

Riddhi

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Title: Prevalence of physical activity among students in a public university

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Contents of This Presentation



- Introduction
- Background
- Rationale
- Research Questions
- Research methodology
- Data analysis technique
- Implications of the research



Background



The health and well-being of college students are greatly affected by how much they engage in physical exercise while attending a public university. Physical fitness, academic performance, and mental health, are just a few domains where regular exercise has been shown to increase the quality of life. Many variables, such as heavy course loads, sedentary lifestyles, and an absence of appropriate sports facilities, have been linked to low rates of physical activity among college students (Romero-Blanco et al., 2020). Knowing the prevalence of this issue at a public university might inform interventions and campaigns targeted at getting students to exercise more and eat better. Educational institutions may develop initiatives to promote and allow students to engage in more excellent physical activity if they first identify obstacles and facilitators.

Introduction

The proportion of students at a public university that engages in regular physical activity is referred to as the "prevalence of physical activity among students." The quantity of physical activity a student engages in to enhance their health and fitness is reflected in their degree of physical activity. Sports, exercise, entertainment, and any other physical activity that keeps students moving are all included.

- Physical exercise benefits the health of the mind and body at any age. However, the World Health Organisation (WHO) reports that just 27% of adults and 80% of adolescents are physically active enough.
- Physical activity levels among students at public institutions are a prominent focus of research and public concern. Regular physical activity is crucial for good health and happiness for various physiological, psychological, and social benefits (Zhu et al., 2019). On the other side, research has shown that when children do not receive enough exercise, their health and academic performance deteriorate.
- There are various reasons why it is essential to learn about the amount of physical activity among students at a public university. It helps to measure the magnitude of the problem and identify segments of the student population that may be at higher risk of inactivity. This understanding may assist educators in developing more effective techniques to get students active and improve their health.

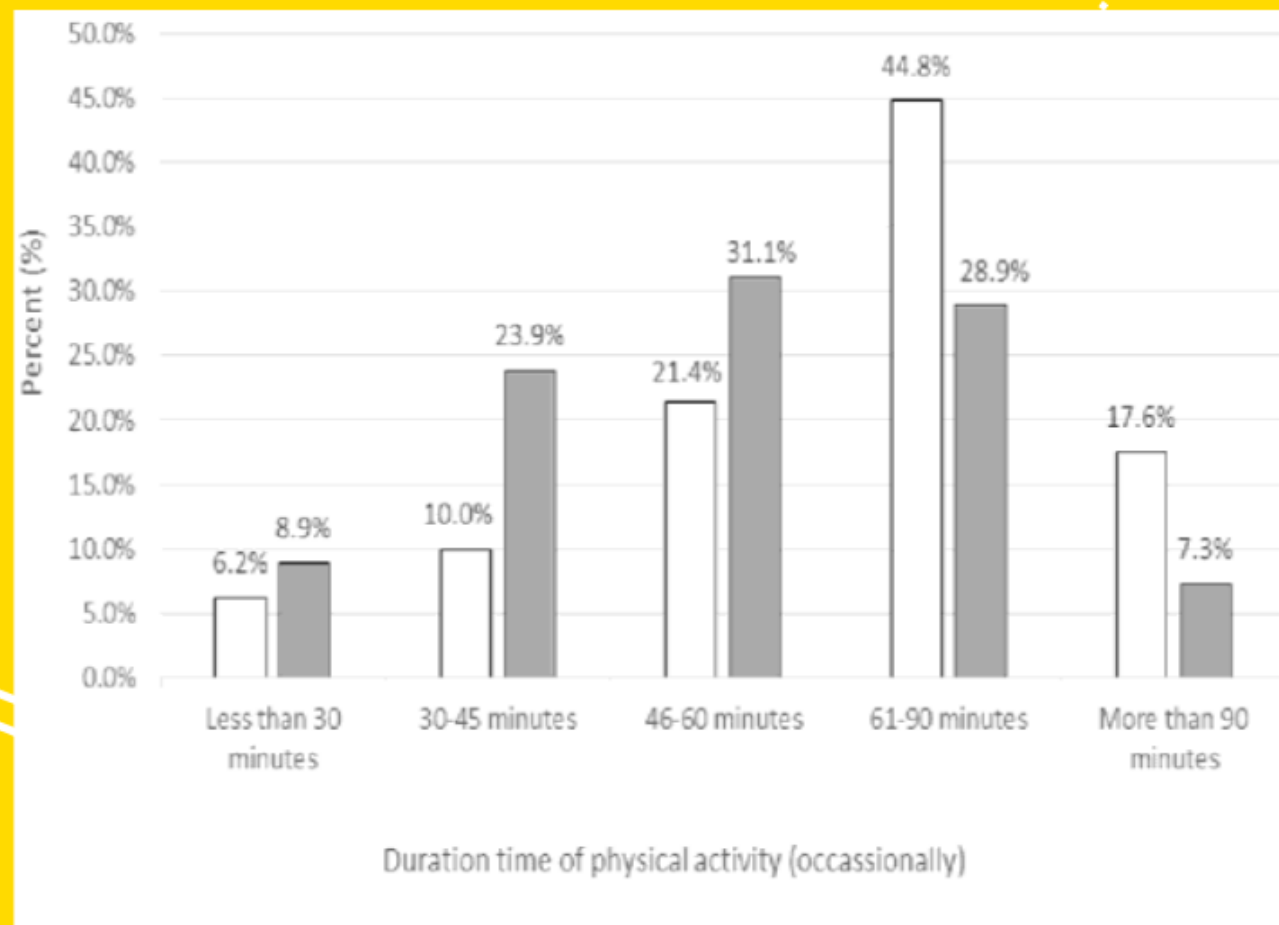


Impact of physical activity on academic performance



- ❑ The regularity with which students participate in physical activity has a significant impact on their academic progress at a public institution. Regular exercise improves brain capacity, memory, intellect, and academic performance. Physical activity increases the amount of oxygen and nutrients transported to the brain by the blood. As a result, youngsters who regularly exercise have better levels of focus, attention, and memory..
- ❑ Regular physical activity may benefit university students since it helps them manage their stress. Stress levels grow in response to school expectations and demands, which may have a detrimental influence on academic performance (Rhodes et al., 2020). When student exercise regularly, the "feel-good" endorphins in the brain are produced, helping student feel less anxious.
- ❑ As a consequence, Students may benefit from improved mental health, less anxiety, and improved overall performance in the classroom. Students who exercise regularly report feeling more invigorated and conscious. Physical activity boosts energy and alertness by boosting blood and oxygen flow to the brain. Students who work up a sweat during the day report feeling more alert, focused, and invigorated, which benefits their academic performance.





Source- Research
gate, 2020



Rationale



The necessity to promote and uphold healthy lifestyles within this particular demographic group is what drives the inquiry of the level of physical activity among students attending public institutions. It is common knowledge that regular physical activity has several positive effects on health and well-being, including a reduction in the chance of developing chronic diseases and an improvement in mental health (III, Murray and Salvo, 2019). By examining the degree of physical activity that is prevalent among university students, one may assess the activity levels that are currently being maintained, locate any activity gaps or disparities, and develop focused interventions to encourage and increase levels of physical activity. This research may contribute to the establishment of evidence-based programmes and programmes that promote an active living culture on campus, ultimately enhancing the health outcomes and quality of life for students attending public institutions.

Research Questions

- What is the current level of physical activity between students at a public institution regarding how often they exercise, how long they exercise for, and how intense their workouts are?
- What variables influence students' levels of physical activity at a public college?
- What are the obstacles and facilitators to physical exercise participation between students at a public university?



Research methodology

Research design

For this study's research design, a method known as a cross-sectional survey will be used. The technique of this research project enables the gathering of data at the same moment, which gives a snapshot of the amount of physical exercise among students attending public universities (Dishman et al., 2022). Using a cross-sectional approach is the most effective way to investigate the current level of physical activity between students as well as the discovery of patterns or trends in this area.





Recruitment, Sampling & Study Participants



- The study will include recruiting a statistically valid sample of students from a public university. Researcher shall use a multi-stage sampling strategy. The university's structure will be based on divisions called "faculties" or "departments."
- After that, students will be picked at random from each group. Using this strategy, researcher can be sure that students from all departments and programs will be represented.
- ⁸ The recruiting process will include many strategies. Initially, all students will be invited to participate in the study by receiving an email via the university's official email system (Hu et al., 2020). Informational posters and brochures will be posted throughout campus to inform students about the study and how they may become involved. Participation will be entirely voluntary, and everyone who chooses to do so will have their privacy and identities protected.



Material and data collection method



A reliable questionnaire will be used to determine the extent to which people engage in physical activity. This research will use the IPAQ (International Physical Activity Questionnaire) to gather information. The International Physical Activity Questionnaire (IPAQ) is a well-known and reliable tool for gauging overall levels of physical activity in contexts as diverse as free time, the workplace, and commutes (Bull et al., 2020). It records data like how often, for how long, and strenuously student engage in various physical activities.

To maximize participation and minimize barriers to entry, an online survey platform will be provided. Additional demographic questions, including Gender, Age, department and Academic year, will be included in the survey design based on the selected questionnaire. The online survey will be made available to participants via a private link.

All participants will be made aware of the study's goals, the confidentiality of their responses, and their autonomy over whether or not they choose to participate (Ghrouz et al., 2019). They will be provided explicit directions on how to finish the survey, and they can do it whenever and wherever they like on any electronic device they own.



Data analysis technique

Descriptive statistics is one method of data analysis that will be used to examine the level of physical exercise among students at a public institution through the collected data (Ramón-Arbués et al., 2020). Students' activity levels and demographic traits may be better understood using descriptive statistics. Following are the steps:

Step 01

Data preparation



Step 02

Calculation of statistics



Step 03

Visualization of Data



Step 04

Analysis and interpretation of results





Steps for Descriptive statistics



Step 1: Data preparation:

Data cleansing and preparation is the initial phase of the analytical process. It's essential to search for anomalies, outliers, and gaps in the data. Now is an excellent time to make necessary changes to the data or recode the variables.



Step 2: Calculation of statistics

Students' levels of physical activity will be described using descriptive statistics (Shimoga, Erlyana and Rebello, 2019). Metrics for variables including mean, median, standard deviation, minimum and maximum values like students' frequency, duration, or intensity of physical activity will be determined.



Steps for Descriptive statistics



Step 3: Visualization of data

It is possible to create visual representations of students' physical activity levels using data visualization techniques, including histograms, bar charts, and pie charts. One can quickly get a feel for the range of activity levels and look for patterns with these charts and graphs.



Step 4: Analysis and interpretation of Data

Rates of physical activity may be broken down by factors like age, education, and occupation using subgroup analysis. It is possible to get descriptive data for each subgroup separately and then compare them (Wang and Boros, 2019).

Descriptive statistics and data visualizations will be used to learn about the level of physical activity among students at public universities. Overall physical activity, differences between student groups, and trends or patterns may all be addressed in light of the data.



Ethical considerations



Several ethical questions will be considered in research on the level of physical exercise at a public institution. At the outset, participants will provide permission after being given all relevant information and the opportunity to engage in the research activities. At every point throughout the study, participants' anonymity will be ensured. Participants' anonymity will be protected by using appropriate data security methods. It cannot be emphasized enough that participating will be entirely voluntary, and no one will be forced to participate in the study. Researchers must ensure that all fitness-related activities and assessments are risk-free for study participants (Pascoe et al., 2020). Prejudice and bigotry have no place in a community that values variety and welcomes all students. Careful deliberation on ethical concerns is essential before data publishing to ensure the confidentiality of study participants. In addition to collecting valuable data on the extent to which college students engage in physical exercise, adherence to these ethical issues assures the rights and well-being of research participants.



Implication of the research



This research's findings are crucial for many different groups since they provide information on the level of physical exercise between students at a public institution. Possible implications for campus health education activities are discussed. It is essential to examine the current state of physical exercise and to find obstacles and motivators to design effective therapies to encourage healthy and active behavior among students (DiPietro et al., 2020). Awareness campaigns, more accessible access to fitness centers, and incorporating physical exercise into the school curriculum are all practical options. There might be policy repercussions from this study. The findings may give valuable data for informing policies and recommendations to get more kids moving. Suggestions may be made on the value of physical education, the design of campuses to encourage active commuting, and the development of relationships with local fitness clubs. The findings of the study are relevant to the student's lives. If students know how often they engage in physical activity, they may have a more accurate idea of how physically active they are compared to their classmates. After reading this, maybe some people may decide to change their eating habits and start exercising regularly. The findings may provide new information on how much college students engage in physical exercise. It might serve as a benchmark for such research in the future, facilitating future comparisons across fields and regions (Grasdalsmoen et al., 2019). The information gained from this study might help inform the creation of more efficient policies and programs that encourage students at public universities to lead physically active lives. Significant implications for health promotion, policymaking, individual behavior modification, and the development of this discipline are drawn from the study's findings. To improve the health of their student bodies, colleges should take preventative measures by addressing these issues and creating an environment that encourages students to engage in physical exercise.

Time schedule

	week 1	week 2	week 3	week 4	week 5	week 6	week 7
Topic selection							
Research questions							
Literature review							
Research methodology							
Discussion							
Analysis of the results							
Recommendations							
Conclusion							

Source- Self created





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