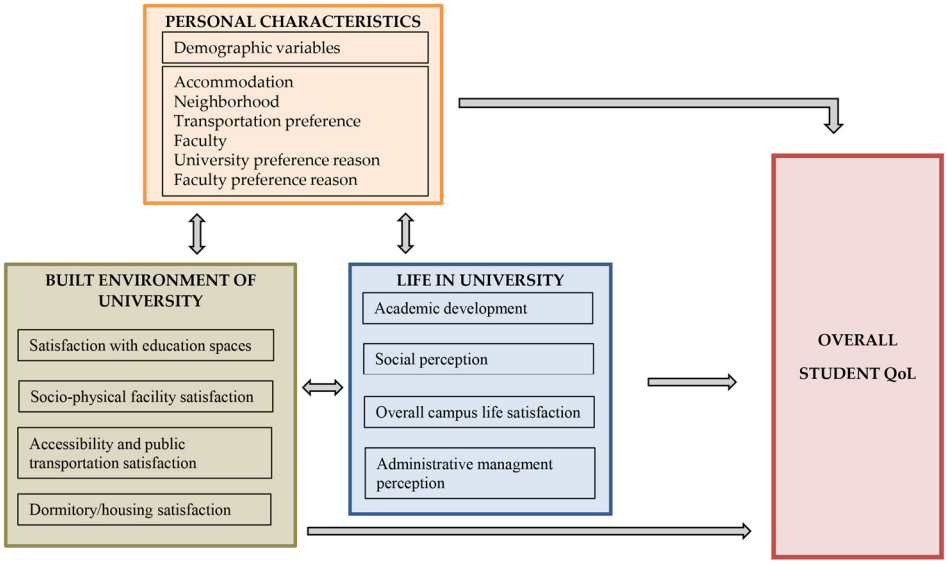

Figure 18. QoL conceptual model.

The survey participants, which were developed based on the conceptual framework and consisted of 685 students, were selected using a systematic random sample procedure based on their field of study. Approval from the Bursa Uludağ University Social Sciences and Humanities Research and Publication Ethics Committee has been obtained for the research. The data received and the observations made at different times of the day and days of the week were evaluated.

3.3. Data Analysis

All data were recorded and analyzed using SPSS (statistical package for social sciences) for Windows 22 and IBM AMOS 24.0 programs. Initially, the assumptions that were to be met to determine which tests (parametric/nonparametric) to employ were tested during the data analysis. Kolmogorov-Smirnov, kurtosis, and skewness values, which are other assumptions of normal distribution, were used to decide on the normality of the distribution. Independent sample *t*-test and Mann–Whitney U tests were used for two independent group comparisons, one-way analysis of variance, and Kruskal–Wallis H tests were utilized for more than two group comparisons. Bonferroni tests were utilized as multiple comparison tests. The relationship between numerical variables was examined with Pearson correlation coefficients. Exploratory factor analyses and confirmatory factor analyses were used for the scale's validity. A significance level of 0.05 was used as a criterion for interpreting whether the values obtained were significant. The statistical analyses utilized for data analysis are presented in Table 2, including the administered tests and their respective purposes.

Table 2. Statistical analyses utilized for data analysis within the scope of their purposes.

Purpose	Analysis
Scale reliability	Item-total correlation analysis, Cronbach's Alpha
Scale validity	EFA and CFA analyses
Comparison of scale scores according to demographic characteristics	For two groups: independent sample *t* test one-way analysis of variance for more than two groups
Relationship between scale sub-dimensions	Pearson correlation coefficient

The item-total correlation values, which are important criteria for construct validity, were examined, and no item below the limit value of 0.30 was observed [85]. Appendix A, Table A1 shows the table regarding the findings of the item-total correlation analysis. The construct validity of the QoL scale was examined by subjecting it to exploratory factor analysis (EFA). As the QoL scales' factors had originally been structured, the Principal Components Method and Varimax Rotation were implemented to ascertain the factor structure without restricting the number of factors.

When the QoL scale data were examined, it was determined that the KMO value was 0.92, the Barlett Test result was significant ($p < 0.05$), and the KMO values subsequently were examined. If this value is above 0.9, it is stated as excellent [86]. At the end of the analysis, it was determined that the sample size was at a very good level, and the test was consistent throughout (Table 3).

Table 3. Findings regarding KMO analysis on sample size.

Kaiser–Meyer–Olkin Measure of Sampling Adequacy		0.92
Bartlett's Test of Sphericity	**Approx. Chi-Square**	19,130.64
	sd	1596
	p	0.01

As a result of the exploratory factor analysis, it was determined that the structure consisting of 57 items and eight dimensions explained 53.17% of the total variance. The total variance explained is expected to be 50–55% in models with more than one factor [85]. Findings regarding the items and item loadings in the dimensions are presented in Appendix A, Table A2. The scale's validity demonstrated that it explained 53.17% of the variance associated with QoL. After conducting an exploratory factor analysis of the QoL scale, it was determined that the scale consists of eight dimensions (Table 4).

Table 4. Findings regarding self-values according to dimensions.

Dimension	**Initial Eigenvalues**			**Total Variance**			**Total Variance after Rotation**		
	Total	**Variance %**	**Cumulative %**	**Total**	**Variance %**	**Cumulative %**	**Total**	**Variance %**	**Cumulative %**
1	15.16	26.60	26.60	15.16	26.60	26.60	5.24	9.19	9.19
2	3.81	6.68	33.28	3.81	6.68	33.28	4.88	8.57	17.76
3	2.48	4.34	37.62	2.48	4.34	37.62	4.72	8.28	26.04
4	2.17	3.81	41.43	2.17	3.81	41.43	4.53	7.95	33.98
5	1.94	3.39	44.82	1.94	3.39	44.82	2.93	5.13	39.12
6	1.83	3.21	48.03	1.83	3.21	48.03	2.81	4.93	44.04
7	1.57	2.75	50.79	1.57	2.75	50.79	2.70	4.73	48.78
8	1.36	2.38	53.17	1.36	2.38	53.17	2.50	4.39	53.17

QoL scale sub-dimension scores were found to be at an acceptable/high reliability level [87]. The overall Cronbach's Alpha value of the scale was found as 0.95 (Table 5).

Confirmatory factor analysis was conducted to test the appropriateness of the dimensions and factor structures obtained from the exploratory factor analysis for the QoL scale. In this context, the appropriateness of distributing 57 items into eight factors was tested (Appendix A, Tables A1 and A2). All of the calculated regression coefficients were found to be statistically significant. It is seen that the factor loading values of the QoL scale are between 0.45 and 0.86. Factor loading values are accepted as "0.45–0.54 = normal", "0.55–0.62 = good", "0.63–0.70 = very good" and "0.70 and above = excellent" [88]. The QoL scale's fit indices, determined through confirmatory factor analysis, are presented in Appendix A, Table A3. At the end of the confirmatory factor analysis conducted to analyze

the fit of the QoL scale with eight factors, the fit indices were improved. When the fit index scores after the modification were examined, it was determined that the CMIN/df value and other scores were at the "good" fit level and that the 8-factor and 57-item structure was compatible with the data (Appendix A, Table A4).

Table 5. Reliability results for the scale and its subscales.

	Cronbach's Alpha
Satisfaction with campus life	0.89
Satisfaction with education spaces	0.87
Academic development	0.87
Satisfaction with socio-physical facilities	0.85
Satisfaction with administrative management	0.86
Social perception	0.77
Satisfaction with dormitory/housing	0.80
Accessibility and satisfaction with transportation	0.71
General QoL	0.95

Whether the scale scores were normally distributed was evaluated by examining the kurtosis-skewness coefficients (Appendix A, Table A5). As the kurtosis and skewness values were between ±2.0 [89], the analyses were performed with parametric tests. In addition, the mean scores of the scales were converted into Z scores, and the score ranges were examined. The criterion of the standard Z score was taken within the range of ±3.29 [90]. No data were detected outside this range. The Mahalanobis value was calculated for the detection of multidirectional outliers, and the critical chi-square value $p = 0.001$ was taken as a criterion [90]. The sub-dimensions included in the student QoL scale regarding the university campus were determined as follows: (i) Satisfaction with educational spaces; (ii) Satisfaction with academic development; (iii) Satisfaction with socio-physical facilities; (iv) Social perception; (v) Satisfaction with campus life; (vi) Accessibility and satisfaction with transportation; (vii) Satisfaction with dormitory/housing; (viii) Satisfaction with administration management.

4. Results

In this section, the following are discussed: (i) The personal characteristics of the participants (demographic data, accommodation, university, and faculty preferences); (ii) The QoL scale and sub-dimension items; (iii) The comparison of QoL scale and sub-dimension scores according to personal variables; (iv) The explanation of the relationships between the QoL scale and sub-dimensions.

4.1. Data Regarding Personal Characteristics

Of the participants, 42.98% were female (n = 294) and 57.02% were male (n = 390). Regarding age distribution, 94.44% were between the ages of 18 and 24 (n = 646), and 5.56% were between the ages of 24 and 28 (n = 38). Regarding marital status, 4.53% were married (n = 31), and 95.47% were single (n = 653). Moreover, 91.82% of the participants were Turkish citizens (n = 629) and 8.18% were Syrian citizens (n = 56) (Table 6).

In addition, 5.70% of the students were from the Faculty of Education (n = 39), 11.84% from the Faculty of Economics and Administrative Sciences (n = 81), 36.55% from the Faculty of Architecture (n = 250), 10.67% from the Faculty of Medicine (n = 73), 1.75% from the Faculty of Fine Arts (n = 12), 18.71% from the Faculty of Engineering (n = 128), 7.75% from the Faculty of Literature and Sciences (n = 53), 3.22% from the Faculty of Sports Sciences (n = 22), and 3.80% from the Faculty of Agriculture (n = 26).

Table 6. Personal characteristics.

Variable	Group	n	%
Gender	Female	294	42.98
	Male	390	57.02
Age	Between 18–24 ages	646	94.44
	Between 24–28 ages	38	5.56
Marital status	Married	31	4.53
	Single	653	95.47
Nationality	TR	629	91.82
	Syria	56	8.18
Accommodation in Bursa	At home with my family	189	27.59
	Apart flat	106	15.47
	At home with my friends	106	15.47
	State dormitory	187	27.30
	Private dormitory	97	14.16
Neighborhood disrict in Bursa	Görükle	358	52.26
	Nilüfer	195	28.47
	Osmangazi	75	10.95
	Yıldırım	36	5.26
	Other	21	3.07
Mode of transportation	Private vehicle	85	12.41
	Public transportation	487	71.09
	On foot	113	16.50
Faculty of study	Faculty of Education	39	5.70
	Fac. of Economics and Administrative Sciences	81	11.84
	Faculty of Architecture	250	36.55
	Faculty of Medicine	73	10.67
	Fcaulty of Fine Arts	12	1.75
	Faculty of Engineering	128	18.71
	Faculty of Science & Literature	53	7.75
	Faculty of Sports Sciences	22	3.22
	Faculty of Agriculture	26	3.80
Reasons for choosing Bursa Uludag University	My family and/or close friends live here	82	18.68
	I think there are more job opportunities in Bursa after graduation	95	21.64
	I find it easier to study university in Bursa in terms of life opportunities	68	15.49
	I find it more attractive to study at university in Bursa than in my hometown	62	14.12
	I find the education quality of the university very good	110	25.06
	My university exam score was good enough for here	22	5.01
Reasons for choosing faculty	To be close to my friends	22	5.39
	Because it's my dream job	208	50.98
	Because there are more job opportunities after graduation	88	21.57
	My university exam score was good enough for here	90	22.06

In terms of accommodation, 27.59% of the participants stayed at home with their families (n = 189), 15.47% in apart flats (n = 106), 15.47% at home with friends (n = 106), 27.30% in state dormitories (n = 187) and 14.16% in private dormitories (n = 97). According to the neighborhoods they live in, 52.26% live in Görükle (n = 358), 28.47% in Nilüfer (n = 195), 10.95% in Osmangazi (n = 75), 5.26% in Yıldırım (n = 36) and 3.07% in other neighborhoods (n = 21). The mode of transportation to the campus was 12.41% by private car (n = 85), 71.09% by public transportation (n = 487), and 16.50% on foot (n = 113).

When the reasons for the participants' preference for Bursa Uludag University are analyzed, 18.68% because their family and close relatives live in Bursa (n = 82), 21.64% because they think that there are more job opportunities in Bursa after graduation (n = 95), 15, 49% preferred Bursa because they thought that living opportunities were easier in Bursa (n = 68), 14.12% preferred Bursa because it was more attractive than their hometown (n = 62), 25.06% preferred Bursa because they found the quality of education at the university good (n = 110) and 5.01% preferred Bursa because their exam grade was enough for this (n = 22). The reasons for preferring their faculties were that 5.39% of them were close to friends (n = 22), 50.98% were because it was their dream profession (n = 208), 21.57% had more job opportunities after graduation (n = 88), and 22.06% had enough exam points for the faculty (n = 90) (Table 6).

4.2. Data Regarding the Opinions on the Dimensions of the QoL Scale

To evaluate the students' views on the scale and sub-dimension scores, the summary statistics of the scale items in Appendix A, Table A6 can be examined. According to the results related to the sub-dimension of satisfaction with academic development, most of the students are satisfied with the quality of teaching, interaction in the classroom, and the efforts of the lecturers to provide efficiency in their courses. Most students agree that the workload as a student in the department they are studying is appropriate and that the lecturers are qualified, knowledgeable, and experienced in their fields. However, neutrality is high, as is agreement that the university provides appropriate information for students' personal growth and career planning, as well as regular academic performance evaluation.

Satisfaction with educational spaces is crucial within the context of the built environment of a university campus in terms of student QoL. The satisfaction rates with the location of the faculty, the size, layout, and location of the classroom, the cleanliness and maintenance of the building, the adequacy and quality of the equipment such as projectors, boards, computers, curtains, and the level of illumination, acoustic, and thermal comfort of the spaces are higher than dissatisfaction, albeit close. On the other hand, the rate of those who disagree with the statement that the physical facilities of the building are adequate and comfortable is higher. An important result of the study is that satisfaction with education spaces varies across faculties.

Most students agree with the statements that the campus is easily accessible from their dormitories/houses, it is easy to walk within the campus, and the transportation facilities are both affordable and adequate when the user opinions on accessibility and satisfaction with public transportation are analyzed. When the satisfaction with socio-physical facilities is analyzed, the majority of the respondents agree, and they neither agree nor disagree with the statement that the green areas on campus are sufficient and of good quality and that the campus is clean and well-maintained. Nearly all participants agree and disagree that club amenities are sufficient and good. However, those who disagree and are neutral about whether indoor and outdoor sports facilities are sufficient are the majority. It was concluded that those who were dissatisfied with the food and beverage facilities on campus, the adequacy of entertainment activities, and the adequacy and prices of housing facilities constituted the majority. Those who are neutral to the statement of satisfaction with the health services and the health center are at the highest rate.

Satisfaction with the accommodation, including dormitories (public/private), apartments, and residences, is an additional critical aspect of university life. Most respondents do not agree or disagree that the accommodation spaces are safe, well-maintained, and clean.

Similarly, the majority neither agree nor disagree that the room of the dormitory/apartment is comfortable or suitable for their requirements. In the discussion, the satisfaction levels in different types of dormitories will be examined.

According to the data on students' social perception, most of the students are satisfied with the multicultural diversity and gender equality in the faculty. The percentage of individuals who engage in university-related activities is higher than those who do not. The findings concerning the perception of safety indicate that most students think that the campus is secure until dark, but they disagree that it is safe after dark. The student perception of administrative management shows that the rate of those who agree that the staff has adequate knowledge of their responsibilities is slightly higher, while the rate of those who are neither in agreement nor disagreement about the staff's kindness and effective problem-solving is extremely similar.

According to the data regarding the items of the QoL scale that encompass general satisfaction with university campus life, a greater number of respondents agree that the quality of academic programs, administrative staff, lecturers, and campus life meets their expectations, as well as university life in general. In the same vein, the majority agreed with the statements that they are content with their university membership, identify as a member of the university community, would recommend the institution to a friend, and would join the alumni organization (Appendix A, Table A6).

4.3. Data on the Comparison of QoL Scale Dimensions and Personal Characteristics

When the findings on the comparison of the scale and sub-dimension scores according to personal characteristics were analyzed, it was found that satisfaction with dormitory facilities was significantly higher in males than in females (Appendix A, Table A7). Considering the age, the scores of satisfaction with the educational space were significantly higher in the 24–28 age group than the 18–24 age group (Appendix A, Table A8). When nationality is considered, satisfaction with socio-physical facilities was significantly higher in Syrian students than in Turkish students. In addition, transportation and accessibility scores were significantly higher for Syrian students (Appendix A, Table A9).

When the sub-dimensions are analyzed according to the place of accommodation, the scores of educational space satisfaction and housing/dormitory satisfaction show a statistically significant difference (Appendix A, Table A10). Individuals who resided in private dormitories reported significantly higher satisfaction levels than those who resided in state dormitories, apart flats, or at home with friends.

When the scale and sub-dimension scores are examined according to the neighborhoods, the scores of satisfaction with the education spaces, academic development, satisfaction with socio-physical facilities, and QoL on the university campus show a statistically significant difference according to the neighborhoods. It was determined that the residents of Yıldırım reported higher levels of satisfaction with their educational institution than those residing in Görükle, Nilüfer, and other neighborhoods. In addition, the academic development scores of those living in Yıldırım were higher than those living in Görükle, Nilüfer, and other neighborhoods, and those living in Yıldırım had higher socio-physical facility satisfaction scores. In addition, those living in Yıldırım had significantly higher university QoL scores (Appendix A, Table A11).

When the scale and sub-dimension scores are compared according to the faculties, there is a statistically significant difference in the satisfaction scores with the educational space, academic development, socio-physical facilities, campus life, and administrative management (Appendix A, Table A12). The Bonferroni test revealed that students at the Faculty of Economics and Administrative Sciences and Engineering had higher educational space satisfaction scores than those at the Faculty of Architecture. It was determined that students at the Faculty of Medicine had higher academic development, socio-physical facility, and campus life satisfaction scores. In addition, it was determined that those studying at the Faculty of Architecture had higher administrative perception scores.

The dimensions that show a statistically significant difference according to the reason for students' preference for BUU are satisfaction with the education spaces, personal academic development, socio-physical facilities, social perception, campus life, and overall QoL (Appendix A, Table A13). When the Bonferroni test was utilized, it was found that those who found the quality of education at the university very good were more favorable to those who found it easier to study at the university in terms of life opportunities. Those who found a university in Bursa more appealing than their hometown and those who could afford it received greater satisfaction scores in education spaces, academic development, socio-physical facilities, and social perspective. Additionally, those close to their families, believing it easier to study at university in Bursa when it came to living conditions and thinking Bursa had better job opportunities, had much higher campus life satisfaction scores. The study found that those who thought they had more job opportunities in Bursa after their education, those living with families, and those who thought the university's education was very good were also more satisfied with administrative management.

The other choice that affects the QoL of students and individuals is the choice of profession and faculty. When the factors that changed based on faculty preferences were examined, the academic development scores were much higher for those who chose the profession because it was their dream job and those who chose it because they thought there would be more job opportunities after graduation (Appendix A, Table A14). Additionally, those who preferred the program because they thought there were more job opportunities after graduation had significantly higher social perception, general satisfaction, and QoL scores than those who preferred it because their score was sufficient.

4.4. Data on the Correlations between QoL Scale Dimensions and the Overall Scale

When the relationship between the sub-dimensions and the overall QoL scale is examined, there is a high positive correlation between satisfaction with the educational space and (i) the overall QoL scale, (ii) academic development, and satisfaction with socio-physical facilities. Additionally, a moderate statistically significant positive relationship has been found between social perception, campus life satisfaction, administrative management, transportation and accessibility, and (iii) satisfaction with dormitory (Table 7).

Table 7. The findings regarding the QoL scale and sub-dimensions.

	Satisfaction with Education Spaces	Academic Development	Socio-Physical Facility Satisfaction	Social Perception	Campus Life Satisfaction	Accessibility and Public Transportation	Dormitory/Housing Satisfaction	Administrative Managemenet Perception	General QOL
Satisfaction with education spaces	1	0.503 **	0.597 **	0.461 **	0.466 **	0.449 **	0.163 **	0.385 **	0.781 **
Academic development	0.503 **	1	0.416 **	0.491 **	0.650 **	0.405 **	0.230 **	0.549 **	0.781 **
Socio-physical facility satisfaction	0.597 **	0.416 **	1	0.478 **	0.450 **	0.477 **	0.161 **	0.431 **	0.754 **
Social perception	0.461 **	0.491 **	0.478 **	1	0.532 **	0.388 **	0.284 **	0.415 **	0.709 **
Campus life satisfaction	0.466 **	0.650 **	0.450 **	0.532 **	1	0.393 **	0.306 **	0.604 **	0.802 **
Accessibility and public transportation satisfaction	0.449 **	0.405 **	0.477 **	0.388 **	0.393 **	1	0.203 **	0.312 **	0.609 **
Dormitory/housing satisfaction	0.163 **	0.230 **	0.161 **	0.284 **	0.306 **	0.203 **	1	0.273 **	0.382 **
Administrative managemenet perception	0.385 **	0.549 **	0.431 **	0.415 **	0.604 **	0.312 **	0.273 **	1	0.684 **
General QoL	0.781 **	0.781 **	0.754 **	0.709 **	0.802 **	0.609 **	0.382 **	0.684 **	1

** $p < 0.05$ r: Pearson correlation coefficient.

There was a high positive correlation between academic development scores and (i) overall QoL, (ii) satisfaction with educational space, satisfaction with socio-physical facilities, social perception, satisfaction with campus life, administrative management, transportation, and accessibility, and (iii) satisfaction with accommodation. Another high positive correlation was found between satisfaction with socio-physical facilities and (i) overall

QoL, (ii) social perception, satisfaction with campus life and administrative management, accessibility, and transportation, and (iii) satisfaction with accommodation. There was also a significant positive correlation found between social perception scores and the overall QoL, satisfaction with accessibility and transportation, campus life, administrative management, and satisfaction with housing/dormitory (Table 7).

5. Discussion

The objective of this research is to determine the dimensions that are indicative of the QoL of university students and to investigate the impact of the built environment of university and university life on student QoL, which is predicted to be highly effective, along with personal characteristics. In accordance with this objective, a scale was developed to assess the QoL of university students. The scale encompassed the following dimensions: (i) Satisfaction with educational facilities; (ii) Satisfaction with academic development (personal academic development); (iii) Satisfaction with socio-physical facilities; (iv) Social perception; (v) Satisfaction with campus life; (vi) Accessibility and satisfaction with transportation; (vii) Accommodation satisfaction; (viii) Satisfaction with administrative management. The QoL scale is valid and reliable, as demonstrated by the results in Section 3.3. Consequently, the student's QoL judgment is influenced by these sub-dimensions.

The data collected from the evaluation of questionnaires reveals that the sub-dimensions with the greatest to least effect on students' QoL are satisfaction with campus life, educational spaces, personal (academic) development, socio-physical facilities, social perception, administrative management, and satisfaction with transportation and accommodation. The results show that student QoL is a multidimensional concept affected by the built environment (education spaces, housing/dormitories, social, recreational, spatial facilities, transportation facilities), academic development, satisfaction with social perception and administration supported by the literature [4,8,45,48,52,71]. QoL is also found to be shaped by students' personal characteristics and differs depending on their neighborhood. Based on the findings that students living in Yıldırım exhibited an enhancement in their QoL on campus, it can be stated that their view of university education as a pathway to a better life increases satisfaction. Moreover, the proximity of university attendance to friends and family enhances QoL, suggesting that academic performance, social perception, and housing satisfaction are elevated due to improved comfort and socio-physical living conditions. Furthermore, the data indicate that expecting improved employment opportunities post-graduate enhances QoL; hence, the conviction that living conditions would improve after graduation contributes to heightened life satisfaction and overall QoL.

Based on the results regarding academic achievement, it can be discussed that satisfaction with academic progress was most influenced by the perception of the university's level of education, students' desired profession, faculty, and neighborhood. Also, parallel with the literature [45,48,52], it is found that academic development, improved by satisfaction with educational spaces, socio-physical facilities, campus atmosphere, and administrative management evaluation, has a significant role in QoL. Also, students' impressions indicate that the quality of academic programs and lecturers impacts their QoL. According to the results that indicate that the highest satisfaction with academic development is in the Faculty of Medicine, which has the highest scores, it should be mentioned that the desire to practice the profession of one's own choice improves academic development. When analyzing the correlation between the residential neighborhood and academic achievement, students residing in Yıldırım perceive pursuing academic advancement as a means to enhance their living standard. Academic development is related to satisfaction with educational spaces' spatial and technological infrastructure in the literature, thus supporting our results [72]. Similar results were observed in [48,56], where satisfaction with socio-physical facilities and campus life was found to be related to academic development.

Concerning satisfaction with educational environments, research [73] highlighted inadequate equipment as a factor that diminishes student QoL. A notable finding is that satisfaction with educational spaces varies among faculties, with elevated satisfaction

levels reported by students learning in newly constructed facilities. The diminished satisfaction within the Faculty of Architecture indicates a decline in satisfaction regarding older structures that fail to offer well-organized areas and adequate capability for the profession. The discontent arises from their more informed assessments of space. When analyzed by personal characteristics, satisfaction with educational environments is greater among older demographics, indicating that older individuals engage with these places less frequently than their younger counterparts, as they are typically postgraduate students or individuals pursuing education while employed. Also, the fact that age is a condition that increases life satisfaction among university students [57] supports this result. It was also determined that satisfaction with the educational space and QoL increases among those living in more unfavorable neighborhoods. Academic development, social perception, satisfaction with socio-physical amenities, campus life, and administrative management were similarly influenced by educational space satisfaction, indicating that students view the constructed environment as interconnected. Perspectives on educational environments are also linked to accessibility. Similar to our study, Hamad [72] and Marchand [75] state that built environment and indoor comfort affect academic achievement and QoL.

The satisfaction with socio-physical facilities, which significantly influences the QoL, is predominantly decreased by dysfunctional green areas (Figure 9), as corroborated by the existing literature [59,60,62], along with sports facilities students cannot easily access and use effectively. The prevalent sentiment among many students regarding campus life as "boring" is attributed to inadequate club facilities and recreational activities, dissatisfaction with food and beverage options, and ineffective utilization of open areas. The inefficacy of the social service building, characterized by a somber ambiance (Figure 7), results in diminished utilization and satisfaction in the areas it serves.

Furthermore, the findings indicate that the absence of appealing study environments on campus and the insufficient capacity of the campus library to accommodate all students diminishes satisfaction; hence, it can be asserted that appropriate and stimulating study spaces are essential for enhancing student QoL. The limited one-hour daily service of the affordable dining hall in the center restricts its utilization, as most students favor affordable choices despite their lower spatial quality and aesthetic appeal (Figure 8). The availability of these establishments to provide meals at all hours is advantageous for socialization between varying class schedules. Consistent with the literature [55], our findings indicate that proximity and cost significantly influence satisfaction with food and beverage services on university campuses.

Based on the finding that satisfaction with socio-physical amenities increased among students living in Yildirim, this can be due to lower comparative standards [14], modest expectations, and poor living conditions. Moreover, our findings indicate that enhanced satisfaction with educational standards and environments correlates with heightened pleasure about socio-physical amenities, as corroborated by Sirgy et al. [48] and Hamad [72]. Our findings demonstrate that campus amenities enhance academic performance and that efficient, well-organized open spaces and recreational facilities are crucial for students' overall QoL, which is in line with the research [48,54,61,70].

The results of this study suggest that the perception of the built environment and social and academic development interact with each other. The improvement in social perception might be ascribed to perceived employment opportunities, intercultural diversity, and a sense of security. A notable adverse finding regarding social perception is that most individuals regard the campus as unsafe post-dusk, suggesting that reducing students after 17:30, insufficient street lighting, and the lack of security measures at the university's entrances and exits negatively impact social perception. Considering the results by Botha et al. [54] and Rodrigues et al. [50] stating that safety is a significant dimension in QoL, it can be indicated that the low sense of safety reduces QoL at the university. It is also found that students' opinions on administrative administration are a factor influencing their social perception.

Within the scope of administrative perception satisfaction, it can also be stated that administrative management significantly influences student satisfaction with academic development, campus life, and socio-physical facilities, which in turn impacts their overall QoL. The impact of the importance of administration on QoL has been proven in different studies [27,28]. The Faculty of Architecture's favorable judgments suggest that a one-to-one atelier approach may enhance student satisfaction through increased attention. Individuals who regard the university's educational quality as satisfactory also express satisfaction with the administrative management. Consequently, it can be posited that a correlation exists between students' educational growth, campus life, social satisfaction, and satisfaction with the built environment.

Another dimension found to impact QoL is satisfaction with accessibility and transportation, as in the literature [54,70,71]. The results indicate that rail access is better for transportation during peak periods. Satisfaction with socio-physical facilities on campus is predominantly affected by satisfaction with transportation and accessibility. Conversely, mobility facilities influence satisfaction with educational environments, particularly during cold weather and assignment loads.

Our findings regarding accommodation, a significant aspect influencing students' QoL in parallel with the literature [51,54], indicate that most favor residing in dorms that provide the most economical rates. Our findings indicate that satisfaction with accommodation is contingent upon the facilities' safety, upkeep, cleanliness, and comfort. To enhance student life quality, it is crucial to ensure that living standards, storage capacity, comfort, personal space, and spatial organization do not exceed maximum capacity. This circumstance presents a security issue, as certain students express apprehension regarding potential theft. Moreover, clean, soundproof, well-ventilated, and artificially illuminated rooms, restrooms, and baths in dormitories will create essential circumstances for pleasant living and working. Single or double accommodations, housekeeping services, availability of ready-to-eat meals, and study spaces enhance overall QoL.

Research indicates that contentment with campus life, a critical determinant of overall QoL, is enhanced when university administration prioritizes student relations, considers their viewpoints, and implements initiatives to promote student well-being. The presence of job prospects in the city housing the university enhances overall satisfaction with the university. The variation in satisfaction with university life among faculties indicates that this view is associated with both academic achievement and educational quality, in addition to the administrative efficiency and spatial infrastructure of the faculty. Satisfaction with campus life rises in faculties with greater academic progress, consistent with the existing literature [48,56].

6. Limitations

Considering the limitations of the study, it is seen that the QoL of university students is a multifaceted assessment, and focusing on a specific case may limit the generalizability of the findings due to the differentiation of the built environment, university life, and personal characteristics. A further drawback may involve choosing not to compare students based on their grades or to evaluate specific students across different grade levels. Given that the quality of education is an essential factor, a comparison could be made of students' academic performances based on their transcript averages. Furthermore, financial resources related to personal characteristics are excluded from this study, which may affect the availability and quality of facilities and services. The research focuses on students' QoL over a period of time by analyzing how satisfaction with life and the built environment develops at various stages of university life, and the limitations mentioned can be addressed in future studies.

7. Conclusions and Recommendations

The study aimed to evaluate the quality of life (QoL) of university students by analyzing several dimensions of university life and the campus built environment while

integrating personal characteristics, and it utilizing the QoL index developed within the context of this research. The main conclusions can be summarized as follows:

- The university's built environment, life in the university, and individual characteristics are all effective in the QoL assessment of university students in interaction.
- The sub-dimensions affecting QoL, sorted from highest to lowest, are satisfaction with campus life, education spaces, personal (academic) development, socio-physical amenities, social perception, administrative management, accessibility and transportation, and accommodation.
- High-quality education, the primary factor for university preference, is also significant for student QoL. Students who perceived the quality of education as very good had enhanced academic development and social perception, as well as higher satisfaction with educational spaces and socio-physical facilities.
- While satisfaction with the sizes, spatial arrangement, and availability of equipment in educational spaces is essential, the effective utilization of green areas, satisfaction with dining and socializing spaces, the diversity and spatial attractiveness of social facilities, along with accessibility and affordability on campus, should be ensured for students' QoL.
- In the context of the university life dimension influencing QoL, the perception of an inclusive and multicultural environment and safety were closely linked to social perceptions.
- Satisfaction with administrative management significantly impacts all aspects of QoL, which differ among faculties.
- The statistics indicate that overpopulation in dormitories adversely affects spatial organization, comfort, personal space, and security, hence diminishing QoL.

Considering that the quality of education is a crucial determinant of university preference and QoL, it can be recommended for considering the quality of academic programs and faculty instructors. Educational environments' spatial adequacy, efficiency, and infrastructure should be regarded with equal importance as education quality. Universities should be encouraged to build more flexible and inclusive educational environments that promote academic growth and social engagement. Additionally, creating small-scale spaces for socializing in educational buildings might enhance students' daily experiences and satisfaction.

Based on the impact of socio-physical facilities, on-campus QoL is dependent upon the efficacy of green spaces and social amenities; it can be beneficial to provide a wide range of club facilities and social activities within well-maintained and organized public areas alongside indoor and outdoor recreational amenities and affordable dining options. Easily accessible open areas that promote physical activity and relaxation can enhance social interaction and community cohesion. Creating conveniently accessible open areas with an extensive mix of hard and soft surfaces can enhance activity engagement and improve student QoL by offering variations and students' experiences.

Given that the impact of socio-physical facilities on the QoL on campus depends on the effectiveness of green spaces and social amenities, it seems beneficial to provide a variety of club facilities and social activities in well-maintained and organized public spaces, as well as indoor and outdoor recreational facilities and affordable dining options. Easily accessible green spaces, which encourage physical activity and recreation through spatial amenities that combine hard and soft surfaces, can increase social interaction and life satisfaction. Regarding accommodation, state dormitories should not exceed the maximum capacity and should prioritize cleanliness and hygiene, provide suitable areas for studying and sleeping, and meticulously design the room layout. In this context, students and families should prioritize cleanliness, ready-to-eat food, and space compatibility when deciding on a dormitory.

Within the scope of campus life and social perception, which significantly impact QoL, organizing events that encourage support, a sense of belonging, and social interaction, and creating spaces that encourage this structure will create an inclusive and multicultural atmosphere at universities. Facilitating opportunities for students to network with alumni

and local companies through workshops, seminars, and mentoring programs and sharing the experiences of employers and companies in the city can improve students' employment prospects and social perception of their education, and thus their QoL.

Future research will focus on evaluating QoL in relation to students' grades or academic advancement at diverse universities with diverse dynamics or at a particular university based on the conceptual model. Comparisons between colleges or variations in students' grades and timelines can impact the QoL. Furthermore, disparities in socioeconomic position might be evaluated regarding university life or access to facilities. A further approach for future research may to examine QoL through deep learning methodologies and employ GIS for spatial data analysis. Moreover, the influence of online learning environments on students' QoL may be compared with the QoL associated with engagement in physical campus locations. These potential research areas can support processes that contribute to improving educational and management frameworks and student QoL.

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Bursa Uludağ University Social Sciences and Humanities Research and Publication Ethics Committee (protocol code: 2024-09/10 and date of 27 September 2024).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: All research data supporting the findings of this article are included within the article itself. No additional datasets were generated or analyzed beyond those presented in the manuscript.

Conflicts of Interest: The authors declare no conflicts of interest.

Appendix A. Tables Including Data

Table A1. Findings regarding item-total correlation analysis.

	Scale Mean When the Item Is Deleted	Item-Total Correlation When the Item Is Deleted	Corrected Item-Total Correlation	Multiple Correlation	Cronbach's Alpha When Item Deleted
i1	178.35	909.37	0.59	0.58	0.95
i2	178.56	914.01	0.51	0.50	0.95
i3	178.36	914.11	0.50	0.48	0.95
i4	178.34	913.45	0.53	0.60	0.95
i5	178.28	917.76	0.47	0.45	0.95
i6	178.03	916.67	0.49	0.50	0.95
i7	178.60	909.66	0.54	0.55	0.95
i8	178.58	911.00	0.54	0.54	0.95
i9	178.45	919.57	0.37	0.34	0.95
i10	178.92	908.89	0.50	0.54	0.95
i11	178.77	911.91	0.45	0.51	0.95
i12	178.52	910.71	0.53	0.57	0.95
i13	178.61	911.04	0.54	0.54	0.95
i14	178.61	913.20	0.50	0.41	0.95
i15	178.74	906.48	0.55	0.51	0.95
i16	178.35	910.29	0.56	0.54	0.95
i17	178.67	908.60	0.57	0.57	0.95
i18	178.78	919.62	0.35	0.41	0.95
i19	178.63	916.12	0.43	0.41	0.95
i20	178.25	919.02	0.39	0.42	0.95
i21	178.29	916.58	0.43	0.39	0.95
i22	178.49	919.37	0.40	0.37	0.95
i23	178.58	924.54	0.37	0.29	0.95
i24	178.57	917.83	0.41	0.41	0.95

Table A1. *Cont.*

	Scale Mean When the Item Is Deleted	Item-Total Correlation When the Item Is Deleted	Corrected Item-Total Correlation	Multiple Correlation	Cronbach's Alpha When Item Deleted
i25	178.68	914.05	0.50	0.49	0.95
i26	179.09	913.62	0.50	0.64	0.95
i27	179.07	915.33	0.49	0.62	0.95
i28	178.54	916.57	0.47	0.45	0.95
i29	179.00	911.31	0.49	0.46	0.95
i31	179.24	916.48	0.41	0.43	0.95
i32	178.81	918.36	0.43	0.47	0.95
i33	178.75	916.39	0.46	0.67	0.95
i34	178.77	914.49	0.49	0.68	0.95
i35	178.53	927.05	0.36	0.50	0.95
i36	178.67	932.80	0.30	0.55	0.95
i37	178.55	931.53	0.33	0.48	0.95
i38	178.72	931.84	0.36	0.45	0.95
i39	178.34	921.83	0.37	0.43	0.95
i40	178.28	917.28	0.45	0.51	0.95
i41	178.46	913.80	0.51	0.53	0.95
i42	178.20	917.48	0.44	0.44	0.95
i43	178.97	912.51	0.43	0.45	0.95
i44	178.56	914.22	0.55	0.45	0.95
i46	178.81	917.70	0.41	0.33	0.95
i48	178.72	916.00	0.46	0.60	0.95
i49	178.78	910.71	0.53	0.69	0.95
i50	178.91	904.77	0.62	0.64	0.95
i51	178.41	909.49	0.57	0.61	0.95
i52	178.44	908.01	0.61	0.62	0.95
i53	178.64	908.65	0.59	0.61	0.95
i54	178.61	905.16	0.62	0.58	0.95
i55	178.46	912.25	0.53	0.61	0.95
i56	178.36	907.36	0.62	0.68	0.95
i57	178.48	906.62	0.58	0.62	0.95
i58	178.41	906.30	0.62	0.66	0.95
i59	178.59	907.25	0.57	0.57	0.95
i60	178.67	914.98	0.45	0.42	0.95

Table A2. Findings regarding items and item loadings in dimensions.

Item Number	Dimension1	Dimension2	Dimension3	Dimension4	Dimension5	Dimension6	Dimension7	Dimension8
I56	0.75							
I55	0.72							
I58	0.70							
I57	0.66							
I59	0.64							
I54	0.61							
I60	0.52							
I52	0.46							
I46	0.36							
I13		0.72						
I11		0.70						
I12		0.70						
I10		0.68						
I18		0.61						
I17		0.57						
I16		0.55						

Table A2. *Cont.*

Item Number	Dimension1	Dimension2	Dimension3	Dimension4	Dimension5	Dimension6	Dimension7	Dimension8
I15		0.55						
I14		0.50						
I19		0.46						
I9		0.35						
I4			0.72					
I3			0.68					
I5			0.67					
I1			0.64					
I7			0.62					
I8			0.60					
I2			0.58					
I6			0.57					
I51			0.41					
I26				0.67				
I27				0.65				
I31				0.63				
I34				0.62				
I33				0.61				
I29				0.60				
I32				0.56				
I25				0.48				
I24				0.44				
I28				0.40				
I49					0.75			
I48					0.73			
I50					0.60			
I53					0.59			
I41						0.71		
I40						0.65		
I42						0.63		
I39						0.59		
I43						0.50		
I44						0.42		
I36							0.82	
I37							0.79	
I38							0.74	
I35							0.70	
I20								0.68
I21								0.58
I22								0.54
I23								0.38

Dimension1: satisfaction with campus life. Dimension2: satisfaction with education spaces. Dimension3: academic development. Dimension4: satisfaction with socio-physical facilities. Dimension5: satisfaction with administrative managment. Dimension6: social perception. Dimension7: satisfaction with dormitories/housing. Dimension8: accessibility and satisfaction with transportation.

Table A3. Regression weight scores of the Quality of Life Scale.

Relationships			Standard Regression Weight	Factor Loadings	S.E.	C.R.	*p*
F1	<---	Quality of life	0.43	0.84	0.04	11.55	***
F2	<---	Quality of life	1.00	0.86			
F3	<---	Quality of life	0.64	0.84	0.04	17.69	***

Table A3. *Cont.*

Relationships			Standard Regression Weight	Factor Loadings	S.E.	C.R.	*p*
F4	<---	Quality of life	0.53	0.79	0.04	14.06	***
F6	<---	Quality of life	0.49	0.81	0.04	13.65	***
F5	<---	Quality of life	0.68	0.76	0.04	18.65	***
F7	<---	Quality of life	0.27	0.42	0.03	9.12	***
F8	<---	Quality of life	0.36	0.75	0.03	10.96	***
i19	<---	F2	1.00	0.76			
i18	<---	F2	0.68	0.61	0.04	17.31	***
i17	<---	F2	0.79	0.76	0.03	23.61	***
i16	<---	F2	0.75	0.75	0.03	23.14	***
i15	<---	F2	0.82	0.74	0.04	22.48	***
i14	<---	F2	0.67	0.66	0.03	19.48	***
i13	<---	F2	0.82	0.79	0.03	25.02	***
i12	<---	F2	0.83	0.78	0.03	24.67	***
i11	<---	F2	0.84	0.72	0.04	21.79	***
i10	<---	F2	0.85	0.74	0.04	22.57	***
i9	<---	F2	0.52	0.51	0.04	14.03	***
i51	<---	F3	0.98	0.68	0.06	16.18	***
i8	<---	F3	1.00	0.68			
i7	<---	F3	1.08	0.71	0.06	16.97	***
i6	<---	F3	0.93	0.68	0.06	16.29	***
i5	<---	F3	0.92	0.68	0.06	16.22	***
i4	<---	F3	1.10	0.78	0.06	18.40	***
i3	<---	F3	1.02	0.71	0.06	16.88	***
i2	<---	F3	0.91	0.64	0.06	15.47	***
i1	<---	F3	1.13	0.78	0.06	18.46	***
i24	<---	F4	1.00	0.58			
i25	<---	F4	1.07	0.65	0.08	13.22	***
i26	<---	F4	1.16	0.70	0.08	13.81	***
i27	<---	F4	1.10	0.68	0.08	13.56	***
i28	<---	F4	0.94	0.59	0.08	12.26	***
i29	<---	F4	1.23	0.68	0.09	13.51	***
i31	<---	F4	1.05	0.58	0.09	12.21	***
i32	<---	F4	0.94	0.58	0.08	12.15	***
i33	<---	F4	0.97	0.60	0.08	12.45	***
i34	<---	F4	1.00	0.61	0.08	12.55	***
i39	<---	F6	1.00	0.56			
i40	<---	F6	1.16	0.65	0.09	12.60	***
i41	<---	F6	1.34	0.74	0.10	13.66	***
i42	<---	F6	1.19	0.66	0.09	12.80	***
i43	<---	F6	1.27	0.60	0.11	11.94	***
i44	<---	F6	1.07	0.65	0.09	12.66	***
i46	<---	F1	1.00	0.45			
i52	<---	F1	1.48	0.69	0.13	11.22	***
i54	<---	F1	1.65	0.74	0.14	11.48	***
i55	<---	F1	1.64	0.76	0.14	11.60	***
i56	<---	F1	1.87	0.85	0.16	12.09	***
i57	<---	F1	1.87	0.80	0.16	11.84	***
i58	<---	F1	1.86	0.83	0.16	11.98	***
i59	<---	F1	1.79	0.77	0.15	11.68	***
i60	<---	F1	1.43	0.63	0.13	10.72	***
i53	<---	F5	0.91	0.74	0.04	20.53	***
i50	<---	F5	1.07	0.05	23.26	***	
i49	<---	F5	1.13	0.05	24.74	***	
i48	<---	F5	1.00				

Table A3. *Cont.*

Relationships			Standard Regression Weight	Factor Loadings	S.E.	C.R.	*p*
i38	<---	F7	1.00				
i37	<---	F7	1.06	0.07	15.45	***	
i36	<---	F7	1.10	0.07	16.12	***	
i35	<---	F7	0.97	0.06	15.15	***	
i23	<---	F8	1.00				
i22	<---	F8	1.50	0.14	10.42	***	
i21	<---	F8	1.60	0.15	10.62	***	
i20	<---	F8	1.49	0.15	10.26	***	

*** $p < 0.01$.

Table A4. Fit indices of 8-Factor Model of Quality of Life Scale.

Fit Index	Value after Modification	Acceptable Fit	Good Fit
CMIN/df	3.48	**≤5**	≤3
GFI	0.87	**≥0.85**	≥0.90
IFI	0.92	**≥0.90**	≥0.95
TLI	0.91	**≥0.90**	≥0.95
CFI	0.95	**≥0.95**	≥0.97
RMSEA	0.06	**≤0.08**	≤0.05
NFI	0.911	≥0.90	≥0.95

Table A5. Findings regarding summary statistics of scale scores.

	Kolmogorov-Smirnov			Skewness	Kurtosis	Mean	S.Deviation
	Statistics	Sd	*p*				
Satisfaction with educational spaces	0.08	685	0.00	−0.30	−0.05	34.58	8.13
(Satisfaction with) Academic development	0.10	685	0.00	−0.60	0.44	30.54	6.53
Satisfaction with socio-physical facilities	0.04	685	0.02	−0.05	−0.06	29.31	6.98
Social perception	0.08	685	0.00	−0.27	0.13	19.89	4.35
Campus life satisfaction	0.09	685	0.00	−0.45	−0.02	29.21	6.99
Accessibility and satisfaction with transportation	0.11	685	0.00	−0.50	0.34	13.51	2.98
Satisfaction with dormitory/housing	0.27	685	0.00	0.27	1.23	12.66	2.84
Satisfaction with administration management.	0.12	685	0.00	−0.36	−0.33	12.08	3.59
General QoLsatisfaction	0.04	685	0.01	−0.41	0.89	181.78	30.77

Table A6. Summary statistics of scale and subscale (dimension) items.

	Expressions	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree		±Sd
		n	%	n	%	n	%	n	%	n	%	
Satisfaction with academic development	I am satisfied with the quality of teaching in my department	45	6.57	74	10.80	171	24.96	330	48.18	65	9.49	3.43 ± 1.02
	Current technological methods and tools are used in teaching	42	6.13	123	17.96	206	30.07	266	38.83	48	7.01	3.23 ± 1.02
	In my department, classroom interaction is good, and students participate actively.	36	5.26	97	14.16	176	25.69	296	43.21	80	11.68	3.42 ± 1.04
	The lecturers try to help me get the most out of the course.	34	4.96	84	12.26	180	26.28	316	46.13	71	10.36	3.45 ± 1.00
	My workload as a student in my department is appropriate for the profession for which I am a candidate.	33	4.82	74	10.80	164	23.94	345	50.36	69	10.07	3.50 ± 0.98
	Lecturers are qualified, knowledgeable, and experienced in their fields of specialization	25	3.65	50	7.30	134	19.56	334	48.76	142	20.73	3.76 ± 0.98
	Regular feedback is provided to students based on their academic performance	51	7.45	135	19.71	207	30.22	223	32.55	69	10.07	3.18 ± 1.09
	The university gives me enough information for my personal development and career planning	44	6.42	134	19.56	209	30.51	232	33.87	66	9.64	3.21 ± 1.07
Satisfaction with eduction spaces	I am satisfied with the location of my department at the university	50	7.30	133	19.42	121	17.66	298	43.50	83	12.12	3.34 ± 1.14
	The physical facilities of the building where I study are adequate and comfortable for the educational environment	114	16.64	153	22.34	173	25.26	199	29.05	46	6.72	2.87 ± 1.20
	Class size is good for the number of students	110	16.06	116	16.93	172	25.11	231	33.72	56	8.18	3.01 ± 1.22
	I am satisfied with the location of my classroom in the building	61	8.91	95	13.87	191	27.88	279	40.73	59	8.61	3.26 ± 1.09
	Classroom organization is efficient for the education	59	8.61	115	16.79	200	29.20	271	39.56	40	5.84	3.17 ± 1.06
	The building where I study is clean and well-maintained	56	8.32	122	17.81	200	29.20	254	37.08	52	7.59	3.18 ± 1.08
	Projector, board, computer, screen, etc.) are sufficient and of good quality	77	11.24	155	22.63	168	24.53	229	33.43	56	8.18	3.04 ± 1.16
	The lighting level of my classroom is sufficient	32	4.67	104	15.18	171	24.96	294	42.92	84	12.26	3.43 ± 1.04
	The acoustic environment of the classroom is comfortable for learning	54	7.88	140	20.44	219	31.97	216	31.53	56	8.18	3.12 ± 1.07
	My classroom is warm in winter and not too hot in summer, climatic comfort is good	95	13.87	145	21.17	180	26.28	192	28.03	73	10.66	3.00 ± 1.21
	There are comfortable study areas on campus where I can work outside of class.	56	8.18	149	21.75	182	26.57	228	33.28	70	10.22	3.16 ± 1.12
Accessibility and satisfaction with public transportation	The campus is easy to reach from where I live.	46	6.72	82	11.97	137	20.00	301	43.94	119	17.37	3.53 ± 1.11
	The campus is a walkable campus; I can reach most places on campus on foot	42	6.13	93	13.58	146	21.31	296	43.21	108	15.77	3.49 ± 1.10
	Transportation facilities are adequate and affordable	49	7.15	110	16.06	191	27.88	262	38.25	73	10.66	3.29 ± 1.08
	Parking space is sufficient on campus	30	4.38	114	16.64	277	40.44	218	31.82	46	6.72	3.20 ± 0.94

Table A6. *Cont.*

	Expressions	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree		±Sd
		n	%	n	%	n	%	n	%	n	%	
Satisfaction with socio-physical facilities	Green space on campus is sufficient and of good quality	53	7.74	138	20.15	173	25.26	250	36.50	71	10.36	3.22 ± 1.12
	The campus is clean and well-maintained	55	8.03	138	20.15	213	31.09	241	35.18	38	5.55	3.10 ± 1.04
	Outdoor sports facilities are adequate and useful	102	14.89	184	26.86	245	35.77	128	18.69	26	3.80	2.70 ± 1.05
	Indoor sports areas are adequate and useful	100	14.60	164	23.94	276	40.29	125	18.25	20	2.92	2.71 ± 1.02
	Club facilities for students are adequate and good.	46	6.72	105	15.33	228	33.28	249	36.35	57	8.32	3.24 ± 1.03
	I am satisfied with the food and beverage facilities on campus	112	16.35	178	25.99	177	25.84	183	26.72	35	5.11	2.78 ± 1.16
	Recreational activities for students on campus are sufficient.	146	21.17	216	31.53	164	23.94	124	18.10	35	5.11	2.54 ± 1.16
	On-campus housing is adequate and reasonably priced	70	10.22	128	18.69	283	41.31	157	22.92	47	6.86	2.98 ± 1.05
	I am satisfied with the health services offered at my university	69	10.07	111	16.20	271	39.56	194	28.32	40	5.84	3.04 ± 1.04
	I am satisfied with the comfort of the place where I receive health services at my university	77	11.24	106	15.47	272	39.71	190	27.74	40	5.84	3.01 ± 1.06
Satisfaction with dormitory/housing	My dormitory is safe	32	4.67	32	4.67	418	61.02	139	20.29	64	9.34	3.25 ± 0.87
	My dormitory is well-maintained and clean.	41	5.99	62	9.05	406	59.27	128	18.69	48	7.01	3.12 ± 0.89
	I am satisfied with the location of my dormitory	34	4.96	50	7.30	394	57.52	134	19.56	73	10.66	3.24 ± 0.92
	The room I stay in is generally comfortable and suitable for my needs.	51	7.45	70	10.22	397	57.96	120	17.52	47	6.86	3.06 ± 0.92
Social perception	I am satisfied with the multicultural diversity in my faculty	44	6.42	72	10.51	194	28.32	287	41.90	88	12.85	3.44 ± 1.05
	I am satisfied with gender equality among students	42	6.13	72	10.51	159	23.21	327	47.74	85	12.41	3.50 ± 1.04
	I feel physically and emotionally safe on campus	41	5.99	100	14.60	209	30.51	265	38.69	70	10.22	3.33 ± 1.04
	The campus is safe until dark (daytime).	36	5.26	76	11.09	131	19.12	336	49.05	106	15.47	3.58 ± 1.04
	The campus is safe after dark (at night)	128	18.69	157	22.92	177	25.84	161	23.50	62	9.05	2.81 ± 1.24
	Student organizations (unions, clubs, etc.) and facilities are supported by the university	31	4.53	107	15.62	277	40.44	217	31.68	53	7.74	3.22 ± 0.96
	I regularly participate in university-related leisure activities (such as sports or fairs)	68	9.93	176	25.69	193	28.18	200	29.20	48	7.01	2.98 ± 1.11
Administrative management sat.	Administrative staff (such as student affairs) have sufficient knowledge about their duties.	79	11.53	99	14.45	243	35.47	229	33.43	35	5.11	3.06 ± 1.07
	Administrative staff treat students with care	85	12.41	109	15.91	245	35.77	210	30.66	36	5.26	3.00 ± 1.08
	Questions and issues are effectively addressed at the university	85	12.41	162	23.65	227	33.14	174	25.40	37	5.40	2.88 ± 1.09

Table A6. *Cont.*

	Expressions	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree		±Sd
		n	%	n	%	n	%	n	%	n	%	
Satisfaction with campus life	I am satisfied with the quality of the lecturers, compared to my expectations	44	6.42	88	12.85	196	28.61	283	41.31	74	10.80	3.37 ± 1.05
	I am satisfied with the academic programs, compared to my expectations	39	5.69	100	14.60	202	29.49	276	40.29	68	9.93	3.34 ± 1.03
	I am satisfied with the administrative staff compared to my expectations	57	8.32	118	17.23	220	32.12	251	36.64	39	5.69	3.14 ± 1.04
	I am satisfied with campus life compared to my expectations	53	7.74	132	19.27	199	29.05	245	35.77	56	8.18	3.17 ± 1.08
	I am generally satisfied with my university life	31	4.53	131	19.12	177	25.84	278	40.58	68	9.93	3.32 ± 1.04
	I am happy to belong to this university	34	4.96	91	13.28	200	29.20	274	40.00	86	12.55	3.42 ± 1.03
	I feel like a member of the university community	51	7.45	112	16.35	184	26.86	257	37.52	81	11.82	3.30 ± 1.11
	I would recommend my university to someone else	46	6.72	86	12.55	200	29.20	275	40.15	78	11.39	3.37 ± 1.06
	If I faced the same choice again, I would choose the same university	62	9.05	105	15.33	231	33.72	212	30.95	75	10.95	3.19 ± 1.11

Table A7. Findings on the comparison of scale and subscale scores by gender.

Scale and Dimension	Group	n	$\bar{X} \pm$ SD	t	Sd	*p*
Satisfaction with education spaces	Female Male	294 390	35.93 ± 7.93 33.55 ± 8.16	3.82	682	0.00
Academic development	Female Male	294 390	29.62 ± 6.67 31.22 ± 6.36	−3.19	682	0.00
Socio-physical facility satisfaction	Female Male	294 390	29.53 ± 7.11 29.12 ± 6.88	0.76	682	0.45
Social perception	Female Male	294 390	19.90 ± 4.55 19.86 ± 4.20	0.13	682	0.90
Campus life satisfaction	Female Male	294 390	28.52 ± 7.34 29.72 ± 6.68	−2.22	682	0.03
Accessibility and public transportation satisfaction	Female Male	294 390	13.62 ± 2.98 13.43 ± 2.99	0.81	682	0.42
Dormitory/housing satisfaction	Female Male	294 390	12.40 ± 2.93 12.87 ± 2.76	−2.14	682	0.03
Administrative management perception	Female Male	294 390	11.73 ± 3.82 12.34 ± 3.39	−2.21	682	0.03
General QoL	Female Male	294 390	181.26 ± 31.74 182.12 ± 30.07	−0.36	682	0.72

Table A8. Findings on the comparison of scale and subscale scores by age.

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	z	*p*
Satisfaction with education spaces	Between ages 18 and 24 Between ages 24 and 28	646 38	34.37 ± 8.09 37.97 ± 8.37	−2.50	0.01
Academic development	Between ages 18 and 24 Between ages 24 and 28	646 38	30.46 ± 6.51 32.37 ± 6.47	−1.22	0.22
Socio-physical facility satisfaction	Between ages 18 and 24 Between ages 24 and 28	646 38	29.26 ± 7.01 30.39 ± 6.39	−1.20	0.23
Social perception	Between ages 18 and 24 Between ages 24 and 28	646 38	19.87 ± 4.31 20.03 ± 5.13	−0.13	0.89
Campus life satisfaction	Between ages 18 and 24 Between ages 24 and 28	646 38	29.23 ± 6.90 29.32 ± 8.02	−0.45	0.65
Accessibility and public transportation satisfaction	Between ages 18 and 24 Between ages 24 and 28	646 38	13.46 ± 2.95 14.42 ± 3.41	−2.24	0.03
Dormitory/housing satisfaction	Between ages 18 and 24 Between ages 24 and 28	646 38	12.70 ± 2.87 12.03 ± 2.28	−1.45	0.15
Administrative management perception	Between ages 18 and 24 Between ages 24 and 28	646 38	12.06 ± 3.58 12.55 ± 3.81	−0.40	0.69
General QoL	Between ages 18 and 24 Between ages 24 and 28	646 38	181.41 ± 30.60 189.08 ± 32.88	−1.15	0.25

Table A9. Findings on the comparison of scale and subscale scores by nationality.

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	z	*p*
Satisfaction with education spaces	TR Syria	629 56	34.45 ± 8.17 36.02 ± 7.66	−0.86	0.39
Academic development	TR Syria	629 56	30.52 ± 6.51 30.79 ± 6.82	−0.04	0.96
Socio-physical facility satisfaction	TR Syria	629 56	29.16 ± 7.01 31.04 ± 6.39	−1.92	0.05
Social perception	TR Syria	629 56	19.85 ± 4.33 20.30 ± 4.56	−0.68	0.49
Campus life satisfaction	TR Syria	629 56	29.16 ± 6.97 29.70 ± 7.17	−0.40	0.69
Accessibility and public transportation satisfaction	TR Syria	629 56	13.44 ± 2.97 14.34 ± 2.96	−2.40	0.02
Dormitory/housing satisfaction	TR Syria	629 56	12.65 ± 2.87 12.80 ± 2.52	−0.25	0.80
Administrative management perception	TR Syria	629 56	12.09 ± 3.56 12.02 ± 3.98	−0.36	0.72
General QoL	TR Syria	629 56	181.32 ± 30.56 187.00 ± 32.82	−0.96	0.34

Table A10. Findings on the comparison of scale and subscale scores by accommodation.

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	F	*p*	Difference
Satisfaction with education spaces	At home with my family	189	35.79 ± 8.28	2.88	0.02	1 > 2
	Apart flat	106	32.96 ± 7.74			
	At home with my friends	106	35.54 ± 8.06			
	State dormitory	187	34.13 ± 8.43			
	Private dormitory	97	33.77 ± 7.43			
Academic development	At home with my family	189	31.25 ± 6.59	1.15	0.33	
	Apart flat	106	30.35 ± 5.13			
	At home with my friends	106	30.40 ± 6.48			
	State dormitory	187	30.53 ± 6.90			
	Private dormitory	97	29.55 ± 7.08			
Socio-physical facility satisfaction	At home with my family	189	29.83 ± 6.97	0.79	0.53	
	Apart flat	106	28.48 ± 7.27			
	At home with my friends	106	28.99 ± 7.05			
	State dormitory	187	29.58 ± 6.79			
	Private dormitory	97	29.05 ± 6.99			
Social perception	At home with my family	189	20.10 ± 4.80	0.56	0.70	
	Apart flat	106	19.89 ± 3.89			
	At home with my friends	106	19.63 ± 3.97			
	State dormitory	187	19.62 ± 4.39			
	Private dormitory	97	20.26 ± 4.27			
Campus life satisfaction	At home with my family	189	28.99 ± 7.54	0.25	0.91	
	Apart flat	106	29.35 ± 7.08			
	At home with my friends	106	29.19 ± 6.66			
	State dormitory	187	29.56 ± 6.97			
	Private dormitory	97	28.82 ± 6.20			
Accessibility and public transportation satisfaction	At home with my family	189	13.19 ± 3.11	2.06	0.08	
	Apart flat	106	13.55 ± 2.99			
	At home with my friends	106	13.90 ± 2.71			
	State dormitory	187	13.83 ± 2.95			
	Private dormitory	97	13.08 ± 2.99			
Dormitory/housing satisfaction	At home with my family	189	12.16 ± 1.50	14.74	0.00	5 > 1, 2, 3, 4
	Apart flat	106	13.01 ± 2.55			
	At home with my friends	106	12.00 ± 1.96			
	State dormitory	187	12.41 ± 3.56			
	Private dormitory	97	14.48 ± 3.56			
Administrative management perception	At home with my family	189	12.00 ± 3.57	0.96	0.43	
	Apart flat	106	12.44 ± 3.60			
	At home with my friends	106	11.87 ± 3.61			
	State dormitory	187	12.32 ± 3.61			
	Private dormitory	97	11.64 ± 3.57			
General QoL	At home with my family	189	183.31 ± 32.22	0.24	0.92	
	Apart flat	106	180.03 ± 28.06			
	At home with my friends	106	181.51 ± 28.20			
	State dormitory	187	181.97 ± 32.69			
	Private dormitory	97	180.66 ± 30.01			

Table A11. Findings on the Comparison of Scale and Subscale Scores by Neighborhood.

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	KW	*p*	Difference
Satisfaction with education spaces	Görükle [1]	358	33.99 ± 8.12	6.34	0.00	4 > 1, 2, 5
	Nilüfer [2]	195	34.12 ± 8.22			
	Osmangazi [3]	75	36.37 ± 6.78			
	Yıldırım [4]	36	40.22 ± 6.66			
	Other [5]	21	32.71 ± 10.10			
Academic development	Görükle [1]	358	30.36 ± 6.61	5.80	0.00	4 > 1, 2, 5 and 1, 2, 3 > 5
	Nilüfer [2]	195	30.48 ± 6.09			
	Osmangazi [3]	75	30.84 ± 5.95			
	Yıldırım [4]	36	34.50 ± 5.42			
	Other [5]	21	26.29 ± 9.47			
Socio-physical facility satisfaction	Görükle [1]	358	29.15 ± 7.12	2.95	0.02	4 > 1, 2
	Nilüfer [2]	195	28.85 ± 6.84			
	Osmangazi [3]	75	29.84 ± 6.42			
	Yıldırım [4]	36	32.94 ± 4.93			
	Other [5]	21	28.33 ± 9.15			
Social perception	Görükle [1]	358	19.70 ± 4.15	2.14	0.07	
	Nilüfer [2]	195	19.89 ± 4.33			
	Osmangazi [3]	75	20.77 ± 4.47			
	Yıldırım [4]	36	20.83 ± 4.55			
	Other [5]	21	18.24 ± 6.32			
Campus life satisfaction	Görükle [1]	358	29.51 ± 7.04	2.91	0.06	
	Nilüfer [2]	195	28.21 ± 6.55			
	Osmangazi [3]	75	29.91 ± 6.56			
	Yıldırım [4]	36	31.47 ± 7.11			
	Other [5]	21	26.90 ± 9.57			
Accessibility and public transportation satisfaction	Görükle [1]	358	13.62 ± 2.87	1.69	0.15	
	Nilüfer [2]	195	13.46 ± 3.07			
	Osmangazi [3]	75	13.37 ± 3.06			
	Yıldırım [4]	36	13.92 ± 2.98			
	Other [5]	21	12.00 ± 3.46			
Dormitory/housing satisfaction	Görükle [1]	358	12.78 ± 2.95	1.90	0.11	
	Nilüfer [2]	195	12.86 ± 3.01			
	Osmangazi [3]	75	12.03 ± 2.49			
	Yıldırım [4]	36	12.03 ± 0.70			
	Other [5]	21	12.24 ± 2.47			
Administrative management perception	Görükle [1]	358	12.26 ± 3.74	4.01	0.00	3 > 2
	Nilüfer [2]	195	11.38 ± 3.37			
	Osmangazi [3]	75	12.85 ± 2.86			
	Yıldırım [4]	36	13.06 ± 3.64			
	Other [5]	21	11.19 ± 4.26			
General QoL	Görükle [1]	358	181.37 ± 30.79	4.67	0.00	4 > 1, 2, 5
	Nilüfer [2]	195	179.24 ± 28.93			
	Osmangazi [3]	75	185.99 ± 27.80			
	Yıldırım [4]	36	198.97 ± 27.59			
	Other [5]	21	167.90 ± 47.75			

Table A12. Findings on the comparison of scale and subscale scores by faculty.

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	KW	*p*	Difference
Satisfaction with education spaces	Faculty of Education	39	36.59 ± 8.87	4.32	0.00	2, 6 > 3
	Fac. of Economics and Administrative Sciences	81	36.04 ± 8.15			
	Faculty of Architecture	250	32.51 ± 8.41			
	Faculty of Medicine	73	35.38 ± 6.00			
	Fcaulty of Fine Arts	12	35.08 ± 9.05			
	Faculty of Engineering	128	36.88 ± 7.30			
	Faculty of Arts & Sciences	53	33.49 ± 8.71			
	Faculty of Sports Sciences	22	35.18 ± 7.90			
	Faculty of Agriculture	26	34.96 ± 7.95			
Academic development	Faculty of Education	39	32.49 ± 6.66	2.75	0.01	4 > 6
	Fac. of Economics and Administrative Sciences	81	30.07 ± 6.49			
	Faculty of Architecture	250	31.05 ± 6.91			
	Faculty of Medicine	73	32.01 ± 5.74			
	Fcaulty of Fine Arts	12	32.17 ± 6.51			
	Faculty of Engineering	128	28.88 ± 6.05			
	Faculty of Arts & Sciences	53	28.98 ± 5.73			
	Faculty of Sports Sciences	22	30.27 ± 7.62			
	Faculty of Agriculture	26	31.27 ± 5.78			
Socio-physical facility satisfaction	Faculty of Education	39	31.79 ± 7.56	3.14	0.00	1, 4 > 3
	Fac. of Economics and Administrative Sciences	81	29.78 ± 7.13			
	Faculty of Architecture	250	27.87 ± 7.33			
	Faculty of Medicine	73	31.10 ± 6.37			
	Fcaulty of Fine Arts	12	29.92 ± 6.88			
	Faculty of Engineering	128	30.08 ± 6.48			
	Faculty of Arts & Sciences	53	28.26 ± 5.54			
	Faculty of Sports Sciences	22	30.64 ± 4.97			
	Faculty of Agriculture	26	29.92 ± 8.03			
Social perception	Faculty of Education	39	21.03 ± 4.47	1.87	0.06	
	Fac. of Economics and Administrative Sciences	81	19.83 ± 5.01			
	Faculty of Architecture	250	19.46 ± 4.02			
	Faculty of Medicine	73	20.85 ± 4.96			
	Fcaulty of Fine Arts	12	20.50 ± 3.21			
	Faculty of Engineering	128	19.72 ± 4.18			
	Faculty of Arts & Sciences	53	18.98 ± 3.59			
	Faculty of Sports Sciences	22	21.23 ± 5.76			
	Faculty of Agriculture	26	20.88 ± 3.95			
Campus life satisfaction	Faculty of Education	39	30.44 ± 6.39	2.46	0.01	4 > 7
	Fac. of Economics and Administrative Sciences	81	30.31 ± 7.09			
	Faculty of Architecture	250	29.35 ± 7.32			
	Faculty of Medicine	73	31.32 ± 5.88			
	Fcaulty of Fine Arts	12	27.17 ± 7.16			
	Faculty of Engineering	128	28.26 ± 6.33			
	Faculty of Arts & Sciences	53	27.17 ± 6.97			
	Faculty of Sports Sciences	22	27.86 ± 8.35			
	Faculty of Agriculture	26	28.27 ± 6.42			

Table A12. *Cont.*

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	KW	*p*	Difference
Accessibility and public transportation satisfaction	Faculty of Education	39	13.92 ± 3.65	1.54	0.14	
	Fac. of Economics and Administrative Sciences	81	13.47 ± 3.19			
	Faculty of Architecture	250	13.33 ± 2.99			
	Faculty of Medicine	73	13.70 ± 2.60			
	Fcaulty of Fine Arts	12	12.50 ± 2.54			
	Faculty of Engineering	128	13.83 ± 2.90			
	Faculty of Arts & Sciences	53	14.17 ± 2.44			
	Faculty of Sports Sciences	22	12.91 ± 3.22			
	Faculty of Agriculture	26	12.35 ± 3.21			
Dormitory/housing satisfaction	Faculty of Education	39	12.49 ± 3.49	1.53	0.14	
	Fac. of Economics and Administrative Sciences	81	12.62 ± 3.18			
	Faculty of Architecture	250	12.68 ± 2.74			
	Faculty of Medicine	73	13.56 ± 2.60			
	Fcaulty of Fine Arts	12	12.83 ± 3.07			
	Faculty of Engineering	128	12.68 ± 2.82			
	Faculty of Arts & Sciences	53	12.17 ± 2.15			
	Faculty of Sports Sciences	22	11.68 ± 1.73			
	Faculty of Agriculture	26	12.31 ± 3.74			
Administrative managemenet	Faculty of Education	39	12.85 ± 4.11	4.01	0.01	3 > 6
	Fac. of Economics and Administrative Sciences	81	11.95 ± 3.52			
	Faculty of Architecture	250	12.82 ± 3.38			
	Faculty of Medicine	73	12.47 ± 3.71			
	Fcaulty of Fine Arts	12	12.25 ± 3.02			
	Faculty of Engineering	128	11.08 ± 3.39			
	Faculty of Arts & Sciences	53	11.19 ± 3.29			
	Faculty of Sports Sciences	22	10.77 ± 3.58			
	Faculty of Agriculture	26	11.31 ± 4.44			
General QoL	Faculty of Education	39	191.59 ± 36.10	1.92	0.06	
	Fac. of Economics and Administrative Sciences	81	184.06 ± 35.43			
	Faculty of Architecture	250	179.08 ± 32.65			
	Faculty of Medicine	73	190.38 ± 25.27			
	Faculty of Fine Arts	12	182.42 ± 30.75			
	Faculty of Engineering	128	181.40 ± 25.76			
	Faculty of Arts & Sciences	53	174.42 ± 24.98			
	Faculty of Sports Sciences	22	180.55 ± 29.68			
	Faculty of Agriculture	26	181.27 ± 31.03			

Table A13. Findings on the comparison of scale and subscale scores by university preference reason.

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	KW	*p*	Difference
Satisfaction with education spaces	My family and/or close friends live here	82	35.07 ± 8.19	4.85	0.00	5 > 3, 4, 6
	I think there are more job opportunities in Bursa after graduation	95	34.88 ± 7.70			
	I find it easier to study university in Bursa in terms of life opportunities	68	32.93 ± 7.95			
	I find it more attractive to study at university in Bursa than in my hometown	62	32.29 ± 8.91			
	I find the education quality of the university very good	110	36.75 ± 8.17			
	My university exam score was good enough here	22	29.45 ± 9.11			

Table A13. *Cont.*

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	KW	*p*	Difference
Academic development	My family and/or close friends live here	82	31.05 ± 5.11	7.08	0.00	5 > 3, 4, 6
	I think there are more job opportunities in Bursa after graduation	95	31.08 ± 5.83			
	I find it easier to study university in Bursa in terms of life opportunities	68	30.28 ± 6.68			
	I find it more attractive to study at university in Bursa than in my hometown	62	28.27 ± 7.38			
	I find the education quality of the university very good	110	33.23 ± 7.02			
	My university exam score was good enough here	22	26.77 ± 4.80			
Socio-physical facility satisfaction	My family and/or close friends live here	82	30.32 ± 5.86	5.40	0.00	5 > 3, 4, 6
	I think there are more job opportunities in Bursa after graduation	95	29.87 ± 7.05			
	I find it easier to study university in Bursa in terms of life opportunities	68	28.09 ± 6.78			
	I find it more attractive to study at university in Bursa than in my hometown	62	27.60 ± 6.63			
	I find the education quality of the university very good	110	31.84 ± 6.99			
	My university exam score was good enough here	22	26.36 ± 7.53			
Social perception	My family and/or close friends live here	82	19.90 ± 4.08	3.16	0.01	5 > 4, 6
	I think there are more job opportunities in Bursa after graduation	95	19.96 ± 4.74			
	I find it easier to study university in Bursa in terms of life opportunities	68	19.74 ± 4.31			
	I find it more attractive to study at university in Bursa than in my hometown	62	18.66 ± 4.39			
	I find the education quality of the university very good	110	20.79 ± 4.34			
	My university exam score was good enough here	22	17.59 ± 3.49			
Campus life satisfaction	My family and/or close friends live here	82	28.99 ± 6.65	9.99	0.00	1, 3 > 6/2 > 4, 6/3, 4 < 5
	I think there are more job opportunities in Bursa after graduation	95	30.62 ± 6.88			
	I find it easier to study university in Bursa in terms of life opportunities	68	28.37 ± 7.66			
	I find it more attractive to study at university in Bursa than in my hometown	62	26.06 ± 6.86			
	I find the education quality of the university very good	110	31.60 ± 6.61			
	My university exam score was good enough here	22	23.00 ± 5.44			
Accessibility and public transportation satisfaction	My family and/or close friends live here	82	13.65 ± 2.83	0.84	0.52	
	I think there are more job opportunities in Bursa after graduation	95	13.68 ± 3.16			
	I find it easier to study university in Bursa in terms of life opportunities	68	13.50 ± 2.18			
	I find it more attractive to study at university in Bursa than in my hometown	62	13.29 ± 3.00			
	I find the education quality of the university very good	110	13.85 ± 3.41			
	My university exam score was good enough here	22	12.55 ± 3.57			

Table A13. *Cont.*

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	KW	*p*	Difference
Administrative managemenet	My family and/or close friends live here	82	12.17 ± 2.88	2.98	0.01	5 > 4
	I think there are more job opportunities in Bursa after graduation	95	12.11 ± 3.61			
	I find it easier to study university in Bursa in terms of life opportunities	68	11.57 ± 3.84			
	I find it more attractive to study at university in Bursa than in my hometown	62	11.35 ± 4.05			
	I find the education quality of the university very good	110	13.13 ± 3.67			
	My university exam score was good enough here	22	11.14 ± 2.78			
General QoL	My family and/or close friends live here	82	183.38 ± 29.45	8.77	0.00	1, 2 > 6/5 > 3, 4, 6
	I think there are more job opportunities in Bursa after graduation	95	184.85 ± 27.97			
	I find it easier to study university in Bursa in terms of life opportunities	68	176.50 ± 29.38			
	I find it more attractive to study at university in Bursa than in my hometown	62	170.05 ± 31.24			
	I find the education quality of the university very good	110	194.25 ± 32.32			
	My university exam score was good enough here	22	159.45 ± 26.66			

Table A14. Findings on the comparison of scale and subscale scores by faculty preference reason.

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	KW	*p*	Difference
Satisfaction with education spaces	To be close to my friends	22	35.64 ± 8.19	1.40	0.24	
	Because it's my dream job	208	34.37 ± 8.39			
	Because there are more job opportunities after graduation	88	36.03 ± 7.39			
	My university exam score was good enough here	90	33.70 ± 8.77			
Academic development	To be close to my friends	22	27.09 ± 7.67	5.16	0.00	2, 3 > 1
	Because it's my dream job	208	31.66 ± 6.58			
	Because there are more job opportunities after graduation	88	31.83 ± 6.04			
	My university exam score was good enough here	90	29.62 ± 6.56			
Socio-physical facility satisfaction	To be close to my friends	22	28.32 ± 4.29	1.75	0.16	
	Because it's my dream job	208	30.05 ± 7.13			
	Because there are more job opportunities after graduation	88	31.00 ± 6.25			
	My university exam score was good enough here	90	28.93 ± 7.49			
Social perception	To be close to my friends	22	18.77 ± 2.64	4.98	0.00	3 > 4
	Because it's my dream job	208	19.89 ± 4.43			
	Because there are more job opportunities after graduation	88	21.16 ± 4.44			
	My university exam score was good enough here	90	18.78 ± 4.31			
Campus life satisfaction	To be close to my friends	22	27.00 ± 7.52	5.78	0.00	3 > 4
	Because it's my dream job	208	30.07 ± 7.38			
	Because there are more job opportunities after graduation	88	30.59 ± 6.56			
	My university exam score was good enough here	90	26.98 ± 6.80			

Table A14. *Cont.*

Scale and Dimension	Group	n	$\bar{X} \pm$ Sd	KW	*p*	Difference
Accessibility and public transportation satisfaction	To be close to my friends	22	13.18 ± 1.82	1.29	0.28	
	Because it's my dream job	208	13.68 ± 3.05			
	Because there are more job opportunities after graduation	88	14.01 ± 3.11			
	My university exam score was good enough here	90	13.19 ± 3.08			
Dormitory/housing satisfaction	To be close to my friends	22	12.23 ± 2.18	1.06	0.37	
	Because it's my dream job	208	12.50 ± 2.80			
	Because there are more job opportunities after graduation	88	13.02 ± 2.72			
	My university exam score was good enough here	90	12.44 ± 2.56			
Administrative managemenet	To be close to my friends	22	11.82 ± 3.74	0.12	0.95	
	Because it's my dream job	208	12.28 ± 3.68			
	Because there are more job opportunities after graduation	88	12.18 ± 3.40			
	My university exam score was good enough here	90	12.14 ± 3.62			
General QoL	To be close to my friends	22	174.05 ± 25.84	3.85	0.01	3 > 4
	Because it's my dream job	208	184.50 ± 33.13			
	Because there are more job opportunities after graduation	88	189.83 ± 28.37			
	My university exam score was good enough here	90	175.79 ± 28.84			

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