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University Students' Perceptions of the Quality of Life at University and Their Motivations for Recreational Activities

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Abstract

The aim of the study is to investigate the motivations of university students in Turkey to engage in recreational activities and their perceptions of the quality of life at university. Relational survey model, one of the quantitative research methods, was used in the study. The sample of the study consisted of 312 university students studying in five different state universities in Turkey in the academic year 2023-2024. University Quality of Life Scale and Recreational Activity Motivation Scale were used as data collection instruments. Data were analyzed using independent samples t-test, ANOVA test, and regression analysis. The results show that the level of motivation for recreational activities among university students is generally high. When the perception of quality of life at the university is examined, it is found that the perception of the participants is at a medium level. The difference in the mean scores of intrinsic motivation, utility, extrinsic motivation, and the total scale of students' leisure activity motivation scores in terms of gender was not significant. When the quality of life perception scores was evaluated in terms of gender, the difference in the mean scores calculated for instructor-student communication, benefit, identity, social opportunities, participation in decisions, student interaction, classroom environment, and the whole scale was not significant. It was also observed that the recreational motivation scores of the sophomores were significantly higher than the other grades, and the general university quality of life scores did not differ significantly by grade. The results show that recreational motivation explains about 15% of the change in perceived university quality of life. In this framework, it is suggested that university administrators should improve the quality of university life of students through the development of social facilities and recreational programs.

Introduction

The university environment is defined as a platform where young adults' processes of independence and identity formation accelerate. During this period, individuals focus both on their academic career and have the opportunity to discover new areas of interest by expanding their social circles. Therefore, the university campus is not only composed of classrooms and laboratories, but is also characterized by the cultural, artistic, sports and social

activities it offers to students (Tokay Argan & Mersin, 2021).

Defining the quality of university life refers not only to academic excellence or campus infrastructure, but also to a multifaceted system that supports students physically, socially, emotionally, and intellectually (Tonon, 2021). The physical, social, and academic opportunities provided by the university environment are among the key elements that determine how students experience their educational process. In this process, students' perceptions of the quality of university life have a crucial impact on their academic performance, psychological well-being, and overall life satisfaction (Kurt, 2022; Çolak, 2024).

The adaptation process of new students to the campus environment plays a crucial role in students' perception of quality of life. The ability of students to participate in social, cultural, and sports activities in the time remaining from academic studies makes the university experience more qualified and meaningful (Coşkun & Dilmaç, 2024). Especially in modern campuses, many opportunities are offered, from sports facilities to art environments, from student clubs to community projects. The existence of these opportunities allows students to use their free time more efficiently and to develop themselves by turning to different interests (Demirel et al., 2021). At this point, recreation appears as a set of activities that protect students' physical and mental health, strengthen their social networks, and increase their personal happiness (Bozavli, 2023).

Although the concept of recreation has historically been defined as leisure activities, today it has gained a broader meaning and is addressed with different dimensions such as healthy living, social interaction, personal development and stress management (Thomas & Rosenberg, 2003). Participation of university students in recreational activities provides benefits in terms of physical health and makes a significant contribution to reducing risks such as obesity, cardiovascular disorders and mental health problems (Kotarska et al., 2021). In addition, recreational activities are also effective in strengthening social bonds, giving students the opportunity to meet and interact with different groups of friends. This social interaction reduces students' feelings of loneliness, improves their communication skills, and creates a collective sense of belonging (Ning et al., 2024). The recreational opportunities offered on university campuses can vary from club activities to art activities, from sports competitions to cultural trips, depending on students' interests. Thus, each student can enrich his or her university life experience by choosing the most appropriate activity according to his or her motivation and goals (Tarafdar et al., 2020).

In this context, the relationship between university quality of life and recreational motivation emerges as a critical issue for student success and well-being in higher education. Uncovering the nature of this relationship is important in terms of determining how students' physical, emotional, and social needs are met (Budiharso & Tarman, 2020; Soyer et al., 2017). In particular, the increasing use of technology is radically changing students' leisure habits and may affect their interest in participating in recreational activities. In this context, a better understanding of the recreational motivations of university students can help them adopt a healthy lifestyle by moving away from risk factors such as digital addiction (Farmer & Lloyd, 2024). The role of recreational activities for this purpose is important in terms of reducing students' stress levels, strengthening social relationships, and increasing their satisfaction with school life (Ece et al., 2022). In this context, the aim of this study is to examine

the motivations for recreational activities and perceptions of university quality of life of students studying at the university level in Turkey.

University Quality of Life

The perception of university quality of life refers to a subjective judgment about the level of satisfaction of students' academic, social, cultural, and psychological needs in higher education institutions. This perception is shaped by the interaction between students' expectations and experiences of the university (Khatiry & Abdallah, 2023; Selwyn & Aagaard, 2021). In the literature, factors that determine the quality of university life include academic support services, access to learning materials, physical infrastructure of the campus, housing and food facilities, opportunities for social interaction, and psychological counseling (Demirel et al., 2021; Tonon, 2021; Yalçın & Erzeybek, 2023). In this context, various scales and indicators have been developed to measure student satisfaction, and holistic models have been proposed that include social and emotional well-being as well as academic achievement. Especially with the transition to a student-centered learning paradigm, the perception of quality of life at universities has become an important part of institutions' strategic plans (Geven & Yaşartürk, 2022).

While the social and cultural diversity of university campuses contributes to the personal development of students, the interaction between individuals from different countries or cities increases global awareness (Çetinkaya & Honça, 2017). Students' level of participation in campus activities and the quality of these activities have a direct impact on their perception of the quality of life at university (Kotarska et al., 2021; Yalçın & Erzeybek, 2023). Therefore, many factors, from social clubs to sports facilities, libraries to research laboratories, play a crucial role in shaping this perception (Garn & Simonton, 2022). At the same time, students' economic resources, family structures, and cultural backgrounds may also differentiate their perceptions of the quality of life at the university (Sunden, 2019). This differentiation places a responsibility on higher education institutions to provide flexible and adaptable services to meet the diversity of students. Improving perceptions of university quality of life can lead to positive outcomes such as reduced dropout rates, increased academic success, and post-graduation satisfaction (Soyer et al., 2017). Student satisfaction with university life also increases the likelihood of emotional commitment to the institution and future alumni support. Therefore, the perception of university quality of life is a strategic concept that is important at both individual and institutional levels (Ciccarelli, 2002; Coşkun et al., 2022; Ersöz et al., 2023).

When conceptualizing quality of life at universities, the interaction between physical conditions and psychosocial climate should not be ignored. Physical conditions include more tangible elements such as the condition of classrooms, housing, and the adequacy of facilities such as libraries and gymnasiums (Adarkwah & Huang, 2023). Psychosocial climate, on the other hand, refers to whether students feel socially safe, whether they are in a supportive environment, and the quality of their friendships (Tokay Argan & Mersin, 2021). These two dimensions form the basis of the perception of quality of life at university and complement each other. For example, the fact that the campus has very good physical facilities may negatively affect students' perception of quality of life if the social environment is competitive or exclusionary. Similarly, if physical facilities such as

classrooms and laboratories are inadequate on a campus where friendships are extremely strong, students may also feel dissatisfied (Ağirkan et al., 2024; Chen et al., 2021).

The literature states that opportunities for social participation and access to recreational activities also play an important role in increasing the level of "campus satisfaction" of university students (Skwiot & Juśkiewicz-Swaczyna, 2017). Therefore, alternatives such as sports, arts, culture, and volunteer activities offered on campus allow students to spend their free time productively. In this context, recreation is considered a dimension of quality of life at universities, and the close relationship between these two concepts is highlighted in various studies. In particular, recreation is seen as an important tool for promoting healthy lifestyles, protecting students' mental health, and strengthening social cohesion (Kotarska et al., 2021). However, the perception of university quality of life is not limited to on-campus activities, but also interacts with students' social and economic conditions off-campus (Tokay Argan & Mersin, 2021). Students who experience financial difficulties, lack family support, or face social pressures may negatively affect their university experience and decrease their perception of quality of life (Çetinkaya & Honça, 2017; Ersöz et al., 2023).

Recreational Activities in Higher Education

Recreation is defined as the evaluation of an individual's leisure time with activities that respond to physical, social, cultural, and intellectual needs (Akçakese & Demirel, 2024). In the university environment, recreation is seen as an important tool for students to escape the stress of their extracurricular time, to improve themselves through physical and social activities, and to adapt to the campus culture (Coşkun & Dilmaç, 2024; Çolak, 2024). These activities include a wide range of activities such as sports, art, music, field trips, volunteering, nature activities, and other organizations organized by student clubs. Thus, students with different interests can enrich their university experience by finding suitable activities (Morales-Baños et al., 2023). In the literature, it is emphasized that recreation is not only a leisure activity, but also has positive effects on physical and psychological health (Krzepota et al., 2015; Çetinkaya & Honça, 2017; Knopf, 2023).

Students' regular participation in sports or artistic activities reduces their stress and anxiety levels and strengthens their positive emotional states. At the same time, the development of social relationships and the strengthening of friendships are considered to be among the factors that increase students' perception of the quality of life at the university (Morales-Baños et al., 2023). However, if recreation is not sufficiently included in the strategic planning of university administrations, students' motivation may decrease and their sense of commitment to the campus may weaken (Çetinkaya & Honça, 2017). In this context, universities can contribute to students' quality of life by developing physical infrastructure for recreational activities, organizing regular activities, and supporting student clubs. At the same time, the intersection of recreation with variables such as gender, socioeconomic status, and cultural background should be considered and activities should be planned in a way that is accessible to all (Karademir, 2023). Creating special programs specifically for students with disabilities or different cultural groups is important for an inclusive campus atmosphere. Ignoring this diversity can limit the potential benefits of recreation. Therefore, recreation practices in higher education are recognized as an indispensable element for students' holistic development and life satisfaction (Skwiot & Juśkiewicz-Swaczyna,

2017).

Recreational activities in higher education provide students with many opportunities for physical, social, emotional, and intellectual development. Students who participate in sports activities can develop leadership, cooperation, and solidarity skills by experiencing both teamwork and competition (Thomas & Rosenberg, 2003). Artistic activities support the development of creativity in areas such as music, drama, or painting and increase students' self-confidence (Coşkun & Dilmaç, 2024). Students involved in volunteer projects gain social sensitivity, learn the importance of contributing to society, and strengthen their empathy skills. All these processes indicate that the university is not only an institution that provides academic knowledge, but also a multifaceted educational environment. Therefore, the role of recreation in the development of students can have a positive impact on their academic performance. This is because students who participate in recreational activities have reduced stress levels and increased motivation, allowing them to better focus on their studies and find creative solutions to problems (Mitrovic et al., 2024).

The literature shows that regular physical activity increases cognitive performance and may contribute to higher academic achievement in the long term (Nowak et al., 2019). Recreational services at universities are therefore seen not only as leisure activities, but also as part of a holistic strategy to support student success. University administrators can promote recreation by developing infrastructure such as sports halls, swimming pools, music studios and art workshops, or by promoting social awareness projects. Organizing tournaments, festivals, or workshops in various industries increases student interest and motivation in recreation. On the other hand, technological changes and concerns about digital addiction suggest that recreation is an important tool to balance students' screen time (Knopf, 2023). At this point, offering a balance of online and face-to-face recreational activities on college campuses provides students with access to different experiences. In conclusion, recreation in higher education is considered a strategic area due to its individual and societal benefits.

The effective implementation of recreation in higher education institutions depends on the correct identification of students' needs and the design of programs according to these needs. To this end, continuous monitoring and evaluation through student feedback, surveys, and focus group interviews are recommended (Çetinkaya & Honça, 2017). Universities should provide a wide range of recreational options, taking into account the socioeconomic status and cultural differences of students. For example, team or individual sports activities can be organized for students interested in sports, while exhibitions, concerts, or theater events can be planned for those who prefer cultural activities. This diversity enhances the quality of campus life by appealing to each student's interests (Demirel et al., 2021). In addition, innovative practices in the field of recreation should also be considered. Digital gaming tournaments, e-sports events or virtual reality applications reflect the modern face of university identity by attracting the younger generation (Akçakese & Demirel, 2024). However, balancing strategies need to be implemented as overuse of these digital options can also lead to the problem of technology addiction (Adarkwah & Huang, 2023). In this regard, collaboration between university administrators and student clubs and athletic departments strengthens the coordination of activity planning. The harmonious integration of recreational activities into educational programs supports both the academic and social development of students. Thus, the expectations and benefits of university students from recreational activities are met in a more planned manner

(Coşkun & Dilmaç, 2024).

University Quality of Life and Participation in Recreational Activities

The impact of recreational activities on students' quality of life and well-being includes both physical and mental dimensions. Studies show that university students who participate in recreational programs that include regular physical activity and social interaction experience reduced stress levels and increased overall life satisfaction (Kurt, 2022). In particular, sports and exercise-based activities increase energy levels and positively affect mood by physiologically supporting hormonal balance. Similarly, artistic activities such as music, drama, dance, or painting contribute to the development of creativity by enriching students' emotional world (Coşkun & Dilmaç, 2024). Such activities enhance students' self-confidence, improve their communication and expression skills, and increase their ability to adapt to group work. Therefore, the level of well-being achieved through recreation also makes it easier for students to cope with the difficulties they face in academic life. Reduced stress and anxiety levels provide mental clarity and positively influence factors such as exam performance, homework quality, and concentration (Nowak et al., 2019).

The impact of recreational activities on student quality of life and academic achievement also gains particular importance in the context of the rise of technology and the increase in digital addiction. Today, many students spend their free time on social media, digital games or other online platforms (Tarafdar et al., 2020). This may cause recreational activities based on physical and social interaction to take a back seat, thus reducing students' physical mobility and increasing the risk of social isolation. However, well-planned recreational programs can function as a means of balancing technology addiction (Akçakese & Demirel, 2024). In particular, sports, nature trips or other activities that require face-to-face socialization enable students to actively use their bodies and social skills by moving away from digital environments. In this way, positive improvements are experienced in areas such as sleep patterns, concentration and general mood (Güven Özdemir & Sonmez, 2021). Likewise, recreational activities can teach controlled and healthy use of technological tools, thus supporting digital literacy skills at a more conscious level (Potas et al., 2022). Students are able to maintain their academic success and psychological well-being when they master technology and lead a balanced life with social and physical activities. The literature emphasizes that one of the most important contributions of recreational activities to student participants is their effect on social and emotional intelligence (Demirel et al., 2021).

Research shows that participation in recreational activities strengthens students' emotional resilience and allows them to develop a more positive perspective on life (Soyer et al., 2017). This positive perspective increases students' interest and curiosity in learning and makes them more enthusiastic about academic pursuits. In addition, the fact that recreation provides opportunities for socialization among students alleviates feelings of loneliness and isolation by creating a sense of community and peer support (Ersöz et al., 2023). This situation has a direct impact on students' perceptions of the quality of life at university and strengthens their commitment to their universities after graduation. In addition, regular participation in recreational activities supports the development of skills such as goal setting, planning, and time management, and helps students more successfully manage their academic and personal responsibilities (Demirel et al., 2021).

Through recreational activities, students get to know themselves better, discover their interests, and gain experiences that will shape their future careers. It is important that the university administration recognizes this potential and develops recreational activities in line with the vision and mission of the institution. In this context, it is necessary to provide platforms, through structures such as student clubs and sports units, where students can express themselves, be productive and experience leadership. When all these factors are taken into account, it becomes clear that recreation has a wide range of effects that cannot be limited to the concept of "entertainment" (Krzepota et al., 2015).

It is suggested that intensive recreational activities can negatively affect academic performance by making time management difficult or, on the contrary, can have a positive effect by reducing stress. These differences can be explained by the student profile, activity type, frequency of participation and variations in academic discipline (Ersöz et al., 2023). One of the frequently encountered issues in research is the effect of recreation participation barriers on the perception of university life quality and student satisfaction (Çetinkaya & Honça, 2017). Students' inability to participate in recreational activities due to reasons such as lack of time, economic constraints, psychological barriers, cultural values or the geographical location of the campus can negatively affect their university experience. In this case, students' stress and anxiety levels increase, their social ties may weaken and their tendency to leave the university becomes stronger. Therefore, it is observed that universities that develop policies to reduce participation barriers create a higher quality of life and satisfaction perception in students (Soyer et al., 2017). In the literature, there are suggestions for solutions such as scholarships, discounts, flexible programming and digital support to reduce these obstacles. Some studies also reveal that participation in recreation has an inversely proportional relationship with technological addiction (Akçakese & Demirel, 2024).

The relationship between the quality of university life and recreation participation is key to students' multifaceted development. Recreation, which has positive effects on basic areas such as academic success, physical and psychological health, social connections and future skills, is seen as a priority in the student-centered approaches of universities (Nowak et al., 2019). However, the existence of barriers that limit participation can prevent the potential benefits of recreation from being fully realized. Understanding students' motivations for recreational activities and strengthening these motivations allows them to spend their university years more productive and satisfying (Mitrovic et al., 2024). On the other hand, many students may experience high levels of stress due to reasons such as academic pressures, financial difficulties and personal problems. Recreation offers an effective solution to cope with this stress and strengthens students' psychological resilience. However, not every student can benefit from these opportunities equally or may be reluctant to participate in recreational activities. In this context, our research problem is also important in terms of determining which points university administrations and policy makers should focus on (Kuş & Tunçkol, 2024). Thus, universities have the chance to better understand student needs and develop more effective support mechanisms. Especially in recent years, the proliferation of applications such as distance education and hybrid learning has limited face-to-face recreation opportunities, making the issue even more important. This reality makes the research problem more current and urgent. University students' efforts to maintain and improve their quality of life while adapting to changing living conditions depend on the diversification and accessibility of recreational activities.

Developing policies to improve the quality of university life concerns many areas such as campus planning, student services, wellness centers and management of social facilities (Kurt, 2022). In an environment where recreational activity motivation is low, students' commitment to the campus may weaken, which can negatively affect student satisfaction and institutional image. Therefore, this issue is defined as a problem area that needs to be addressed not only at the individual but also at the institutional level. Higher education institutions diversify recreational activities, establish new facilities or improve existing facilities in order to meet the needs of students and increase the quality of campus life (Demirel et al., 2021). In this process, students' expectations from recreational activities may require the development of innovative applications that can compete with technological and digital entertainment options.

On the other hand, students' attitudes towards recreation are also closely related to social values and cultural norms. While recreation is seen as a "waste of free time" in some cultural contexts, it is accepted as an integral part of a healthy and productive life in some communities (Alfadhil, 1996). These cultural differences are among the important elements to be considered in planning recreational activities on university campuses. At the same time, gender roles and socioeconomic status also affect the ways students participate in recreation (Yalcin & Erzeybek, 2023). Therefore, our research problem also seeks an answer to the question of whether student groups from different segments benefit from recreational activities equally. In this regard, the findings to be obtained are expected to shed light on strategic planning and decision-making processes at the institutional level.

Another important aspect of this research topic is the increasing prevalence of student-centered education and the fact that universities have begun to adopt the concept of "student satisfaction" as a strategic goal (Geven & Yaşartürk, 2022). However, it is seen that the number of studies that analyze this relationship in a holistic and comprehensive manner is limited. In this context, the aim of the research is to examine the recreational activity motivations and perceptions of the quality of university life of university students in Turkey in a relational manner. In line with the purpose of the study, the following sub-problems and hypotheses were created based on the literature.

- What are the levels of university students' perceptions of the quality of university life and their motivations for recreational activities?
- Do university students' perceptions of the quality of university life and their motivations for recreational activities differ according to the gender variable?
- Do university students' perceptions of the quality of university life and their motivations for recreational activities differ according to the grade level?

H1: Students' Recreational Activity Motivations significantly affect their Perceptions of the Quality of University Life.

Method

Research Model

The study utilized the relational screening model, one of the quantitative research methods, and applied the survey

method as a measurement tool. In the relational screening method, whether a change occurs between two or more variables, which can increase or decrease together, is of primary importance. The relational screening method, defined as a research model aimed at determining the acceleration of change in the event of change, focuses on the point where variables move together (Piwowarski, 2001). Based on this method, the research examined the relationships between the perceptions of university life quality and recreational activity motivations of students studying in different departments of universities in Turkey. In this context, it also aims to reveal the results of the relationship between demographic variables such as gender and class.

Research Group

The universe of this study consists of students studying at universities in Turkey. Reaching all the students in the target universe requires serious time, transportation and teamwork. In addition, such a study requires significant economic resources. Considering all these situations, the convenience sampling method was preferred (Golzar et al., 2022). In this direction; the participants of the study consisted of 312 university students studying at five different state universities in Turkey in the 2023-2024 academic year. The participants were included in the study with a volunteer approach according to the convenience sampling method in purposeful sampling methods. 162 (52.0%) of the participants were female and 150 (48.0%) were male.

Data Collection Tool

University Quality of Life Scale

The “University Quality of Life Scale”, which consists of 33 questions and was developed by Doğanay and Sari (2006), was used by the volunteers participating in the study. This scale consists of 7 sub-dimensions. Since the items 31, 30, 24, 25, 18 and 33 in the scale examine the level and quality of students’ communication with faculty members, this dimension was named “Faculty Member – Student Communication”. The Cronbach Alpha internal consistency coefficient of this dimension was found to be 0.72. The second sub-dimension, which includes items 17, 6, 12, 8 and 23, expressing students’ perceptions of their organizational identity at the university and their general satisfaction level with being a student at this university, was named “Identity”. The Cronbach Alpha internal consistency coefficient of this dimension was found to be 0.75. The dimension containing items 20, 7, 2, 14 and 29 related to socio-cultural opportunities related to cinema, theatre, concerts, sports and hobbies at the university was named “Social Opportunities”. The Cronbach Alpha internal consistency coefficient of this dimension was found to be 0.64. The 4th sub-dimension containing items 4, 27, 32, 22, 11 and 16, which examine the extent to which students participate in these decision-making processes when decisions are made at various levels at the university, was named “Participation in Decisions”. The Cronbach Alpha internal consistency coefficient of this dimension was found to be 0.52. The dimension containing items 10, 5, 26 and 19, which aim to determine the quality of students’ communication with other students, was named “Student-Student Communication”. The Cronbach Alpha internal consistency coefficient of this dimension was found to be 0.65. Since items 1, 13 and 28 include students’ future thoughts about their university, this dimension was named “Future”. The Cronbach’s alpha internal consistency coefficient of this dimension was found to be 0.76. The dimension including items 3, 15, 21 and 9, which refer to various aspects of the classroom environment, was

named “Classroom Environment”. The Cronbach’s alpha internal consistency coefficient of this dimension was found to be 0.56. The University Life Quality Scale consists of 33 items. Responses to the scale items are on a Likert-type rating scale as; 1 “Strongly Disagree”, 2 “Disagree”, 3 “Somewhat Agree”, 4 “Agree”, 5 “Strongly Agree”.

Recreational Activity Motivation Scale

The validity and reliability study of the Recreational Activity Motivation Scale was adapted to Turkish culture by Özantet et al. (2024) and introduced to the literature. The scale consists of 4 sub-dimensions and a total of 39 items. The 5 sub-dimensions determined to determine the motivations that direct individuals to physical recreational activities are: intrinsic motivation, benefit, amotivation and extrinsic motivation. The scale is evaluated on a 5-point Likert type scale, rated as “strongly disagree: 1”, “strongly agree: 5”. The 4 sub-dimensions of the Recreational Activity Motivation Scale and the total internal consistency coefficient were determined by calculating Cronbach Alpha. The highest internal consistency coefficient is intrinsic motivation sub-dimension with 0.5, benefit sub-dimension with 0.93, amotivation sub-dimension with 0.84, and the lowest internal consistency coefficient is extrinsic motivation sub-dimension with 0.70. The internal consistency coefficient of the total sub-dimensions of the recreational activity motivation scale is 0.94. While the high total average scores of the recreational activity motivation scale reflect positive motivation, the high scores only in the amotivation dimension show a negative tendency. While the total scores of the scale were obtained, the amotivation sub-scale scores were scored in reverse, thus obtaining scores in the same direction (positive).

Data Analysis

The obtained data was recorded with the package program called IBM Spss 27.0. Statistics experts were consulted for the statistical analysis of the obtained data. The total inventory scores, frequency (f) and percentage (%) values, which provide personal information about the participants, were determined and given. The normal distribution status of the scores was examined by examining the normal distribution curves, skewness-kurtosis values, normal distribution curves via histograms and the Kolmogorov-Smirnov (K-S) test values used when the group size was greater than 50. As a result of the analyses, it was seen that both the ‘University Quality of Life Scale’ and the ‘Recreational Activity Motivation Scale’ scores had a normal distribution. In this context, independent groups t test, ANOVA test and Regression analysis were performed.

Results

In this section, the findings obtained as a result of the analyses conducted in the context of the research questions are presented. First, the descriptive statistics of the Recreational Activity Motivation Scale scores are presented in Table 1. When the distribution of Recreational Activity Motivation scores is examined in Table 1, it is observed that university students have the highest mean intrinsic motivation ($\bar{X}=3.85$). Participants obtained the lowest mean in the "lack of motivation" subscale ($\bar{X}=3.16$). In this respect, it can be said that university students have a high level of recreational activity motivation.

Table 1. Descriptive Values of Scores Obtained from Recreational Activity Motivation Scale

	N	Minimum	Maximum	\bar{X}	Sd
Intrinsic Motivation	312	1.00	5.00	3.85	0.89
Benefit	312	1.00	5.00	3.81	0.88
Amotivation	312	1.00	5.00	3.16	0.99
Extrinsic Motivation	312	1.00	5.00	3.66	1.03
Recreational Activity Motivation	312	1.43	4.83	3.54	0.64

When the distribution of university life quality perception scores is examined in Table 2, it is observed that the students' perceptions in the 'future' subscale (\bar{X} =3.58) have the highest average. The participants obtained the lowest average in the "social opportunities" subscale (\bar{X} =2.61). In general, the participants' perceptions of university life quality are at a moderate level.

Table 2. Descriptive Values of the Scores Obtained from the University Life Quality Perception Scale

	N	Minimum	Maximum	\bar{X}	Sd
Faculty-Student Communication	312	1.67	4.50	3.36	0.57
Identity	312	1.00	5.00	2.89	1.11
Social Opportunities	312	1.00	4.60	2.61	0.71
Participation in Decisions	312	1.00	4.67	3.10	0.65
Student-Student Interaction	312	1.00	4.75	2.89	0.79
Future	312	1.00	5.00	3.58	1.09
Classroom Environment	312	1.00	5.00	2.81	0.85
University Quality of Life Total	312	1.56	4.27	3.03	0.52

The students' recreation motivation scores are compared based on gender and the results are given in Table 3.

Table 3. Comparison of University Students' Recreation Motivation Scores According to the Gender Variable

	Gender	N	\bar{X}	Sd	t	p
Intrinsic Motivation	Female	162	3.88	0.83	0.54	0.59
	Male	150	3.82	0.96		
Benefit	Female	162	3.82	0.80	0.29	0.77
	Male	150	3.79	0.96		
Amotivation	Female	162	2.92	0.89	-4.43	0.00
	Male	150	3.41	1.04		
Extrinsic Motivation	Female	162	3.60	0.95	-1.08	0.28
	Male	150	3.72	1.11		
Recreational Activity Motivation	Female	162	3.59	0.61	1.53	0.13
	Male	150	3.48	0.67		

When the recreation activity motivation scores of university students were evaluated in terms of gender, the difference in the calculated mean scores of intrinsic motivation, benefit, extrinsic motivation and the whole scale was not found to be significant ($p>0.05$). However, a significant difference was found in the amotivation subscale according to the gender variable ($p<0.05$). When the mean scores were examined, it was seen that the amotivation levels of male students were significantly higher than their female peers.

The students' university life quality perception scores are compared based on gender and the results are given in Table 4. When the students' perception of the quality of university life was evaluated in terms of gender, the difference in the calculated mean scores of the instructor-student communication, benefit, identity, social opportunities, participation in decisions, student-student interaction, classroom environment and the whole scale was not found to be significant ($p>0.05$). However, a significant difference was found in the 'future' subscale according to the gender variable ($p<0.05$). When the mean scores were examined, it was seen that the perception of the quality of university life of male students in terms of 'future' was significantly higher than their female peers.

Table 4. Comparison of Students' University Life Quality Perception Scores According to Gender Variable

	Gender	N	\bar{X}	<i>Sd</i>	t	p
Faculty-Student Communication	Female	162	3.34	0.51	-0.59	0.55
	Male	150	3.38	0.64		
Identity	Female	162	2.98	1.12	1.61	0.11
	Male	150	2.78	1.09		
Social Opportunities	Female	162	2.62	0.68	0.25	0.80
	Male	150	2.60	0.75		
Participation in Decisions	Female	162	3.13	0.69	0.85	0.39
	Male	150	3.07	0.60		
Student-Student Interaction	Female	162	2.88	0.86	-0.37	0.71
	Male	150	2.91	0.72		
Future	Female	162	3.40	1.13	-2.99	0.00
	Male	150	3.77	1.02		
Classroom Environment	Female	162	2.81	0.87	0.12	0.90
	Male	150	2.80	0.83		
Perception of University Quality of Life Total	Female	162	3.02	0.53	-0.34	0.73
	Male	150	3.04	0.52		

When the recreational activity motivation scores of university students were evaluated in terms of class level, the calculated F values of intrinsic motivation, benefit, amotivation, extrinsic motivation and the whole scale were found to be significant ($p<0.05$). In the advanced analyses performed with the Scheffe test, it was seen that the recreational activity motivations of the second-year students were higher compared to the first, third and fourth-year participants. The lowest recreational activity motivation scores in the whole scale were obtained by the first and fourth-year students (see Table 5).

Table 5. Comparison of Students' Recreational Activity Motivation Scores According to Grade Level

	Class Level	N	Mean	Std. Deviation	F	p
Intrinsic Motivation	1	117	3.73	0.82	6.82	0.00
	2	110	4.14	0.80		
	3	39	3.53	1.10		
	4	46	3.72	0.93		
Benefit	1	117	3.62	0.77	5.36	0.00
	2	110	4.05	0.83		
	3	39	3.64	1.13		
	4	46	3.84	0.90		
Amotivation	1	117	3.04	0.87	7.98	0.00
	2	110	3.51	1.14		
	3	39	2.87	0.75		
	4	46	2.86	0.89		
Extrinsic Motivation	1	117	3.50	0.96	10.30	0.00
	2	110	4.06	0.88		
	3	39	3.25	1.18		
	4	46	3.43	1.10		
Recreational Activity Motivation	1	117	3.45	0.55	3.49	0.02
	2	110	3.69	0.54		
	3	39	3.39	0.95		
	4	46	3.53	0.71		

When the students' university life quality perception scores were evaluated in terms of grade level, the F values calculated for the 'future' subscale and the entire scale were not found to be significant ($p > 0.05$). However, the F values calculated for the 'instructor-student communication', 'benefit', 'identity', 'social opportunities', 'participation in decisions', 'student-student interaction' and 'classroom environment' subscales were found to be significant ($p < 0.05$). According to the advanced analyses performed with the Scheffe test, the students studying in the first and second grades obtained higher scores compared to other grade levels in the 'Instructor-Student Communication', 'Social Opportunities' and 'Participation in Decisions' subscales. On the other hand, the students studying in the third and fourth grades obtained significantly higher mean scores compared to other grade levels in the 'Identity', 'Student-Student Interaction' and 'Classroom environment' subscales (see Table 6).

Table 6. Comparison of Students' University Life Quality Perception Scores According to Grade Level

	Class Level	N	Mean	Std. Deviation	F	p
Instructor-Student Communication	1	117	3.44	0.53	2.77	0.04
	2	110	3.38	0.68		
	3	39	3.16	0.51		
	4	46	3.28	0.38		
Identity	1	117	2.96	1.02	5.95	0.00

	Class Level	N	Mean	Std. Deviation	F	p
	2	110	2.57	1.08		
	3	39	3.30	1.38		
	4	46	3.12	0.98		
Social Opportunities	1	117	2.71	0.67	3.10	0.03
	2	110	2.70	0.69		
	3	39	2.34	0.63		
	4	46	2.55	0.87		
Participation in Decisions	1	117	3.19	0.52	12.66	0.00
	2	110	3.28	0.65		
	3	39	2.68	0.62		
	4	46	2.83	0.76		
Student-Student Interaction	1	117	2.78	0.73	5.74	0.00
	2	110	2.78	0.71		
	3	39	3.08	1.20		
	4	46	3.26	0.55		
Future	1	117	3.44	1.03	1.80	0.15
	2	110	3.57	1.22		
	3	39	3.88	1.24		
	4	46	3.69	0.70		
Classroom Environment	1	117	2.29	0.76	6.56	0.00
	2	110	2.85	0.92		
	3	39	2.85	0.64		
	4	46	3.04	0.89		
University Life Quality	1	117	3.05	0.44	0.99	0.40
	2	110	3.00	0.53		
Total	3	39	2.96	0.69		
	4	46	3.13	0.54		

When Table 7 is examined, it is understood that the regression model developed to determine the effect of recreational activity motivation on the perception of university life quality is statistically significant ($R=0.39$; $F=54.61$; $p<0.01$).

Table 7. Effect of Recreational Activity Motivation on the Perception of University Quality of Life

	Unstandardized Coefficients		Standardized Coefficients		
	β	Std. Error	β	t	p
(Constant)	1.91	0.15		12.43	0.00
Recreational Activity Motivation	0.32	0.04	0.39	7.39	0.00

Dependent Variable: Perception of University Life Quality, $F=54.61$; $R=0.39$; $R^2=0.15$

Approximately 15% of the change in the perception of university life quality is explained by recreational activity motivation. Recreational activity motivation has a positive effect on the perception of university life quality ($\beta=0.39$; $p<0.01$).

Discussion

This study aims to address the interaction between university students' perceptions of university life quality and recreational activity motivation from a multidimensional perspective. The findings obtained in line with the first research question show that university students' recreational activity motivation levels are generally high. It is determined that the mean score of the intrinsic motivation sub-dimension is the highest, whereas the "amotivation" sub-dimension has the lowest score. This suggests that students act more out of interest and desire in participating in recreational activities.

On the other hand, when the perception of university life quality is examined, it is understood that the participants have the highest mean score especially in the "future" sub-dimension. However, the fact that the "social opportunities" sub-dimension is lower suggests that students may have difficulty in accessing sufficient sociocultural and sportive opportunities in the university environment. When the general averages are examined, it is seen that the perception of university life quality is at a moderate level. According to the findings, it is understood that students mostly adopt a positive attitude towards recreational activities, but not every dimension of campus life provides the same level of satisfaction. Particularly, the high level of recreation participation reveals that it nourishes the sense of desire and enthusiasm in students. At this point, the physical infrastructure of the campus and the quality of social activities are also reflected in the students' perception of the quality of university life.

The high motivation of university students in recreational participation is consistent with studies emphasizing the importance of physical activity and social interaction, especially in young adulthood (Krzepota et al., 2015; Morales-Baños et al., 2023). The significantly high level of "intrinsic motivation" of students supports the view that personal interest and enjoyment are the main factors in recreational participation, as emphasized by researchers such as Thomas and Rosenberg (2003) and Coşkun and Dilmaç (2024). On the other hand, the relatively low level of the "social opportunities" sub-dimension in the perception of university life quality brings to mind the dissatisfaction arising from the inadequacy of on-campus facilities, as also emphasized by Çetinkaya and Honça (2017). The high level of the "future" sub-dimension is parallel to the findings of the Tonon (2021) study, which emphasized that university students evaluate their university experience with a future-oriented perspective. This result explains that the quality of university life gains meaning not only with current conditions but also with future plans and expectations. There are studies in the literature that interpret the contradiction of high recreation motivation but relatively low satisfaction with campus facilities as the "gap between potential and actual experience" (Nowak et al., 2019). Therefore, the results of this study show that university students have a high recreation potential, but current social facilities may not fully meet this. This situation is evidence that reminds us that university administrations should strengthen their recreation infrastructure in the future. In addition, these findings are consistent with the literature on the positive effects of recreation participation on

academic success and general life satisfaction (Soyer et al., 2017; Demirel et al., 2021).

The second research question examines whether students' perceptions of university life quality and recreation motivation differ according to gender. The analysis results do not detect a statistically significant difference between male and female students in terms of general recreation motivation scores. However, when the "lack of motivation" sub-dimension is examined, it is determined that male students have higher scores in this dimension compared to females. This finding suggests that some internal or external factors that may prevent participation in recreational activities may be stronger in male students. In terms of university life quality dimensions, although no significant difference is observed in terms of total scores, it is revealed that male students' averages are higher than females in the "future" sub-dimension. This result reflects that male students' future expectations regarding university are relatively more positive or higher. However, it is noteworthy that female and male students have similar perceptions in sub-dimensions such as "student-student interaction", "participation in decision making" or "social opportunities". These data suggest that recreation programs customized or designed in a more inclusive manner according to gender may increase productivity in university settings (Coşkun & Dilmaç, 2024).

The findings obtained regarding the gender variable show both similarities and some differences with similar studies in the literature. There are studies that argue that gender does not have a significant effect on the general score of recreation motivation (Kotarska et al., 2021; Mitrovic et al., 2024). On the other hand, the fact that the level of amotivation is higher in male students is evaluated in some studies as a pressure or performance anxiety due to social judgments such as "men are expected to be interested in sports or cultural activities" (Coşkun & Dilmaç, 2024). The fact that the perception of "future" is high in men partially overlaps with the findings in studies such as Wang et al. (2020) that address the risk-opportunity balance regarding technology and the future. These studies suggest that male students may have higher self-efficacy or more specific future planning regarding academic and professional expectations (Soyer et al., 2017). On the other hand, relatively higher recreation motivation scores in female students may support the view that instead of digital addiction or avoiding social media use, active use of their free time is preferred (Bozavli, 2023). However, studies in this field that point to the effect of cultural and family structure on gender roles indicate that each campus and student group may be evaluated under different social norms (Alfadhil, 1996). Therefore, the results of this study are in line with most of the general trends, but the fact that gender does not have the same effect in each sub-dimension reflects the continuation of the complex picture in the literature. Therefore, it is recommended that future research should aim to understand the sociocultural and psychological dynamics behind gender differences by conducting more in-depth qualitative studies (Nopiana et al., 2022). In this way, university administrations will have more opportunities to develop gender-sensitive recreation strategies and will be able to combat the amotivation tendency observed in male students more effectively.

The third research question addresses how students' perceptions of university life quality and recreation motivation differ according to the grade level variable. The analysis results show that the recreation motivation scores of sophomore students are significantly higher than those of other grade levels. This suggests that students may tend to engage in recreation activities more, especially after the first year of adaptation to university is over. On the other hand, it is noteworthy that the recreation motivation levels of first and fourth year students are

relatively lower. It is thought that the increasing graduation and career anxiety in fourth year students may lead to a decrease in recreation participation. When the sub-dimensions of the quality of university life are examined, it is seen that first and second year students have relatively higher perceptions of "instructor-student communication", "social opportunities" and "participation in decision-making". The fact that sophomores have higher scores in recreation motivation suggests that students have strengthened their adaptation especially after the first year of university life and are more interested in leisure activities (Ersöz et al., 2023). On the other hand, the higher scores of third and fourth year students in sub-dimensions such as "identity", "student-student interaction" and "classroom environment" suggest that campus belonging and peer relationships have matured over time. However, general university life quality scores do not show a significant difference according to grade level. These findings reveal that different needs and priorities arise at various stages of university life and that this situation affects both recreation motivation and perception of quality of life. Providing additional support to maintain students' motivation, especially in periods close to graduation, may limit the decrease in recreation participation of fourth year students (Demirel et al., 2021).

The findings of recreation motivation and quality of university life, which differ based on grade level, largely coincide with the literature. For example, Ersöz et al. (2023) and Çolak (2024) state that students who have just started university experience an adaptation process in the first years and that their recreation participation increases in the following years. However, the fact that sophomores had higher motivation in this study supports the idea of "interest strengthening in line with previous experiences" as pointed out by studies such as Nowak et al. (2019). The fluctuations seen in the third and fourth years are explained in the literature with the issues of "career anxiety" or "uncertainty after graduation" (Mitrovic et al., 2024). In terms of quality of university life, the determination of higher scores in the subjects of "faculty-student communication" and "social opportunities" in the first years brings to mind the thesis of "new student curiosity" in the study of Daskapan et al. (2005). On the other hand, the increase in scores in the "identity" and "student-student interaction" dimensions in upper grades is similar to the finding of "development of socialization and belonging over time" emphasized in the research of Kurt (2022). There is also a similarity with the studies suggesting that as the grade level advances, more active participation in student societies or dominating the campus atmosphere positively affects the quality of university life (Soyer et al., 2017; Geven & Yaşartürk, 2022). However, the fact that some studies suggest that there is a decrease in the perception of quality of life due to increased stress in fourth-year students, and that different sub-dimensions yielded different results in this study, shows the multidimensionality of the issue. In conclusion, the data in this study confirm that grade level is an important factor in shaping recreation participation and campus satisfaction, and is also consistent with many findings in the existing literature. This situation reaffirms the suggestions in the literature that university policies should be designed to respond to needs that differ according to grade levels.

The basic hypothesis of the study, that students' recreational activity motivations significantly affect their perceptions of university life quality, was tested with regression analysis. The analysis findings show that recreational motivation explains approximately 15% of the change in the perception of university life quality. This effect is statistically significant and indicates a positive relationship. In other words, it is understood that students with high motivation for recreational activities also perceive the quality of university life more positively. The

findings provide important indicators that recreational motivation increases the quality of university life through factors such as enriching students' campus experiences and supporting physical and psychological well-being (Soyer et al., 2017; Çolak, 2024). It is thought that especially high intrinsic motivation increases students' voluntary and enthusiastic participation. At the same time, it is stated that as the perception of benefit increases, students' interest in social, sportive and cultural activities increases and this situation positively affects their sense of satisfaction towards the institution. The amotivation dimension emerges as a variable that can negatively affect the quality of university life, but the high general motivation scores can limit this effect. In this context, the hypothesis is confirmed and it is proven that recreation motivation has a significant and positive effect on the perception of university life quality. Recreation can support not only physical health but also the fulfillment of social and psychological needs (Kurt, 2022). In this respect, it also benefits students in coping with the stress and anxiety they encounter during the education process (Farmer & Lloyd, 2024).

High intrinsic motivation shows that students attribute more meaning to activities and reflect this positively on their quality of life. Although extrinsic motivation predicts participation due to external factors such as social environment or grades, it is understood that intrinsic motivation is critical for maintaining effective participation. In addition, it should be taken into account that the quality of life is negatively affected when the amotivation score is high, and it is important to develop measures to eliminate this obstacle. From the perspective of university administrations, effective design of recreation programs offers a strategic approach that will increase student loyalty and satisfaction (Demirel et al., 2021). Based on this, it can be said that the hypothesis is confirmed and recreation motivation contributes statistically significantly and positively to the perception of university life quality. When evaluated together with other factors, recreation motivation seems to have the power to transform student experience in line with both individual and institutional gains. In this context, it is possible for universities to support students' academic and social success in the long term by developing their recreation policies with systematic and participatory methods.

The positive impact of recreation motivation on the perception of university life quality is a relationship frequently emphasized in the literature. In the study of Soyer et al. (2017), it is stated that active participation in recreational activities acts as a bridge between student satisfaction and academic success. Demirel et al. (2021) suggest that recreation strengthens students' stress management skills and thus enables them to participate more efficiently in other activities on campus. The 15% explanatory power ratio obtained in this study shows that recreation is an important factor, although it is not the sole determinant (Kurt, 2022). Coşkun and Dilmaç (2024) also state that the social experiences that young adults gain through recreation can have positive effects in the later periods of their lives. The prominence of intrinsic motivation indicates that the voluntary and pleasurable participation of the individual provides permanent benefits, as predicted by motivation theories (Thomas & Rosenberg, 2003). In addition, although the presence of extrinsic motivation or external pressures may trigger short-term participation, it is consistent with the findings in the literature that an internal driving force is necessary to achieve long-term benefits (Ning et al., 2024). Studies that argue that amotivation limits students' potential gains emphasize that minimizing this dimension is critical for university administrations (Çetinkaya & Honça, 2017).

When the applied dimensions of the study are examined, the findings are instructive for university administrations

and educational policy makers. The high recreation motivation observed especially in second-year students indicates that students can integrate more into the campus if the adaptation process in the first year is managed successfully. Therefore, recreation activities to be integrated into orientation programs can contribute to students' sense of belonging to the university at an early stage (Ersöz et al., 2023). The concentration of differences according to gender in certain sub-dimensions, such as the tendency for lack of motivation in male students, reveals that universities need to organize more targeted campaigns. In addition, determining the needs that vary according to class level will allow students to prevent loss of motivation through faculty trips, campus tournaments or career-focused recreation activities to be organized after the second year (Kurt, 2022). The perception of inadequate social opportunities emphasizes the importance of increasing opportunities such as gyms, art workshops, music studios or multi-purpose areas on campus (Çetinkaya & Honça, 2017). In addition, designing recreational activities not only face-to-face but also online ensures student participation is sustainable, especially in periods when distance education or hybrid programs become widespread (Akçakese & Demirel, 2024). Since the findings of the study confirm that recreation is a factor that directly affects the perception of the quality of university life, relevant departments should prioritize it in budget and program planning (Demirel et al., 2021). In the long term, as students' satisfaction and commitment levels increase, the image of universities and alumni affiliation can also be strengthened. Finally, thanks to projects to be carried out in collaboration with psychological counseling centers, special guidance programs can be designed for students with a high tendency to be unmotivated. All these practices will contribute to a more holistic learning ecosystem by strengthening not only the academic but also the social and emotional development pillars of education.

Conclusion

From a theoretical perspective, the results of this study support the arguments of the literature that shift the university experience from an “academic success-oriented” perspective to a “holistic student development” framework (Coşkun & Dilmaç, 2024). The fact that recreation simultaneously touches on psychological, social and institutional dimensions makes it a multidisciplinary research topic. In this respect, the study offers a common discussion ground for researchers from different disciplines such as educational sciences, sports sciences, psychology and sociology. At the same time, it should not be overlooked that the increasing impact of technology addiction and digitalization has made recreation an alternative balancing element (Chen et al., 2021; Bozavli, 2023). As a result, this study produces data that enriches existing theoretical frameworks and more clearly reveals the multidimensional relationship between the quality of university life and recreational motivation. Thus, it contributes to the development of theoretical models aimed at improving the quality of life of students in academic literature.

Although this study was conducted on a large sample, it has some limitations. First of all, since the survey technique adopted as the data collection method is based on the participants' self-reporting, factors such as social desirability or response bias may affect the findings (Golzar et al., 2022). The geographical, cultural and socioeconomic structures of the participants also vary; therefore, caution should be exercised when generalizing the results to all university students in Turkey. While the effect of recreation motivation on the perception of university life quality was examined in the study, the role of other potential mediating or external factors was not

addressed. For example, it is not known how variables such as digital addiction, family support or psychological resilience shape this relationship (Chen et al., 2021). Likewise, the role of different demographic or individual factors (e.g. disability status, part-time work, accommodation options) in addition to gender and grade level was not examined in this study. In addition, adopting a cross-sectional design limits the ability to clearly reveal changes or causal relationships over time. Longitudinal studies are needed to see how students change in the same variables at the beginning and end of their undergraduate studies (Nowak et al., 2019). Although this study provides consistent and valid results, the fact that the data were obtained in a single time period may not reflect the effects of seasonality or seasonal stress factors (e.g., exam weeks). Finally, the fact that the sample was limited to certain universities may make it difficult to provide a broader representation at the national level. In light of all these limitations, the findings should be interpreted with caution and methodological diversity should be increased in future studies.

Recommendations

Future research that includes qualitative methods beyond quantitative findings offers the opportunity to examine students' recreation motivations and perceptions of university life quality in more depth. In particular, semi-structured interviews or focus group discussions provide the opportunity to understand students' participation barriers, expectations, and sources of satisfaction in more detail. In addition to variables such as grade level and gender, it should be considered that technological addiction, psychological resilience, academic intensity, or family socioeconomic status may also affect participation. Conducting comparative studies in universities from different cultures and geographies will contribute to evaluating the universal validity of the findings. Similarly, conducting similar studies not only in state universities but also in institutions such as foundation universities and vocational schools will be able to examine the role of differences in student profiles and institutional opportunities. Evaluating students' experiences in volunteering projects, sports teams, or art events that they participate in on or off campus in separate subcategories will make the findings more specific.

University administrations should create progressive recreation programs by taking into account the changing needs of students at different grade levels. Intensive orientation and friendship-focused activities should be planned for the first year, more in-depth social and sports activities for the second year, club leadership or project-based studies for the third year, and career-focused recreation activities for the fourth year (Ersöz et al., 2023). In this way, students at each grade level will be able to have a recreation experience that suits their own expectations and motivations. For the differences observed on the basis of gender, flexible and interesting activities that aim to reduce the tendency of male students to be unmotivated should be designed. In addition, awareness-raising activities and mixed teams should be supported to reduce prejudices in sports against women. The development of social opportunities should include not only sports and cultural activities, but also the organization of green areas on campus, the diversification of outdoor activities, and the encouragement of low-cost artistic activities (Çetinkaya & Honça, 2017). Recreation programs integrated with psychological counseling units will make it easier to closely monitor students' stress and anxiety levels and provide appropriate guidance (Dinler et al., 2020). Finally, regular evaluation of recreation activities and systematic collection of student feedback form the basis of the continuous improvement cycle. In this way, universities will be able to prepare a stronger basis for both

academic and social success by increasing student satisfaction.

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