Trends in Fitness and Health Behaviour Among College Students

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ABSTRACT

This research study investigates the contemporary trends in fitness and health behaviour among college-attending young adults, shedding light on the evolving lifestyles, challenges, and opportunities faced by this demographic. The study employs a survey research design, utilizing a random sampling approach to collect data from a diverse group of college students. Multiple data collection methods, including fitness assessments & surveys, are employed to capture a holistic view of the participants' fitness levels, health behaviours, and influencing factors.

The findings reveal that the mean values for various fitness components, including flexibility, grip strength, and body fat percentage, fall within moderate ranges, highlighting the overall fitness status of the population. Physical activity levels are categorized into low, moderate, and high, with a significant proportion of students engaging in low physical activity, posing potential health risks associated with sedentary behaviour.

Dietary habits indicate that a substantial number of college students consume junk food frequently, raising concerns about overall dietary quality. Sleep patterns also vary, with a majority of students falling within the recommended sleep duration of 6-8 hours, but a significant minority reporting insufficient sleep.

The implications of these findings underscore the importance of targeted interventions to promote healthier lifestyles among college students. These interventions may include fitness and wellness programs, nutrition education initiatives, stress management resources, and improved campus dining options.

In conclusion, this research provides valuable insights into the dynamic trends in fitness and health behaviour among college-attending young adults. It underscores the need for holistic approaches to address the multifaceted factors that influence their physical fitness, health behaviours, and overall well-being in the college environment. The findings serve as a foundation for future research and the development of evidence-based policies and interventions aimed at improving the health and wellness of this vital demographic.

Keywords : Physical Fitness, Sleep Pattern, Dietary Habits

Introduction

The importance of fitness and health among college students cannot be overstated, as it directly impacts not only their well-being but also their academic success and future quality of life. Here's an overview of why fitness and health are crucial for college students:

Physical Well-being : College students often experience significant lifestyle changes, including irregular schedules, poor eating habits, and increased stress. Maintaining fitness and health helps students combat these challenges and reduce the risk of chronic illnesses like obesity, diabetes, and heart disease.

Mental Health : Fitness and regular exercise have been linked to improved mental health. College life can be stressful, and physical activity releases endorphins, which can alleviate symptoms of anxiety and depression. It's a vital tool for managing stress and promoting emotional well-being.

Academic Performance: Physical health directly correlates with cognitive function. Students who engage in regular physical activity tend to have better focus, memory, and problem-solving abilities, which can lead to improved academic performance.

Energy and Productivity : Staying physically active helps students maintain higher energy levels and productivity throughout the day. This is especially important during long hours of studying and attending classes.

Stress Reduction: College life can be demanding, and stress is a common issue. Regular exercise is a natural stress reliever, helping students manage their stress levels effectively.

Healthy Habits for Life : College is a time when lifelong habits are established. Encouraging fitness and health among college students instills behaviors that can persist into adulthood, leading to a healthier and more fulfilling life.

Social Interaction: Engaging in fitness activities can promote social interaction and a sense of belonging. Joining sports teams, fitness classes, or recreational clubs can help students build friendships and a support network.

Improved Self-Esteem : Maintaining physical health can boost self-esteem and body confidence, which is essential for overall well-being, especially during a period of significant personal growth and development.

Long-Term Health Benefits : Establishing healthy habits during college can have a lasting impact on a student's life. It reduces the risk of chronic diseases in later years and promotes a higher quality of life in the long run.

Fitness and health are integral components of a successful and fulfilling college experience. By prioritizing physical and mental well-being during their academic years, college students are better equipped to overcome challenges, excel academically, and lay the foundation for a healthy and prosperous future.(CDC, 2023)

General objective of the study was to identify and analyse trends in health behaviours such as physical activity, diet, sleep patterns, and substance use among college students along with role of digital technologies, including fitness apps and social media, in shaping fitness and health behaviour trends among college students.

Studying fitness and health behaviour trends among college-going young adults is significant for several reasons:

Public Health Impact: The fitness and health behaviours of young adults can have a significant impact on their long-term health outcomes. Understanding these trends can help public health authorities develop targeted interventions to improve the health of this population, reducing the burden of chronic diseases in the future.

Prevention of Lifestyle-Related Diseases: Unhealthy fitness and health behaviours during the college years can set the stage for the development of lifestyle-related diseases such as obesity, cardiovascular disease, and type 2 diabetes later in life. By identifying negative trends early, interventions can be implemented to prevent these diseases.(Sleep Cycle Stages: Chart, Durations, and How to Improve Sleep, n.d.)

Academic Performance: There is a growing body of evidence suggesting a link between physical fitness and academic performance. Improved fitness and health

behaviours may lead to better cognitive function and academic outcomes among college students, which can have long-lasting effects on their careers.

Mental Health: Physical activity and healthy behaviours are closely linked to mental health. Understanding trends in this area can help colleges implement mental health and wellness initiatives that address the needs of their students.

Social and Peer Influence: College is a time when young adults are exposed to new social and peer influences. Studying fitness and health behaviour trends can help identify how these factors affect students and inform strategies to promote healthy choices and peer support. (Larose et al., 2022)

Research Methodology:

This study employs survey method providing a snapshot of fitness and health behaviour trends among college students aged 18 yrs. to 25 yrs.

Sampling Method : A stratified random sampling approach was used to ensure a diverse representation of college students. Stratification was based on gender.(Best, 2010)

Sampling Size : A target sample size of 120 participants was recruited to achieve sufficient statistical power for the study.

Tools for Data Collection : Physical fitness levels was assessed using the following standardized fitness tests :

- Sit and reach test for flexibility.
- Grip strength test for muscular strength.
- Body composition was measured using bioelectrical impedance analysis (BIA).
- Health Behaviour Surveys:
- Participants completed self-report surveys to assess various health behaviours, including: Physical activity levels, Dietary habits, Sleep patterns (Miller, 2009)

Data Analysis:

Statistical Analysis and Conclusions : Quantitative data was analysed using statistical software (e.g., SPSS) to identify trends and correlations among variables. Qualitative data from focus groups was transcribed and analysed thematically to extract key themes and insights. Percentage along with Graphs was used to present the data.

Table 1 : Descriptive of the Fitness Test

Name of the Test	Mean	SD
Sit and reach (cm)	18	+ 1.2
Grip strength (kg)	37	+ 4.6
Fats (%)	23	+ 3.1

The mean value of 18 cm represents the average score for sit and reach flexibility among the studied population. The SD of 1.2 cm indicates the amount of variability in the sit and reach scores within the population. In this case, a smaller SD suggests that the data points are closer to the mean, indicating less variability in sit and reach scores.

The mean grip strength of 37 kg represents the average grip strength level among the participants.

The SD of 4.6 kg indicates the spread or dispersion of grip strength scores in the population. A larger SD suggests that there is more variability in grip strength among the participants, with scores ranging farther from the mean.

The mean body fat percentage of 23% represents the average level of body fat among the individuals in the study.

The SD of 3.1% indicates the degree of variability in body fat percentages within the population. A larger SD implies that there is more variation in body fat percentages among participants.

Table 2 : Analysis of Physical Activity

Name of the Test	No of Students	Percentage
Low Physical activity	55	46 %
Moderate Physical activity	42	35 %
High Physical activity	23	19 %

Low Physical Activity (46%) : This category includes 55 students, representing 46% of the total population studied. It indicates that a substantial proportion of the students have low physical activity levels. Possible implications: These students may be at higher risk for health issues related to sedentary behaviour, such as cardiovascular diseases, obesity, or decreased physical fitness.

Moderate Physical Activity (35%) : This category includes 42 students, representing 35% of the total population studied. It shows that a significant portion

of the students engage in moderate physical activity. Possible implications: Moderate physical activity is associated with health benefits and may contribute to better overall fitness and reduced health risks compared to low physical activity levels.

High Physical Activity (19%) : This category includes 23 students, indicating 19% of the total population studied. It suggests that a smaller but notable percentage of students have high physical activity levels. Possible implications: High physical activity levels are associated with improved cardiovascular health, better fitness, and a reduced risk of chronic diseases.

Table 3 : Analysis of Dietary Habits

level intake of junk Food	No of Students	Percentage
Once a week	33	28 %
Up to 3 times a week	57	48 %
Up to 5 times a week	30	25 %

The data provides insight into how often college students consume junk food. It appears that the majority (48%) of the surveyed students report consuming junk food up to three times a week. A significant portion (25%) consumes it up to five times a week, while a smaller group (28%) reports consuming it only once a week.

Table 3 : Analysis of Sleep Pattern

No of Hours	No of Students	Percentage
6 Hrs to 8 Hrs	64	53 %
More than 8 Hrs	31	26 %
Less Than 6 Hrs	25	21 %

6-8 Hours of Sleep (Recommended Range) : In this category, there are 64 students, which represents 53% of the total sample. This suggests that a majority of the students in the sample, over half of them, are getting the recommended amount of sleep, which is generally considered to be between 6 and 8 hours for adults.

More than 8 Hours of Sleep : In this category, there are 31 students, which accounts for 26% of the total sample. This indicates that a significant portion of the students are getting more than 8 hours of sleep, which can be considered a relatively longer sleep duration.

Less Than 6 Hours of Sleep : In this category, there are 25 students, representing 21% of the total sample. This suggests that a minority of the students, around one-

fifth of them, are getting less than 6 hours of sleep per night, which is generally considered insufficient for most adults.

Conclusions:

Physical Fitness : Flexibility Improvement Programs: For individuals with moderate flexibility levels (average sit and reach scores), consider offering flexibility improvement programs or classes on campus. These could include yoga or stretching sessions to help students enhance their flexibility.

Strength Training Opportunities : Encourage students to participate in strength training programs or access fitness facilities that offer strength training equipment. This can help individuals improve their grip strength and overall muscular strength.

Body Composition Assessments: Offer body composition assessments or consultations to students with a focus on those with body fat percentages that fall outside the average range. Provide guidance on achieving and maintaining a healthy body composition through nutrition and exercise.

Physical Activity : Promote Physical Activity: Launch awareness campaigns and programs to promote physical activity among the student population, especially among those with low physical activity levels. Offer incentives, such as fitness classes or rewards, to encourage participation.

Physical Education Courses: Consider integrating physical education or wellness courses into the curriculum to ensure that students have opportunities to engage in regular physical activity as part of their academic experience.

Dietary Habits :

Nutrition Education: Develop nutrition education programs to raise awareness about healthy eating habits and the consequences of frequent junk food consumption. Workshops, seminars, and cooking classes can help students make better food choices.

Healthy Food Options : Increase the availability of nutritious food options on campus, such as salads, whole grains, lean proteins, and fresh fruits and vegetables. Ensure that these options are accessible and affordable for students.

Dining Hall Initiatives : Collaborate with campus dining services to promote balanced and healthy meals. Implement menu labeling and provide nutritional information to help students make informed choices.

Sleep Patterns:

Sleep Hygiene Education : Offer sleep hygiene workshops and resources to help students develop healthy sleep habits. Encourage the importance of consistent sleep schedules, creating a conducive sleep environment, and minimizing sleep disturbances.

Stress Management Programs : Recognize that high stress levels can contribute to inadequate sleep. Implement stress management programs and counselling services to assist students in managing academic and personal stressors effectively.

Promote Time Management : Encourage time management skills to help students balance their academic and social lives, reducing the likelihood of late-night studying or social activities that interfere with sleep.

Counselling and Support: Provide access to counselling services for students who may be experiencing sleep disorders or other factors affecting their sleep quality.

References:

Best, J. (2010). Educational Research (10th ed.). Pearson.

CDC. (2023, June 29). Physical Activity. Centers for Disease Control and Prevention. https://www.cdc.gov/physicalactivity/index.html

Larose, D., Panahi, S., Jacob, R., & Drapeau, V. (2022). Evaluation of a randomized nutrition intervention combining nutrition education and cooking workshops on dietary intakes and psychosocial determinants of performance in university football athletes. FACETS, 7, 876–890. https://doi.org/10.1139/facets-2021-0140

Miller, M. (2009). Measurement & Assessment in Teaching (10th ed.). Pearson.

Sleep cycle stages: Chart, durations, and how to improve sleep. (n.d.). Retrieved October 7, 2023, from https://www.medicalnewstoday.com/articles/sleep-cycle-stages