



Physical activity, eating attitude and body mass index (BMI) in students of sports sciences: differences and correlations

Actividad física, actitud alimentaria e índice de masa corporal (IMC) en estudiantes de ciencias del deporte: diferencias y correlaciones

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Abstract

Introduction: The literature indicates that, during young adulthood, body mass index (BMI), physical activity levels, and eating attitudes are closely interrelated.

Objective: This study aims to examine the relationships between physical activity, eating attitudes and BMI among university students.

Methodology: The study was conducted with 296 university students. The data were collected using a Descriptive Information Form, International Physical Activity Questionnaire-Short Form (IPAQ-SF), and Eating Attitudes Test-26 (EAT-26). N and percentage values, Median (minimum-maximum), Kruskal-Wallis H test, Mann-Whitney U test, and Spearman's rank correlation were used in the analysis of the research data.

Results: It was found that the BMI values of male students were higher than those of females ($U=5285$; $p < 0.001$), and that students over the age of 25 had higher BMI values compared to other age groups ($H=10.984$; $p < 0.01$). The EAT scores of Recreation Department students were higher than those of Sports Management and Coaching Education students ($H=13.116$; $p < 0.01$), while the IPAQ scores of Physical Education and Sports Teaching students were higher than those of Sports Management students ($H=8.935$; $p < 0.05$). In addition, a weak but significant positive correlation was identified between IPAQ and EAT ($r = 0.131$; $p < 0.05$).

Conclusions: These findings indicate that university students' physical activity, eating attitudes and BMI are influenced by demographic factors. Field of study, age, departments, and gender emerged as significant determinants of IPAQ, EAT and BMI.

Keywords

Body mass index; eating attitude; physical activity; sports sciences; students.

Resumen

Introducción: La literatura indica que, durante la adultez joven, el índice de masa corporal (IMC), los niveles de actividad física y las actitudes alimentarias están estrechamente interrelacionados.

Objetivo: Este estudio tiene como objetivo examinar las relaciones entre la actividad física, las actitudes alimentarias y el IMC en estudiantes universitarios.

Metodología: El estudio se llevó a cabo con 296 estudiantes universitarios. Los datos se recopilaron utilizando un Formulario de Información Descriptiva, el Cuestionario Internacional de Actividad Física - Forma Corta (IPAQ-SF) y el Test de Actitudes Alimentarias-26 (EAT-26). Para el análisis de los datos se utilizaron los valores de N y porcentaje, mediana (mínimo-máximo), la prueba U de Mann-Whitney, la prueba H de Kruskal-Wallis y la correlación de rango de Spearman.

Resultados: Se encontró que los valores de IMC de los estudiantes masculinos fueron mayores que los de las mujeres ($U=5285$; $p < 0,001$) y que los estudiantes mayores de 25 años presentaron valores de IMC más altos en comparación con otros grupos de edad ($H=10,984$; $p < 0,01$). Los puntajes de EAT de los estudiantes del Departamento de Recreación fueron mayores que los de los estudiantes de Gestión Deportiva y Educación en Entrenamiento ($H=13,116$; $p < 0,01$), mientras que los puntajes de IPAQ de los estudiantes de Enseñanza de Educación Física y Deportes fueron mayores que los de Gestión Deportiva ($H=8,935$; $p < 0,05$). Además, se identificó una correlación positiva débil pero significativa entre IPAQ y EAT ($r = 0,131$; $p < 0,05$).

Conclusiones: Estos hallazgos indican que el IMC, la actividad física y las actitudes alimentarias de los estudiantes universitarios están influenciados por factores demográficos. El área de estudio, la edad, el departamento y el género surgieron como determinantes significativos de IPAQ, EAT e IMC.

Palabras clave

Índice de masa corporal; actitud alimentaria; actividad física; ciencias del deporte; estudiantes.

Introduction

Obesity and overweight refer to an excessive or abnormal accumulation of fat that carries significant health risks (World Health Organization [WHO], 2004). Obesity is a multifactorial, chronic, and complex health condition influenced by the interaction of genetic, behavioral, and environmental factors (Segal & Sanchez, 2001). The rapid progression of industrialization and globalization has contributed to a global obesity epidemic, closely linked to changes in dietary behaviors and increasingly sedentary lifestyles. Overweight and obesity are largely the result of a discrepancy between energy intake and expenditure, with caloric intake surpassing energy output (WHO, 2004). Such an energy imbalance plays a central role in the development of excessive body weight, highlighting the importance of regulated nutrition and regular physical activity in weight management.

The prevalence of overweight and obesity has increased markedly among both children and adults over the past several decades (Giammattai et al., 2003). According to WHO reports, more than one billion individuals worldwide are overweight, with over 300 million classified as obese. Of particular concern, over 20 million children under the age of five were reported to be overweight (WHO, 2004). A national survey in the United States conducted between 1988 and 1994 reported a 20% increase in overweight prevalence among adolescents aged 12–17 years and a 10% increase among children aged 6–12 years (Segal & Sanchez, 2001). These increases are largely attributed to shifting dietary habits, particularly among youth populations.

In Turkey, multiple large-scale studies have investigated obesity prevalence. Findings from the TEK-HARF and TURDEP studies (Satman et al., 2002), as well as a nationwide survey by the Turkish Association for the Study of Obesity, reported that 32.5% of 13,878 participants were overweight and 28.6% were obese (Bağrıaçık et al., 2009).

The WHO defines health not only by the absence of disease but also by the presence of complete social well-being, mental, and physical. Therefore, promoting healthy lifestyle behaviors, including regular exercise and balanced nutrition, is essential for sustaining overall health (Su et al., 2019). Elevated body weight and a high BMI are consistently associated with inadequate physical activity and poor nutritional habits (Roura et al., 2016). The widespread consumption of energy-dense but nutrient-poor foods further exacerbates this public health issue (Dobrowolski & Włodarek, 2021).

Eating disorders, which can affect individuals across all age groups, have also become increasingly common. Regular physical activity has been identified as having significant protective and therapeutic benefits in the prevention and treatment of disordered eating behavior (Hay, 2005). Engaging in regular physical activity is associated with improved self-perception, enhanced quality of life, and healthier eating patterns (Vancampfort et al., 2014). Conversely, reduced physical activity, sedentary lifestyles, and the frequent consumption of fast food contribute substantially to the rising prevalence of obesity (Erkan, 2003).

Although weight-related problems are often perceived as primarily affecting middle-aged adults, research indicates that obesity frequently begins in childhood or adolescence and may persist into adulthood. According to the 1998 Turkey Health and Population Survey, 33.4% of women were overweight (BMI = 25–30 kg/m²), and 18.8% were obese (BMI > 30 kg/m²), emphasizing the need for early interventions (THPS, 1998).

University students are considered a vulnerable population regarding health behaviors. Factors such as living away from home, limited financial resources, lack of cooking skills, and restricted time for physical activity often contribute to unhealthy dietary practices and reduced activity levels (Brunt & Rhee, 2008; Papadaki et al., 2007). Research shows that weight gain and increased fat accumulation are especially common during the first year of university life (Hoffman et al., 2006; Spanos & Hankey, 2010).

For example, Gow et al. (2010) identified first-year university students as being at particularly high risk for excessive weight gain, which may predispose them to adult obesity. However, this transitional period also presents a critical opportunity to establish health-promoting habits. Previous research by Dinger and Waigandt (1997), Mihas et al. (2009) and Singhal et al. (2010), highlights the increasing academic focus on health behaviors among university students.



Developing healthy dietary behaviors is central to fostering lifelong health awareness and well-being. Physical activity has been shown to reduce binge eating, improve dietary attitudes, and contribute to psychological and physical health (Vancampfort et al., 2014). For young adults, especially university students, improving awareness of health, body image, nutritional behaviors are crucial for fostering a healthier society. Accordingly, this study was conducted to examine the relationships among physical activity, eating attitudes, and BMI in students enrolled in sports sciences programs.

Method

Study Design

This cross-sectional, methodological study aimed to evaluate the relationships between IPAQ, EAT and BMI among sports sciences faculties students. Data were collected between October 2023 and June 2024 from two faculties of sports sciences located in the Anatolia region of Turkey, each affiliated with a different university.

Participants

A total of 296 university students (133 females, 163 males; mean age = 21.42 ± 4.17) were included in the study. Participants were recruited through convenience sampling and were eligible if they (a) were enrolled in one of four academic years (freshman to senior), (b) were enrolled in the Departments of Sports Management (SM), Coaching Education (CE), Recreation (R), or Physical Education and Sports Teaching (PEST), and (c) provided informed consent to participate.

Using G*Power 3.1.9.7, the minimum required sample size was estimated to be 193 participants, based on an alpha level of 0.05, a power of 0.80, and a small effect size ($d = 0.2$). To account for potential non-response, the target sample size was increased to ensure adequate statistical power for the analyses. Data were collected face-to-face through structured questionnaires administered in classroom settings.

Measures

Demographic Form and BMI Calculation

Participants completed a demographic questionnaire including age, gender, academic year, department, height, and weight. BMI was determined using the standard formula, calculated by dividing body weight in kilograms by the square of height in meters (kg/m^2). It is a widely recognized measure for categorizing obesity, overweight, normal weight, and underweight in accordance with WHO guidelines (Garrow & Webster, 1985).

IPAQ-SF

Physical activity levels of students were assessed using IPAQ-SF, which performed activities lasting at least 10 minutes over the past 7 days. Turkish adaptation was validated by Öztürk (2005). MET values were assigned according to activity intensity: vigorous (8.0 MET), moderate (4.0 MET), and walking (3.3 MET). Total weekly physical activity was calculated by summing the MET-minutes accumulated from each activity type. Based on total weekly MET-minutes, participants were classified into three groups: sufficiently active ($\geq 3,000$ MET-min/week), low active (600–2,999 MET-min/week), and inactive (< 600 MET-min/week) (Özüdoğru, 2013).

EAT-26

Eating behaviors were measured using EAT-26, developed by Garner et al. (1982) and validated in Turkish by Ergüney-Okumuş and Sertel-Berk (2020). The EAT-26 includes 26 items, with responses recorded on a 6-point Likert-type scale. Scores ≥ 20 suggest abnormal eating attitudes and potential clinical concern. The internal consistency reliability for the Turkish version was reported as $\alpha = 0.75$.

Ethical Considerations

Ethical approval for this study was granted by the Eskişehir Technical University Scientific Research and Publication Ethics Committee (Protocol No: E-87914409-640-2300018868; Date: 06/04/2023). Prior to data collection, institutional approvals were secured. All participants received a comprehensive



explanation of the study objectives, and written informed consent was obtained in compliance with the Declaration of Helsinki.

Data Analysis

All statistical analyses in this study were conducted using SPSS Statistics for Windows, version 25 (IBM Corp., Armonk, NY, USA), to ensure precise computation of descriptive statistics, comparative tests, and correlation analyses. Prior to conducting hypothesis tests, the normality of numerical variables was assessed using the Shapiro–Wilk test. Variables that did not meet the assumption of normality were reported as median (minimum–maximum) values. The Mann–Whitney U test was employed for two-group comparisons, while the Kruskal–Wallis H test was applied for analyses involving three or more groups. In cases of significant differences in multiple comparisons, distinct letters were assigned next to the relevant medians in the tables to indicate these differences. Relationships among the scales were examined using Spearman's rank correlation coefficients, interpreted as follows: >0.8 (very high), 0.8–0.6 (high), 0.6–0.4 (moderate), 0.4–0.2 (weak), and <0.2 (very weak) (Choi, Peters, & Mueller, 2010). Statistical significance was considered at $p < 0.05$, $p < 0.01$, and $p < 0.001$, with all tests conducted using two-tailed hypotheses.

Results

Table 1 summarizes the demographics findings of university students. The sample consisted of a higher proportion of males (55.1%) compared to females (44.9%). Nearly half of the participants (47.6%) were under the age of 20. The majority (58.1%) were enrolled in PEST Departments. In addition, most participants reported not consuming alcohol (76.7%) or cigarettes (78.4%).

Table 1. The descriptive characteristics of university students

Variable		n	%
Gender	Female	133	44.9
	Male	163	55.1
	CE	77	26.0
Departments	PEST	172	58.1
	R	27	9.1
	SM	20	6.8
Age	<20 age	141	47.6
	21-24 age	126	42.6
	>25 age	29	9.8
Cigarette consumption	Yes	64	21.6
	No	232	78.4
Alcohol consumption	Yes	69	23.3
	No	227	76.7

n: number; %: percentage; CE: Coaching Education; PEST: Physical Education and Sports Teaching; R: Recreation; SM: Sports Management

In Table 2, the median BMI score of male students [23.1 (10.4-29.8)] was higher than that of females [20.1 (14.8-28.9)] ($U=5285$; $p < 0.001$). It has been revealed that the median BMI values of students aged >25 [24.2 (17.4-29.4)] are higher than those of students aged 21–24 [22.1 (10.4-29.8)] and <20 [21.7 (16.5-29)] ($H=10.984$; $p < 0.01$). The median EAT score of R Department students [17 (3-38)] was higher than that of SM Department students [8 (1-24)] and CE Department students [10 (0-54)] ($H=13.116$; $p < 0.01$). It has been revealed that the median IPAQ values of PEST Department students [5271 (0-23940)] are higher than those of SM Department [2691 (0-16002)] ($H=8.935$; $p < 0.05$).

Table 2. Comparison of university students' demographics findings with IPAQ, EAT-26 and BMI scores.

Variable		IPAQ	EAT-26	BMI
		Median (min-max)	Median (min-max)	Median (min-max)
Gender	Female	4686 (0-23940)	11 (0-54)	20.1 (14.8-28.9)
	Male	4878 (0-44292)	10 (0-53)	23.1 (10.4-29.8)
	U	9969.5	10151.5	5285
	p	0.235	0.347	0.000***
Departments	CE	4896 (0-16017)	10 (0-54)	22.8 (10.4-29.6)
	PEST	5271 (0-23940)	10 (0-53)	21.9 (15.7-29.8)
	R	6492 (0-44292)	17 (3-38)	23.1 (16.80-27.5)
	SM	2691 (0-16002)	8 (1-24)	23.3 (17.8-29.4)



Age	H	8.935	13.116	3.917
	p	0.030 ^{b>d}	0.004 ^{**c>d, a}	0.271
	<20 age	6492 (0- 23232)	10 (0-54)	21.7 (16.5-29)
	21-24 age	4350 (0- 23940)	10 (1-53)	22.1 (10.4-29.8)
Cigarette consumption	>25 age	4212 (594- 44292)	13 (2-47)	24.2 (17.4-29.4)
	H	4.088	3.140	10.984
	p	0.129	0.208	0.004 ^{**c>a,b}
	Yes	4455 (0-18576)	15 (1-35)	23.1 (16.1-29.6)
Alcohol consumption	No	5223 (0-44292)	10 (0-54)	21.9 (10.4-29.8)
	U	6699.5	6326	6260
	p	0.232	0.070	0.055
	Yes	5160 (0-18210)	11 (1-44)	21.8 (16.5-29.1)
	No	4686 (0-44292)	10 (0-54)	22.2 (10.4-29.8)
	U	7427	7657.5	7776
	p	0.516	0.789	0.929

IPAQ: International Physical Activity Scale; EAT-26: Eating Attitude Test-26; BMI: Body Mass Index; CE: Coaching Education; PEST: Physical Education and Sports Teaching; R: Recreation; SM: Sports Management; H: Kruskal-Wallis H Test; U: Mann-Whitney U Test. Significant differences, $p<0.05^*$, $p<0.01^{**}$, and $p<0.001^{***}$

As presented in Table 3, the correlations among IPAQ, BMI, and EAT-26 scores were examined in the university student sample. A weak but statistically significant positive correlation was identified between IPAQ and EAT scores ($r = 0.131$; $p < 0.05$), indicating that an increase in the IPAQ score resulted in a 13.1% increase in the EAT score.

Table 3. Correlation coefficients between IPAQ, BMI, and EAT-26 scores.

		IPAQ	BMI	EAT-26
IPAQ	s	1.000		
	p			
BMI	s	0.047	1.000	
	p	0.418		
EAT-26	s	0.131	0.400	1.000
	p	0.024 [*]	0.488	

IPAQ: International Physical Activity Scale, BMI: Body Mass Index, EAT-26: Eating Attitude Test-26, s: Spearman's Rank Differences Correlation. Significant differences, $p<0.05^*$, $p<0.01^{**}$, and $p<0.001^{***}$

Discussion

Achieving the goal of a healthy society requires the evaluation and improvement of physical activity and eating attitudes among young individuals. Accordingly, this study aims to evaluate the relationships between IPAQ, EAT, and BMI among university students.

BMI is a key anthropometric measure commonly employed to evaluate an individual's body weight in relation to their height. In this study, the majority of students' BMI values were classified as normal according to WHO criteria. Notably, the median BMI of female students within the normal weight range was lower than that of their male counterparts, suggesting potential gender-related differences in body composition. These findings are consistent with large-scale international studies. Peltzer et al. (2014) evaluated the body weights of 15,746 undergraduate students across 22 countries, finding that the mean BMI was within the normal range (22.5 kg/m²) and that obesity prevalence was greater among male students than females. Consistent with these findings, Jamshed et al. (2018) observed that the prevalence of overweight and obesity was higher among male medical students relative to females. Regional studies, such as Yilmaz and Kocataş (2019), also identified higher mean BMI values among boys compared to girls, with statistically significant differences. In contrast to our study, Flores-Paredes et al. (2024) found that the prevalence of overweight (15.06%) and obesity (8.17%) was higher among women compared to men. Additionally, Yáñez-Sepúlveda et al. (2025), in their study on children aged 5–9 years and adolescents aged 10–19 years, found no differences in BMI according to sex. As a result of the study conducted by Paredes Román et al. (2025) on middle school students, it was found that there was homogeneity in body mass index (BMI) between both sexes. Altınbaş (2022) reported no statistically significant association between gender and BMI, suggesting the influence of contextual factors. The influence of sociocultural factors further contextualizes these findings. With the proliferation of media, thinness has become an entrenched beauty standard for women (Halliwell, 2013), who often perceive slimmer body types as more attractive (Stojcic, Dong, & Ren, 2020). Moreover, women with thinner bodies may access greater social and economic opportunities, such as employment in professions



that emphasize a slender appearance (Teng et al., 2017). Consequently, the pursuit of a specific body shape among women increasingly reflects aesthetic norms rather than solely health-related motivations (Di Gesto et al., 2022).

Age is another critical determinant of BMI among university students. Young adults in the university age range are transitioning from adolescence to adulthood, and both age and lifestyle factors influence BMI trajectories. In the present study, BMI values were generally within the normal range across age groups; however, students over 25 years of age exhibited higher median BMI compared to those under 20 or between 21 and 24 years. Previous studies have reported comparable outcomes. Sayyah et al. (2012) observed significant BMI differences between female students aged 18 and 21 years. Longitudinal data from the large-scale SHoT study in Norway (2010–2018) demonstrated an upward trend in BMI with age, with male students' mean BMI increasing from 24.0 to 24.5 kg/m² and female students' from 22.7 to 24.0 kg/m² (Grasdalsmoen et al., 2019). In contrast, studies in Nepal, Bangladesh, and Sri Lanka found no significant association between BMI and age, suggesting that dietary habits, physical activity, and socioeconomic status may exert a stronger influence on BMI in these contexts (Jha et al., 2021; Rahman et al., 2016; Wehigaldeniya et al., 2017). Collectively, these findings indicate that BMI among university students is shaped by a complex interplay of age, gender, lifestyle behaviors, and sociocultural factors. While age-related increases in BMI are observed in certain geographic and cultural contexts, this trend is less pronounced in others, reflecting the influence of dietary patterns, physical activity engagement, and gender norms. These results highlight the importance of promoting healthy dietary habits and consistent physical activity among university students to prevent excessive weight gain and its associated health consequences.

Physical activity constitutes a pivotal component of health maintenance and quality of life during young adulthood, yet engagement is shaped by multiple contextual factors, including academic discipline, professional orientation, and academic workload. In the present study, median IPAQ scores were significantly higher among students enrolled in the PEST Departments compared to those in the SM Departments, potentially due to differences in curriculum design, as SM students typically encounter a higher proportion of theoretical courses and fewer practical sessions, limiting opportunities for structured physical activity. These findings are consistent with previous research demonstrating the impact of academic discipline on physical activity levels; for example, Çağın (2021) reported significant differences in activity according to students' fields of study, Sarıkaya et al. (2023) observed greater engagement among CE students compared to SM peers, and Güven and Solmaz (2022) identified a statistically significant association between academic department and physical activity, whereas Şahin et al. (2017) noted comparable levels across departments, suggesting that contextual and institutional factors may modulate these relationships. Taken together, these results underscore the importance of considering both curriculum structure and professional expectations when designing interventions aimed at promoting physical activity among university students, particularly in disciplines with heavy theoretical loads and limited practical exposure.

Eating attitudes constitute another critical dimension of university students' health-related behaviors. These attitudes reflect dietary practices, body image, and potential risk for developing eating disorders. In the current study, although overall eating attitude scores did not exceed 20, students enrolled in the R program exhibited significantly higher levels of disordered eating attitudes compared to those in CE and SM programs, indicating that participation in non-health-oriented programs may be associated with less favorable eating behaviors. These results align with prior research showing that academic discipline can influence eating attitudes; Dügeroğlu (2022) and Çiftçi (2012) reported significant variations in eating attitudes based on department or faculty enrollment. While students in health sciences programs generally possessed higher nutritional knowledge, they still exhibited tendencies toward meal skipping and increased consumption of convenience and fast foods, likely due to intensive coursework and clinical or internship obligations (Deliens et al., 2014). Internationally, Aserese et al. (2025) reported a significant association between field of study and disordered eating attitudes in female students at Arba Minch University. Notably, students from non-health-related programs were 2.27 times more likely to exhibit irregular eating behaviors compared to their peers from health-related disciplines. This disparity may reflect differences in awareness of the consequences of unhealthy eating habits and in the use of coping strategies, indicating that students in health-related fields possess protective knowledge and skills that lower the risk of disordered eating behaviors. Collectively, these findings underscore the importance of academic discipline as a determinant of eating attitudes in university populations. They also



highlight the potential need for targeted interventions within non-health-oriented programs to promote healthier dietary behaviors and prevent the development of maladaptive eating patterns. Further longitudinal and interventional studies are needed to elucidate causal relationships and to guide program-specific interventions designed to enhance nutritional outcomes among university students.

University students' health-related behaviors, encompassing both physical activity and eating attitudes, represent interrelated aspects of lifestyle that jointly influence physical and psychological well-being. Previous research has highlighted a significant interplay between eating attitudes and physical activity, suggesting that dietary behaviors and exercise patterns are closely interconnected and jointly influence both physical and psychological health outcomes (Deliens et al., 2014). In line with these findings, the present study identified a significant positive correlation between students' physical activity levels and their eating attitudes. This finding aligns with Rouzitalab et al. (2019), who reported a significant positive correlation between eating attitudes and physical activity among Physical Education students ($p = 0.002$). Arslan et al. (2022), examining students at Üsküdar University, also identified a statistically significant, though weak, correlation between EAT-40 and IPAQ scores ($r = -0.179$; $p < 0.001$), while Li et al. (2024), in a study with 644 Polish adults, reported a robust correlation between EAT-26 and IPAQ scores ($r = 0.642$). Similarly, Arı and Çakır (2021) found that higher engagement in physical activity was associated with more favorable attitudes toward healthy eating, and Kaya et al. (2022) observed that physically active students exhibited more positive dietary habits than their less active peers. Morin et al. (2013) further reported that physically active adolescents were more likely to consume vegetables, fruits, and whole-grain products and to maintain regular breakfast habits compared to their inactive counterparts. Collectively, these results underscore a consistent relationship between physical activity and healthier eating behaviors. Beyond individual behavior, family functioning has emerged as an influential contextual factor in shaping adolescents' eating and physical activity patterns. Higher levels of family functioning are associated with healthier dietary habits, increased engagement in physical activity, and reduced sedentary behavior (Berge et al., 2013). This suggests that interventions aimed at improving lifestyle behaviors among young adults should consider both individual and familial factors to effectively promote physical activity and healthy eating practices.

Strengths and Limitations

This study provides a comprehensive perspective on university students' health-related behaviors by simultaneously examining physical activity, eating attitudes, and BMI. The inclusion of 296 students from various academic departments enhances the reliability and generalizability of the findings. Additionally, the use of validated instruments, such as IPAQ and EAT-26, strengthens the reliability and validity of the results. By considering demographic factors (age, gender) and academic variables (field of study, department) together, the study offers a nuanced understanding of determinants influencing students' lifestyle behaviors and provides valuable insights for targeted interventions aimed at promoting healthy habits among young adults.

Several limitations should be noted when interpreting the findings. First, the cross-sectional design limits the ability to establish causal relationships among physical activity, eating attitudes, and BMI. Second, the use of convenience sampling may introduce selection bias and restrict the generalizability of the findings to the broader university population. Third, all data were self-reported (IPAQ, EAT-26), which may be influenced by recall bias or social desirability. Fourth, potential confounding factors, such as socioeconomic status, place of residence, and access to sports facilities or university dining services, were not considered. Finally, the study was conducted in two universities in the Anatolia region, limiting the generalizability of the findings to students in other regions or educational settings.

Conclusions

In conclusion, university students' physical activity, eating attitudes, and BMI are significantly influenced by demographic and academic factors. Students in practice-oriented programs demonstrated higher physical activity levels and more favorable eating attitudes compared to those in non-practice-oriented disciplines, while female students generally reported lower BMI scores. BMI also tended to increase with age. These findings highlight the importance of discipline-specific interventions that promote regular physical activity and healthy eating behaviors to reduce the risk of obesity and disordered



eating and to support the development of sustainable, health-promoting habits among university students. Future longitudinal and intervention-based studies will contribute to a better understanding of causal relationships and the development of program-specific recommendations aimed at improving students' overall health and well-being.

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