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Title-Prevalence of physical activity among students at Kingston University

Department of MSc Public Health & Social care in practice

Module: Practice-Based Research(LCHS7001)

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Assessment 1 (Individual Presentation)

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Introduction

- Engaging in physical activity offers a variety of advantages for both your physical and mental well-being.
- Among the benefits are the development and preservation of physical and mental function, as well as a reduction in the risk of disease and management of pre-existing conditions.(UK Chief Medical Officers' Physical Activity Guidelines,2019).
- Adults and children in the UK exhibit widespread levels of sedentary behavior and lack of physical activity(Start Active, Stay Active,2011).
- In this research, I will focus to determine the prevalence of physical activity among students at Kingston University.

Literature review

The impact of motivation for physical activity, sports, and exercise among University students

- 736 participants, each statement was evaluated on a Likert scale of 0 to 5, where 1 represents "very true for me," and 5 represents "not at all true for me”.
- Compared to other age groups, students over 23 reported being more motivated.

Nursing and medical students' physical activity and exercise barriers

- Sample size of 361 nursing (n = 193) and medicine (n = 168) students.
- Questionnaire survey.

- Nursing students, at 48%, and medical students, at 38% did not engage in the required amounts of physical activity.
- Nursing students reported lower levels of social support for physical activity, as well as fewer perceived advantages and greater barriers to exercise.

  The impact of age, gender, and ethinicity on exercise motivation for physical activity among college students.
- 199 students at midsize university, cross sectional study.
- Age-related differences were discovered in 3 of the 14 exercise motivating subscales, 2 subscales showed no sex difference, race differences 8 subscales.

Health and happiness levels are higher among active students compared to their inactive counterparts

- A representative sample (n = 8122) of Irish university students participated in a cross-sectional online survey.
- 64.3% met recommended levels.

The perspectives, actions, obstacles, and driving factors related to cycling among university students

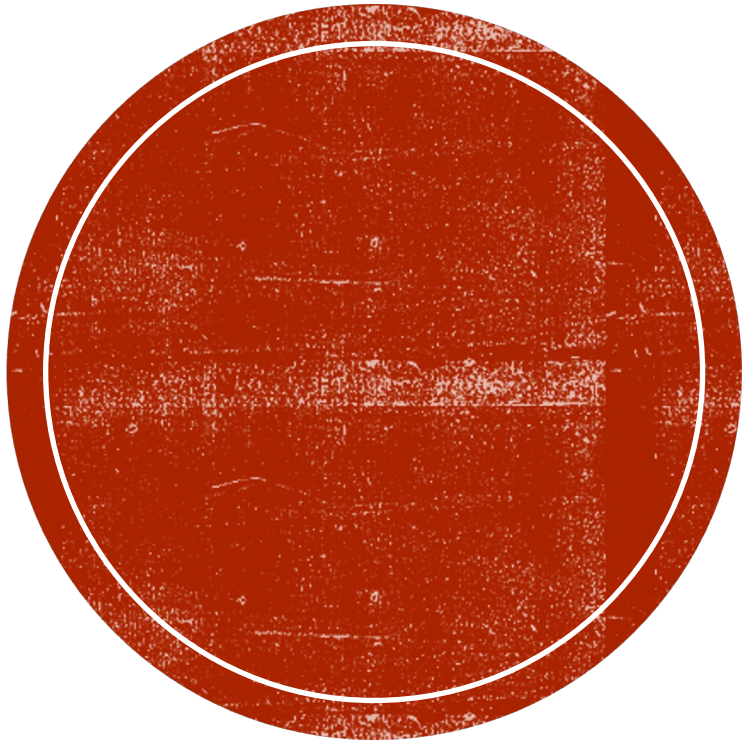
- 194 responses at urban UK university, cross sectional online survey.
- 64 percent of students claimed to cycle just once a year or fewer and it was the preferred mode of transportation for 15% of participants, which is greater than the 10% national average.

Research question

- How many students at Kingston University engage in physical activity?

Rationale

To determine the prevalence of physical activity among students which can potentially aid the University in implementing suitable policies and facilities to meet the demands of students involved in physical activities.



Aim

- To determine the prevalence of Kingston University students who engage in physical activity on a regular basis.

Objectives

- To determine the socio-demographic characteristics of the University students who engage in physical activity.
- To examine the types of physical activity performed by the University students.
- To identify factors motivating students in the University to engage in physical activity.

Hypothesis

- There is a significant proportion of University students who engage in physical activity, and their participation is influenced by specific socio-demographic characteristics.
- The types of physical activity performed by University students vary, encompassing a range of activities.
- Various factors play a significant role in motivating University students to engage in physical activity.

Null hypothesis

- A significant proportion of University students engage in physical activity, and their participation is not influenced by specific socio-demographic characteristics.
- No factors play a significant role in motivating University students to engage in physical activity.

RESEARCH METHODOLOGY

Type of quantitative research (research design)

- Cross sectional study - In my research I am going to utilise cross sectional study which allows me to evaluate simultaneously study participants' exposures and outcomes at point of time.
- To determine the prevalence of a disease or characteristic and to conduct population-based surveys (Maninder S Setia,2016).

Recruitment

Recruitment of all students will be exclusively conducted via the University's email distribution lists(E. F. Sprake et al,2018).

There will not be any mandatory survey questions, participation will be completely voluntary, and the survey will be entirely anonymous.

By checking the "I agree" box before beginning the survey, participants will give their consent(Katerina Belogianni et al,2021).

Sampling and study participants

- A sample of 1000 University students will be selected by stratified sampling technique as it gives accurate results.
- It will result in higher population coverage, since the researchers will have more control over the subgroups and can guarantee their inclusion (Md. Mizanur Rahman et al,2022).
- Inclusion criteria - Students of all ages(over 18 years), all races, both full time and part time under graduation and post graduation students, non health and health courses students.
- Exclusion criteria – Students who are physically disabled and contraindications to physical activity will be excluded.

Data collection procedure

- An online questionnaire will be provided to study participants through email.
- Reasons to choose online questionnaire - Flexible for both researcher and participant, Cheaper, Versatile, Quick and precise, Participant control(Research lifeline,2012).
- Questionnaire will consist of both open and close end questions.

Data analysis technique

- Statistical method – Descriptive statistical analysis will be used as it comprises basic calculations for measures of central tendency, dispersion, as well as graphical representations of frequency distributions(Lynda Gelston,2023).
- Software -Statistical Package for Social Sciences (SPSS) will be used to analyse data.
- Before analysis dataset will be checked for missing data and outliner.

Ethical considerations

- The research protocol will be presented to the Research Ethics Committee at Kingston University for evaluation and approval.
- Before enrolling eligible students into the study, a written informed consent will be acquired from each of them.
- Participation in the study will be optional, and measures will be taken to ensure the confidentiality of the collected data (Kingston university London,2023).

Implication of research

- The research will produce results regarding the prevalence of physical activity among students, this can be used to development of support facilities for the students.
- The research will also identify the factors that motivate the students to engage in physical activity and this can be used to develop policies for the students in the University.

Plane of work and time schedule(Gantt chart)

PHASE	TIME REQUIRED (IN WEEKS)					
	W1	W2	W3	W4	W5	W6
Development and review of research proposal						
Submission of the research proposal to the Research Ethics Committee						
Study staff recruitment and Study staff training .						
Data Collection & Data analysis						
Report writing						
Dissemination of findings.						

Kingston University Physical Activity Student Questionnaire

1.Gender

a. Male b.Female c.others

2. Can you please tell me which program area you are studying in?

a. Science, Engineering & Computing b. Management

c. Health and social care d. Arts

3. Do you engage in any kind of physical activity?

a. Yes b.No

4. If you chose no from above question,can you tell what factors hinder you from doing physical activity?

5. How frequently do you participate in physical activity?

a. Daily b.Weekly c.Monthly d.Yearly e.Never

6. What type of physical activity do you prefer?

a. Walking b.Swimming c.Bicycling d. Jogging and running

e. Aerobics. f.Others g.None

7.If you have chosen 'others' in the question above, can you tell me about your physical activity?

8. What motivates you to engage in physical activity?

Reference

1.Roberts, S. et.al (2014) *The influence of physical activity, sport and exercise motives among UK-based university students, Taylor and Francis online*. Available at: https://www.tandfonline.com/doi/full/10.1080/0309877X.2014.938265 (Accessed: 2 July 2023).

2.Lovell, G.P. El Ansari, W. and Parker, J.K. (2010) *Perceived exercise benefits and barriers of non-exercising female university students in the United Kingdom*, MDPI. Available at: https://www.mdpi.com/1660-4601/7/3/784 (Accessed: 3 July 2023).

3.Holly,B. et.al (2016) *Predictors of physical activity and barriers to exercise in nursing and medical students* , Wiley Online Library. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/jan.13181 (Accessed: 3 July 2023).

4.MS,T.E. et.al (2011) *Influence of age, sex, and Race on college students' exercise Motivation of Physical Activity*, Taylor & Francis online. Available at: https://www.tandfonline.com/doi/full/10.1080/07448481.2010.513074 (Accessed: 4 July 2023).

5.Murphy, M.H. et al. (2018) *Active students are healthier and happier than their inactive peers: The results of a large representative cross-sectional study of university students in Ireland*, Human Kinetics. Available at: https://journals.humankinetics.com/view/journals/jpah/15/10/article-p737.xml (Accessed: 4 July 2023).

6.Khunthi,K.et.al. (2007) *Physical activity and sedentary behaviours of South Asian and white European children in inner city secondary schools in the UK* , *Academic.oup.com*. Available at: https://academic.oup.com/fampra/article/24/3/237/484121 (Accessed: 5 July 2023).

7.Rothon,C.et al. (2010) *Physical activity and depressive symptoms in adolescents: A prospective study - BMC medicine*, SpringerLink. Available at: https://link.springer.com/article/10.1186/1741-7015-8-32 (Accessed: 5 July 2023).

8. Rayan,S.et.al. (2017) *A cross sectional survey of attitudes, behaviours, barriers and motivators to cycling in university students*, Journal of Transport & Health. Available at: https://www.sciencedirect.com/science/article/pii/S2214140517301275 (Accessed: 6 July 2023).

9. Andrew Steptoe D.et.al. (2022) *Trends in Smoking, Diet, Physical Exercise, and Attitudes toward Health in European University Students from 13 Countries*, 1990–2000, Science direct. Available at: https://www.sciencedirect.com/science/article/pii/S0048969721076737 (Accessed: 6 July 2023).

10. Mahendra singh setia (2016) *Methodology series module 3: Cross-sectional studies - researchgate*. Available at: https://www.researchgate.net/publication/316889406_Methodology_Series_Module_3_Cross-sectional_Studies (Accessed: 7 July 2023).

11. Sprake, E.F. et al. (2018) *Dietary patterns of university students in the UK: A cross-sectional study - nutrition journal*, BioMed Central. Available at: https://nutritionj.biomedcentral.com/articles/10.1186/s12937-018-0398-y (Accessed: 7 July 2023).

12. Belogianni,K. et al. (2021) *Nutrition knowledge among university students in the UK: A cross-sectional study*: Public Health Nutrition, Cambridge Core. Available at: https://www.cambridge.org/core/journals/public-health-nutrition/article/nutrition-knowledge-among-university-students-in-the-uk-a-crosssectional-study/3A7D110D106E586BF2017C11B62DE6B9 (Accessed: 8July 2023).

13. Student profiles (2022) *Facts and figures - Kingston University London*. Available at: https://www.kingston.ac.uk/aboutkingstonuniversity/factsandfigures/studentprofiles/ (Accessed: 8 July 2023).

14. Rahman,Md.M. et al. (2022) *Sampling techniques (probability) for quantitative social science researchers: A conceptual guidelines with examples*, SEEU Review. Available at: https://sciendo.com/article/10.2478/seeur-2022-0023 (Accessed: 9 July 2023).

15. Hubspot(2012) *Six Key Advantages of Online Surveys (and Three Potential Problems*). Available at: https://cdn2.hubspot.net/hub/58820/file-17649547-pdf/docs/rl_wp_six_advantages_online_surveys.pdf (Accessed: 9 July 2023).

16. Mahsin,Md (2022) *Data Analysis Techniques for Quantitative S*tudy, SpringerLink. Available at: https://link.springer.com/chapter/10.1007/978-981-19-5441-2_16#Sec17 (Accessed: 10 July 2023).

17. The Research Competition (2017) *Types of analysis.*Available at: http://research.ccdmd.qc.ca/31-types-analysis#:~:text=Descriptive%20and%20inferential%20are%20the,frequency%20distributions%20displayed%20in%20graphs. (Accessed: 10 July 2023).

18. Sagepub (2004) *Ethical considerations*. Available at: https://www.sagepub.com/sites/default/files/upm-binaries/4999_Polonski_Chapter_5.pdf (Accessed: 11 July 2023).

19. Kingston University London(2023) *Ethics Guidance and Procedures for Undertaking Research Involving Human*. Available at: https://d68b3152cf5d08c2f050-97c828cc9502c69ac5af7576c62d48d6.ssl.cf3.rackcdn.com/documents/user-upload/kingston-university-6c83b8ab6fb-ethics-guidance-and-procedures-.pdf (Accessed: 12 July 2023).

20. Youthrex (2022) *International physical activity questionnaire - short form.* Available at: https://youthrex.com/wp-content/uploads/2019/10/IPAQ-TM.pdf (Accessed: 13 July 2023).

21. Gov.uk (2019) *UK chief medical officers' physical activity guidelines*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf (Accessed: 13 July 2023).

22. Amazon web services (2011) *Start active, stay active*. Available at: https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/dh_128210.pdf (Accessed: 14 July 2023).

23. Aceijas, C.et.al.(2016) *Academic.oup.com.* Available at: https://academic.oup.com/eurpub/article/26/suppl_1/ckw174.255/2449430 (Accessed: 14 July 2023).

24. Stelzer, et.al. (2004*) Attitudes toward physical education: a study of high school students from four countries - Austria, Czech republic, England, and USA*., EBSCOhost. Available at: https://web.p.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=01463934&asa=Y&AN=14098751&h=Mun81D7KjTsGEmyM%2f4zWJpVdhEkceyyRZp1HrtNfqbznRrvupnPy20e4pVz%2bOKA39a%2bIqOyAnZRgYEUCJQXIow%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d01463934%26asa%3dY%26AN%3d14098751 (Accessed: 15 July 2023).

25. Rusell,R.pate. et al. (2002) *Compliance with physical activity guidelines: Prevalence in a population of children and Youth*, Annals of Epidemiology. Available at: https://www.sciencedirect.com/science/article/abs/pii/S1047279701002630 (Accessed: 15 July 2023).

26. Beale,N. et al. (2021) *Exploring activity levels in physical education lessons in the UK: A cross-sectional examination of activity types and fitness levels*, BMJ Open Sport & Exercise Medicine. Available at: https://bmjopensem.bmj.com/content/7/1/e000924.abstract (Accessed: 16 July 2023).

27. Edmunds,S.Hurst,L and Harvey,K. (2013) *Physical activity barriers in the workplace : An exploration of factors contributing to non-participation in a UK workplace physical activity intervention*, International Journal of Workplace Health Management. Available at: https://www.emerald.com/insight/content/doi/10.1108/IJWHM-11-2010-0040/full/html?utm_campaign=Emerald_HR_PPV_November22_RoN (Accessed: 16July 2023).

28. Bhatnagar.Shaw,A. and Foster,C. (2015) *Generational differences in the physical activity of UK South Asians: A systematic review - international journal of behavioral nutrition and physical activity*, SpringerLink. Available at: https://link.springer.com/article/10.1186/s12966-015-0255-8 (Accessed: 16 July 2023).

29. L.Miles (2007) *Physical activity and health,* wiley online library. Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1467-3010.2007.00668.x (Accessed: 17 July 2023).

30. McAloney,K. et al. (2012) *OP13 diet and physical activity levels among UK youth*, Journal of Epidemiology & Community Health. Available at: https://jech.bmj.com/content/66/Suppl_1/A6.1.short (Accessed: 17 July 2023).