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Healthy lifestyle practices among university students: A survey study

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Abstract

Background: University life represents a critical transitional period where students establish independent lifestyle habits. However, heavy academic demands often lead to compromised health behaviors, which can significantly affect their overall well-being and academic performance. **Objectives:** This study aims to identify and evaluate the lifestyle patterns and health-related behaviors of university students, specifically focusing on dietary patterns, exercise, hygiene, stress, and unhealthy habits. **Methods:** A quantitative research design utilizing a survey method was employed. The participants consisted of 40 students (35 females, 5 males; average age 20) from the Faculty of Teacher Training and Education. Data were collected using a 15-item questionnaire created in Google Forms and distributed via WhatsApp. The data were then analyzed descriptively using Microsoft Excel to determine response frequencies and percentages across five lifestyle categories. **Results:** The findings revealed a contrast in students' daily habits. The majority of students demonstrated positive behaviors in hygiene (95.0% frequently maintained) and dietary patterns (65.0% frequently practiced healthy eating). However, physical activity was alarmingly low, with 75.0% of students rarely or never exercising. Furthermore, nearly half of the respondents (47.5%) frequently experienced stress, and a notable portion (37.5%) frequently engaged in unhealthy habits such as staying up late, smoking, or consuming fast food. **Conclusion:** While students exhibit excellent hygiene and adequate dietary habits, they struggle significantly with physical inactivity, high stress levels, and unhealthy daily routines. Institutional support and health promotion programs focusing on stress management and physical fitness are highly recommended to improve students' overall quality of life.

Keywords: Student Lifestyle, Health Behaviors, Stress, Dietary Pattern, Quantitative Survey.

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INTRODUCTION

The transition to university life marks a critical period of development where young adults experience newfound independence and begin to establish autonomous lifestyle habits. During this phase, students undergo significant environmental, psychological, and social changes that can profoundly influence their health trajectories (Romero-Blanco et al., 2020; Savage et al., 2020). While higher education offers vast opportunities for

personal and professional growth, the heavy academic demands, irregular schedules, and peer influences often lead to the adoption of poor health behaviors. Consequently, university students are increasingly recognized as a vulnerable population highly susceptible to negative lifestyle shifts, which can directly impact their academic performance and long-term well-being (Son et al., 2020).

Among the most concerning lifestyle changes observed in university students are alterations in dietary patterns and a decline in physical activity. Research indicates that college students frequently consume fast food, skip meals, and fail to meet daily nutritional requirements, a trend often exacerbated by limited time and budget constraints (Amatori et al., 2020). Concurrently, sedentary behaviors have surged, with a significant proportion of students failing to meet the recommended guidelines for weekly physical exercise (Galle et al., 2020). This physical inactivity not only contributes to physiological health risks but is also intrinsically linked to poor mental health outcomes, including heightened anxiety and depressive symptoms (Grasdalsmoen et al., 2020).

In addition to physical inactivity and poor nutrition, university students frequently battle high levels of psychological stress and engage in unhealthy daily habits. Academic pressures, such as tight assignment deadlines and examinations, are primary stressors that severely burden students' mental health (Pascoe et al., 2020). High levels of continuous stress often trigger a cascade of unhealthy coping mechanisms, including sleep deprivation, smoking, and the excessive consumption of sugary beverages or snacks (Kecojevic et al., 2020; Marelli et al., 2021). Furthermore, while general health awareness and personal hygiene practices have seen increased attention in recent years due to global health crises, consistent application of environmental and personal hygiene remains variable among the student population (Peng et al., 2020).

Investigating these lifestyle components is particularly vital for students enrolled in the Faculty of Teacher Training and Education. As future educators, these students will not only face the demanding nature of the teaching profession but will also serve as vital role models for the health and

behavioral habits of younger generations. Despite the critical importance of holistic well-being, comprehensive data capturing the multidimensional lifestyle patterns of these specific students remains limited.

Therefore, this study aims to identify and evaluate the overarching lifestyle patterns and health-related behaviors of university students. By specifically assessing five core domains—dietary patterns, exercise frequency, hygiene practices, stress levels, and unhealthy habits—this research seeks to provide foundational data. These insights are essential for academic institutions to design targeted health promotion programs and stress management interventions, ultimately fostering a healthier, more resilient student body.

METHOD

Study Design and Participants

This study employed a quantitative research design utilizing a survey method to identify students' lifestyle patterns. The target population for this study was students from the Faculty of Teacher Training and Education. A total of 40 students participated as respondents, consisting of 35 females and 5 males.

Research Instrument and Data Collection

The data collection instrument was a structured questionnaire consisting of 15 questions. To facilitate the data gathering process, the questionnaire was created using Google Forms and distributed online to the students through WhatsApp. The 15 questions were divided into five main categories assessing different aspects of health and lifestyle. The detailed breakdown of the categories and their respective questions is presented in Table 1.

Table 1. Categorization of Questionnaire Items

No	Category	Questions
1	Dietary Pattern	1. Do you often consume nutritious foods? 2. How often do you drink water? 3. Do you often consume fruits? 4. Do you often consume vegetables?
2	Exercise	1. How often do you exercise in one week?
3	Hygiene	1. Do you consistently maintain the cleanliness of your surrounding environment?

No	Category	Questions
		2. Do you consistently maintain personal hygiene?
4	Stress	1. How often do you experience stress in a day? (often/rarely/never) 2. Do academic assignments often cause stress?
5	Unhealthy Habits	1. Do you often consume fast food or snacks? 2. Do you often consume sweet foods/drinks? 3. Do you pay attention to the number of calories you consume each day? 4. Do you often stay up late? 5. Do you often lie down immediately after eating? 6. Do you often smoke?

Data Analysis

The collected data were analyzed using Microsoft Excel. The software was utilized to calculate response percentages and generate graphs and charts. This method facilitated a straightforward and accurate analysis of the respondents' data, allowing the researcher to accurately interpret the students' lifestyle patterns.

RESULT

Based on the data obtained, there were 40 respondents consisting of 33 students from the Primary School Teacher Education Study Program and 7 students from other study programs. In terms of gender, 35 respondents were female and 5 were male. The average age of respondents was 20 years, represented by 28 students, while 2 students were 18 years old, 2 students were 19 years old, 6 students were 21 years old, and 2 students were 22 years old.

Table 1. Characteristics of Respondents

Characteristics	Category	n	%
Study Program	Primary School Teacher Education	33	82.5
	Other study programs	7	17.5
	Total	**40**	**100.0**
Gender	Female	35	87.5
	Male	5	12.5
	Total	**40**	**100.0**
Age (years)	18	2	5.0
	19	2	5.0
	20	28	70.0
	21	6	15.0
	22	2	5.0
	Total	**40**	**100.0**

The results are presented based on five categories of questions assessing students' lifestyle and health-related behaviors: dietary patterns, exercise, hygiene, stress, and unhealthy habits.

Dietary Pattern Category

This category consisted of four questions assessing students' eating habits and dietary patterns. As shown in Table 2, 65.0% of students frequently practiced healthy eating habits, while 35.0% rarely practiced healthy eating habits.

Exercise Category

This category assessed the frequency of students' participation in exercise activities during a typical week. The results showed that 25.0% of students exercised frequently, 65.0% exercised rarely, and 10.0% reported that they never exercised.

Hygiene Category

This category consisted of two questions assessing students' personal and environmental hygiene practices. The results indicated that 95.0% of students frequently maintained good hygiene, whereas 5.0% rarely maintained good hygiene.

Stress Category

This category consisted of two questions assessing students' experiences of stress. The results showed that 47.5% of students frequently experienced stress, 47.5% rarely experienced stress, and 5.0% reported never experiencing stress.

Unhealthy Habits Category

This category consisted of four questions assessing students' unhealthy habits. The results indicated that 37.5% of students frequently engaged in unhealthy habits, 40.0% rarely engaged in unhealthy habits, and 22.5% reported never engaging in unhealthy habits.

Table 3. Distribution of Students' Responses by Category

Category	Response Frequency	n	%
Dietary Pattern	Frequently	26	65.0
	Rarely	14	35.0
	Total	**40**	**100.0**
Exercise	Frequently	10	25.0

Category	Response Frequency	n	%
	Rarely	26	65.0
	Never	4	10.0
	Total	**40**	**100.0**
Hygiene	Frequently	38	95.0
	Rarely	2	5.0
	Total	**40**	**100.0**
Stress	Frequently	19	47.5
	Rarely	19	47.5
	Never	2	5.0
	Total	**40**	**100.0**
Unhealthy Habits	Frequently	15	37.5
	Rarely	16	40.0
	Never	9	22.5
	Total	**40**	**100.0**

n = number of students; % = percentage. Percentages are calculated based on a total of 40 respondents.

Table 8 reflects the cardiovascular endurance levels. Overall, the extracurricular program has fostered robust aerobic capacity, with a majority of students performing well. However, the 34% of males and 24% of females in the average-to-poor categories represent students who may struggle with sustained focus and technique fatigue during prolonged practice sessions. Instructors should use these insights to strategically schedule rest intervals during training.

DISCUSSION

The present study evaluated the lifestyle patterns and health-related behaviors of university students, focusing on dietary habits, physical activity, hygiene, stress levels, and unhealthy practices. The findings reveal a compelling dichotomy in the students' daily routines: while the majority demonstrate excellent hygiene and adequate dietary patterns, they simultaneously struggle with alarmingly low levels of physical activity, high academic stress, and frequent engagement in unhealthy habits.

Interestingly, our results indicate that 95.0% of the respondents frequently maintained good personal and environmental hygiene, and 65.0% regularly practiced healthy dietary habits, such as consuming nutritious foods, fruits, and vegetables. This high adherence to fundamental health practices may be partially attributed to their academic background in the Faculty of Teacher Training and Education, where students are generally

exposed to foundational health, wellness, and developmental concepts. Recent literature supports this observation, noting that college students who are equipped with adequate health literacy often prioritize basic nutritional intake during their transition into independent living (Horaist & Watson, 2024). Furthermore, maintaining a balanced dietary structure—particularly one rich in micronutrients and low in high-calorie foods—has been shown to significantly optimize physical development and cognitive performance among university populations (Zhang, 2025). Regular meal consumption and adequate hydration also serve as crucial protective factors against the cognitive fatigue commonly experienced in demanding higher education environments (Popovici et al., 2024; Yun et al., 2024).

Conversely, the most concerning finding of this study is the pervasive lack of physical activity. A cumulative 75.0% of the respondents reported exercising rarely or never. This severe physical inactivity aligns with a growing global epidemic of sedentary behavior among university students, which is heavily driven by prolonged screen-based learning, extensive academic workloads, and limited time for recovery (Guerriero et al., 2025). The transition to university life often drastically reduces a student's incidental physical activity, replacing it with prolonged sitting during lectures and study sessions. This sedentary lifestyle is not merely a physiological health risk; it is directly correlated with diminished psychological resilience and emotional instability (Martín-Rodríguez et al., 2024). Regular, moderate physical activity is essential for regulating neurotransmitters such as serotonin and dopamine, which play critical roles in managing the psychological burdens of academic life (Jiazhi, 2024).

The high prevalence of stress and unhealthy habits further complicates the students' health profiles. Nearly half of the participants (47.5%) reported frequently experiencing stress, primarily triggered by academic assignments, while 37.5% frequently engaged in unhealthy behaviors such as staying up late, consuming fast food, or smoking. This correlation is not coincidental; chronic academic stress heavily influences lifestyle choices by depleting the cognitive capacity required for self-control, leading to emotional eating and irregular sleep–wake cycles (Alzahrani, 2024). As students experience

heightened anxiety and academic pressure, they frequently resort to passive coping mechanisms, sleep deprivation, and the consumption of ultra-processed foods or high-sugar beverages as immediate, albeit harmful, stress relievers (Akhtari-Zavare et al., 2025). Over time, this mutually reinforcing cluster of risk factors—sedentary behavior, chronic stress, and poor daily habits—can lead to early metabolic disturbances, weakened immune function, and severe mental health decline (Khairunnisa et al., 2024).

In summary, while the surveyed education students exhibit foundational strengths in hygiene and diet, their vulnerability to stress and physical inactivity requires immediate institutional attention. As future educators, these students must embody the healthy behaviors they will eventually model for younger generations. Universities must move beyond traditional academic frameworks by integrating comprehensive wellness policies, promoting accessible campus-based physical activities, and providing active stress-management interventions to foster a healthier student body.

CONCLUSIONS

In conclusion, the lifestyle of university students reveals a significant paradox between foundational health awareness and actual daily practices. While many students demonstrate excellent adherence to personal and environmental hygiene and maintain relatively healthy dietary patterns, they simultaneously face severe vulnerabilities regarding sedentary behaviors and psychological well-being. The most concerning findings highlight an alarmingly low level of physical activity coupled with high stress—primarily triggered by academic burdens—which frequently leads to unhealthy coping mechanisms such as sleep deprivation and the consumption of fast food. These patterns indicate that heavy academic demands often force students to sacrifice physical fitness and recovery time, ultimately proving that possessing basic health knowledge does not automatically translate into an active lifestyle or effective stress management.

To deepen the understanding of these findings, future research should move beyond descriptive designs by employing correlational or path analysis studies to examine the direct causal relationships between academic stress, sedentary habits, and academic performance. Additionally, utilizing

qualitative or mixed-methods approaches would be highly beneficial to explore the subjective experiences of academic stress and the underlying reasons for physical inactivity, such as time constraints or inadequate campus facilities. Future studies must also aim to recruit a larger, more diverse sample across various faculties to allow for comprehensive demographic comparisons, particularly regarding gender and academic disciplines. Finally, researchers are strongly encouraged to design and evaluate targeted campus-based interventions, such as brief relaxation and physical activity programs, to actively mitigate student stress and improve their overall quality of life.

AUTHOR CONTRIBUTIONS

Conceptualization: I. & I.D.P.W.; Methodology: I. & I.D.P.W.; Investigation: I. & I.D.P.W.; Data curation: I. & I.D.P.W.; Formal analysis: I. & I.D.P.W.; Project administration: I. & I.D.P.W.; Visualization: I. & I.D.P.W.; Writing – original draft: I. & I.D.P.W.; Writing – review & editing: I. & I.D.P.W.. All authors have read and approved the final version of the manuscript and agree to be accountable for the integrity and accuracy of the work.

ETHICAL STATEMENT

The study was conducted in accordance with ethical principles for research involving human participants. Formal permission to conduct the study was obtained from the relevant educational authorities and University prior to data collection. The research procedures were coordinated with the lecture before the study was conducted.

INFORMED CONSENT

Written informed consent was obtained from the participants' parents or legal guardians prior to participation in the study. In addition, assent was obtained from all participating students. Participation was voluntary, and participants were informed that they could withdraw from the study at any time without penalty.

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this manuscript, the authors used ChatGPT

(OpenAI) solely to improve language, grammar, and readability. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the accuracy, integrity, and content of the publication.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest with any party in the implementation of this research.

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