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## PHYSICAL ACTIVITY PATTERNS AMONG UNDERGRADUATE COLLEGES AT THE UNIVERSITY OF TEXAS AT ARLINGTON

Jeanne Bandalaria

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PHYSICAL ACTIVITY PATTERNS AMONG  
UNDERGRADUATE COLLEGES AT  
THE UNIVERSITY OF TEXAS  
AT ARLINGTON

by

JEANNE MICHAEL “MIKKI” BANDELARIA

Presented to the Faculty of the Honors College of  
The University of Texas at Arlington in Partial Fulfillment  
of the Requirements  
for the Degree of

HONORS BACHELOR OF SCIENCE IN EXERCISE SCIENCE

THE UNIVERSITY OF TEXAS AT ARLINGTON

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I am so lucky to have had the support of such a wonderful and kind mentor. I would like to extend my sincerest gratitude to Dr. Becky Garner. She alone helped me put my vision to life. I wanted to create a project that would combine the ideals of public health (her specialty) and kinesiology (my specialty), and through this project, it was Dr. Garner's sincerity and honesty that pushed me to make the most out of it. She helped me to stay on task and to see the logistics of my project. The little details of the project I easily would have missed if it was not for her careful and gentle nature. Her flexibility even for my character is unbelievable and I truly appreciate her.

I would also like to extend my gratitude towards my freshman government teacher, Dr. Larry Carter, who, without even realizing it, made my project successful. It was his flexibility that made my questionnaire accurate and precise. With just an email, I managed to get an unbelievable sample size and I feel so thankful for his adaptability and quick thinking.

I would also like to thank my beautiful, loving family: Mom, Papa, Ate Abby, Matthew, and even Mike. They are without a doubt the most exceptional individuals in my life and without them I would not be here at all today. This was by far the most difficult semester of my life, but with their care, I have never felt alone.

November 15, 2019

## ABSTRACT

# PHYSICAL ACTIVITY PATTERNS AMONG UNDERGRADUATE COLLEGES AT THE UNIVERSITY OF TEXAS AT ARLINGTON

Jeanne Michael “Mikki” Bandelaria

The University of Texas at Arlington, 2019

Faculty Mentor: Rebecca Garner

The correlation between undergraduate majors/colleges and their corresponding levels of physical activity was investigated at the University of Texas at Arlington. The relationship between the two subjects of research was determined by the method of a survey, as inspired by the International Physical Activity Questionnaire (IPAQ). The IPAQ serves to analyze data through a series of questions that determine an individual’s weekly average of vigorous to moderate exercise based on their job, major, leisure activity, and time spent sedentary. Pie charts and tables are presented to depict the survey’s findings of undergraduate major, college, and times of physical and sedentary activity. The results indicate that although there is little correlation between undergraduate major or college and their levels of physical activity, the Colleges of Architecture and Business had the highest

averages of vigorous and moderate activity, while the College of Engineering had the highest averages of sedentary activity.

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## CHAPTER 1

### INTRODUCTION

#### 1.1 Physical Activity

Physical activity refers to body movements that require an individual's energy and is put into action by skeletal muscles. Although exercise is underneath the term "physical activity," the term itself is represented in a number of ways. Pertaining to everyday life, physical activity can be filtered into different categories such as occupational, sports, conditioning, household, recreational, or other various activities (Caspersen et al., 1985). Exercise is a subset of physical activity that is structured, repetitive, and executed with purpose to maintain a level of fitness. Physical fitness refers to a health standard, indicating that an individual that is "physically fit" has attributes that can be measured medically or skillfully.

#### 1.2 International Physical Activity Questionnaire

The International Physical Activity Questionnaire (IPAQ) is a self-administered report that serves to measure an individual's level of physical activity on a weekly basis (Hallal et al., 2004). The purpose of the IPAQ is to assess the types of intensity an individual may experience in their day-to-day life. Physical activity levels can be divided by intensity such as light, moderate, or vigorous. For the purpose of the IPAQ, moderate intensity levels are recorded if the individual engages in an activity that feels "fairly difficult" to a certain extent. Examples may include carrying light loads, breathing quicker than normal, developing a light sweat, exercising at an average pace, or other various

methods that does not include overreaching to a point of fatigue. Vigorous intensity is recorded with activities that require much physical effort and concentration. Vigorous exercise may include heavy lifting, construction work, fast exercise, running, sprinting, or other various types of physical activity or exercises that require much breath. An individual's level of muscular fatigue is an indicator of the type of physical activity level an individual experiences (Shen, 2006). Sedentary activity levels refer to the activities that do not require an increase in energy expenditure above resting levels; such activity levels include sitting, sleeping, and watching television (Pate et al., 2008).

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 IPAQ Utilization Among Countries

The IPAQ has been utilized by a wide variety of people for a number of different reasons studying various populations. Benitez-Porres et al. (2013) utilized the IPAQ to study the validity of its use amongst fibromyalgia patients. The purpose of the study was to compare and analyze the correlations of physical activity from the IPAQ and an accelerometer. The results indicated that there were both weak and significant correlations between the physical intensities of the two instruments. The greatest correlations referred to the physical activity recorded at home or in the garden. Such a study determines that the IPAQ (or similar self-report measures) has a limit when concerning its validity and accuracy, especially when concerning different populations (Beneitez-Porres et al., 2013).

In a similar study, Boon et al. (2010), found that when comparing accelerometer correlations with IPAQ and the New Zealand Physical Activity Questionnaire results amongst a sample of New Zealand adults, both of the self-reported questionnaires had the tendency to overestimate activity levels by 165%. However, the two surveys were strongly correlated with one another, revealing that individuals have a consistent standard to which they view themselves as.

Craig et al. (2003) administered a study that served to find the validity to which the IPAQ questionnaire produced repeatable data. The IPAQ and its two general versions (four short versions and four long versions of the questionnaire was created) were presented to

the public and 14 call centers from 12 different countries collected data utilizing at least two of the eight IPAQ versions. Test-retest repeatability was determined the following week after the initial call. Overall the IPAQ did have acceptable measurements, especially in correlation to other established self-reports. The different versions of the IPAQ increase its levels of convenience and timeliness for others especially with the short version. The long version was suggested by Craig et al. to be utilized for more detailed assessments (Craig et al., 2003).

## 2.2 IPAQ Utilization Among Colleges

The IPAQ has been administered to college cohorts in previous studies but for various purposes. Miller et al. (2013) studied physical activity levels amongst college students at the University of Kentucky and each individual's personal characteristics. It was found that the students that engaged in the most vigorous sports activities were more likely to be young Caucasian males. The most students that reported "[walking] for at least 30 minutes at a time" were more likely to be young Caucasian females. Gender, race, or involvement in Greek life or a sports team were predictors of physical activity levels.

A similar study, administered in Egypt at Mansoura University, looked to describe patterns of physical activity amongst a variety of students (El Gilany et al., 2011). The study also gathered perceptive information on the perceived barriers of accomplishing high levels of physical activity and the predictors of sedentary behavior. More than 11% of the students were physically inactive consistently. The predictors of inactivity include high socioeconomic standards of a student's family, being female, medical purposes, and non-membership/inclusions in sports organizations. The barriers to physical activity mainly indicate towards time limitations and lack of accessible recreational centers. Despite the

fact that more than 70% of the students reported that physical activity promotes health, there were still a number of students that continued to remain inactive.

Physical activity levels were also studied among college students against different ethnicities. Suminiski et al. (2010), in their IPAQ research, found that among college students (ages 18-25), close to half of the sample did not engage in vigorous physical activity and about 17% were physically inactive. Among women, Asian women were the most inactive (28.1%), followed by African (23.5%) and Hispanic (20.3%) women, with White (17.4%) women as the least inactive ethnic group at the specific university. For men, Hispanic (13.8%) were the most inactive, followed by White (12.0%) and Asian (11.7%) men, leaving African (7.7%) men as the least inactive ethnic population among their group. Weight training and television time played a significant role in the subjects' levels of physical activity. The research suggests that more effort can be placed on increasing the amount of active recreational events, especially for minorities.

CHAPTER 3  
METHODOLOGY

3.1 Subjects

503 undergraduate students from the University of Texas at Arlington (UTA) were questioned for the purpose of this study. There were no distinct protocols, restrictions, requirements, or demographics asked for by the students. The instructions and purpose of the survey was discussed prior to its administration to each student/class. If the student felt uncomfortable at all or did not wish to continue during any part of the survey, they were instructed to stop the questionnaire immediately. The questionnaire was anonymous. See Appendix A and C for the complete form and permission from IRB protocol.

3.2 Administration of the Questionnaire

The questionnaire was a reflection of the IPAQ (long version), which was administered online to each student through a link with Google Forms. Tabling during various times at UTA's University Center and at the Maverick Activities Center brought a variety of students as well. During tabling sessions, a laptop with the subsequent survey was online for the subjects to freely answer, flyers describing the survey and containing the QR code with access to the form (for subjects to answer the questionnaire through their cellular device or other various mobile devices) was spread along the table, and candy was available as a reward for the subjects to grab after completion of the survey.

The survey was also presented to various classes (whether it was in the form of extra credit or simple as a learning experience) where students were also informed of the



purpose and protocol of the survey. The professors of the classes the IPAQ was presented to were then able to send the students an announcement of the link to the survey and a digital version of the flyer with the QR code.

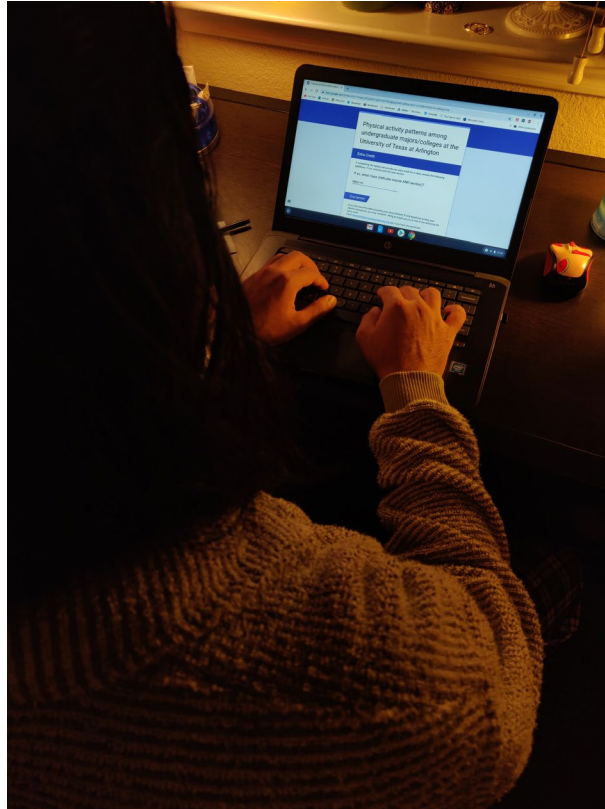


Figure 3.1: A subject completing the survey online

### 3.3 Survey

The survey itself is utilized to determine if there is a pattern or correlation of physical activity between undergraduate colleges. The IPAQ serves to ask a variety of questions of an individual's level of physical activity in various settings or activities including: job-related/major-related physical activity, transportation, housework (both inside and outside the home), caring for the family, recreation/sport/leisure time physical activity, and time spent sitting. Such activities are then divided by levels of intensity (moderate or vigorous). The long IPAQ also determined the amount of days an individual

engaged in each activity (for more than ten minutes at a time) within the last seven days. This modified version of the IPAQ through Google form was adjusted to include questions of the student's major and college. See Appendix D for the exact survey administered on Google forms. See Appendix E for the IPAQ long form.

## CHAPTER 4

### RESULTS

The average number of minutes students engaged in physical activity per week varied from 1.5 minutes to 436.4 minutes. The College of Architecture had the highest rates of vigorous intensity rates of physical activity during a job/college related activity (369 minutes per week (mpw)). The College of Business had the highest rates of moderate levels of physical activity as part of their job or college (309.8 minutes per week). The College of Business also had the highest rates of walking on a day-to-day basis (436.4 minutes per week). The College of Architecture had the highest averages of walking to-and-from locations (388.5 mpw). The College of Business had the highest rates of vigorous physical activity during outside work (113.2 mpw). The College of Liberal Arts had the highest rates of moderate physical activity inside their homes (189.03 mpw). The College of Architecture had the highest rates of leisure walking with 226.5 mpw. The College of Business had the highest rates of both vigorous and moderate exercise for leisure (202.9 and 94.6 mpw), while the College of Engineering had the highest rates of sitting during both weekdays and weekends (346.67 and 355.56 mpw) (See Table 4.1). See Appendix G for specificity.

Table 4.1: UTA's undergraduate colleges and their corresponding levels of physical activity in minutes per week

	Business	Architecture	Engineering	Liberal	Nursing	Science	Social Work
Vigorous	273	<b><u>369</u></b>	154.03	190.17	195.53	207	78
Moderate	<b><u>309.8</u></b>	235.5	159.86	245.59	143.11	184.62	120
Walking	<b><u>436.4</u></b>	340.5	231.67	312.71	288.89	327.69	172.5
Walking to & from	235.8	<b><u>388.5</u></b>	233.47	256.52	208.24	182.08	195
Vigorous (outside)	<b><u>113.2</u></b>	43.5	57.5	68.14	56.65	81.46	1.5
Moderate (outside)	96.8	26.4	65.97	<b><u>152.92</u></b>	84.71	66.92	19.5
Moderate (inside)	151	103.5	81.81	<b><u>189.03</u></b>	109.41	96	57
Leisure Walking	111	<b><u>226.5</u></b>	76.39	119.36	92.12	110.77	57
Vigorous Leisure	<b><u>202.9</u></b>	79.5	87.64	122.8	125.12	104.53	312
Moderate Leisure	<b><u>94.6</u></b>	15	70.42	81.73	54	69.92	94.5
Sitting weekday	286	348	<b><u>346.67</u></b>	285.64	297.89	338.77	306
Sitting weekend	290	348	<b><u>355.56</u></b>	299.24	300	322.77	312

## CHAPTER 5

### DISCUSSION

Although there is not too much of a significance that suggests that an individual's major will automatically determine their levels of physical activity and their health status, there is an evident relationship between college and typical levels of physical activity. The IPAQ within itself does have its limitations, especially as it is merely a self-report status which in and of itself contains self-bias, but nevertheless is a worthwhile platform to gain information. The self-administered questionnaire was unbiased in its questions and as the Colleges of Architecture and Business at the University of Texas at Arlington had the highest rates of activity amongst the other colleges, there could be a variety of reasons surrounding this ideology. For one, the layout of UTA requires students, especially the Architecture and Business students to walk far to each of their classes. Automatically, it ensures that at least two days out of the week, a student is forced to walk across parking lots, streets, and throughout the school to get to Pickard Hall or the Architecture buildings.

The College of Liberal Arts also had the highest rates of moderate physical activity levels within the home setting. This could give rise to the fact that liberal arts students are provided time to give to their specific art, whether it be art, linguistics, theatre, or music, that ensures that there is movement that must be brought home for practice. The College of Engineering had the highest rates of sitting and time spent sedentary. This could be attributed to the fact that Engineering students must either sit at a computer or desk screen to produce code or read material necessary for their classes or job-field.

There is an endless amount of possibly as to why the results indicate as so, and there were many outliers within the data that could have easily changed the results as well. However, although Exercise Science students, Nursing students, and other medically inclined students study the importance of maintaining healthy physical activity levels does not necessarily mean there is a correlation between their own levels of physical activity. As neither the College of Nursing nor College of Science did not have the highest averages but rather mediocre levels of physical activity for all categories, it thereby proves that an undergraduate student's decision on their college/major does not have a true indication of their levels of physical activity. If there was a larger sample size, the correlation study would have helped more and if there was a method where students could indicate why they answered specific questions, it would provide the questionnaire a greater bout for general knowledge as to why the results indicate the specific correlations.

## CHAPTER 6

### CONCLUSION

Essentially, little evidence proves that undergraduate major/college has a significant effect on an individual's levels of physical activity. Although the research depicts that the Colleges of Architecture and Business have the highest levels of physical activity, and the College of Engineering has the lowest levels of physical activity, there needs to be more research done to determine the study's validity and reliability. There are many outside factors that could alter the data (for example the location of the study or university, the convenience of a gym, time constraints, family life, etc.). There is no clear indication or factor that determines an individual's levels of physical activity solely based on their undergraduate college.

APPENDIX A  
INSTITUTIONAL REVIEW BOARD PROTOCOL



**INSTITUTIONAL REVIEW BOARD (IRB) FOR THE PROTECTION OF HUMAN SUBJECTS  
APPLICATION FOR RESEARCH INVOLVING HUMAN SUBJECTS**

*Faculty, staff, or students who propose to engage in any research, research development, testing or evaluation with human subjects must have review and approval from the IRB prior to initiation. Some activities involving humans are not considered human subject research requiring IRB review (i.e., class projects, program evaluation, oral histories, quality*



*improvement). Refer to the Research Project Chart for more information.*

**\*\*Utilize the IRB Submission Checklist to guide you through the full IRB application process. NOTE: All study personnel must have completed Human Subjects Protection (HSP) Training prior to study approval. HSP Training expires and must be retaken every 3 years.\*\***

*If you require assistance to complete this form or need additional information, please contact Regulatory Services at 817-272-3723 or [regulatoryservices@uta.edu](mailto:regulatoryservices@uta.edu). Regulatory Services also has open office hours every Thursday from 9:00 – 11:00am. The UTA IRB Website also has lots of helpful guidance– check it out!*

**SECTION A: GENERAL INFORMATION**

**1. Non-UTA Personnel:** *Enter all individuals that are **NOT affiliated with UTA** who will interact or intervene with human subjects for the research study OR who will access identifiable subject data. UTA-affiliated personnel should be listed on the electronic portion of the protocol (#3) in the electronic submission system.*

**\*Note:** *In the electronic submission system, upload a completed Non-UTA Collaborator Form and Human Subject Protection training for each listed Non-UTA individual.*

Name:	Organization:

**2. Expected Start Date and Completion Date:** *(You are not authorized to start any research on human subjects including subject recruitment until the IRB has approved the research protocol.)*

**3. Funding:** *Indicate existing, potential, or pending sources of funding below (you may select more than one).*

**\*Note:** *If you do (or may) receive funding from NSF, NIH, CMMS, DOD, DOJ, DOE, DOEd, DOT, or any other federal agency, you MUST disclose this funding source below to ensure that your study is reviewed in accordance with the appropriate federal regulations for that specific federal funding source.*

**External:**

Federal (Sponsor: )     State (Sponsor: )     Industry (Specify Sponsor: )

Grants & Contracts Bluesheet Number from Mentis:

**Other:**

UTA Department Account     Personal Funds     Other:     None (No funding)

**SECTION B: RESEARCH CLASSIFICATION, RATIONALE, PROCEDURES, SITES, QUALIFICATIONS, OVERSIGHT**

**4. Research Classification:** *Indicate if this study is categorized as **Minimal Risk (MR)** or **Greater than Minimal Risk (GMR)**. “Minimal Risk (MR)” means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in the subjects’ daily life or during the performance of routine physical or psychological examinations or tests. “Greater than Minimal Risk (GMR)” refers to research activities that do not meet the definition of “Minimal Risk.” Throughout this application form, there are additional questions or information requested for studies categorized as GMR; these instructions will be presented in purple.*

**Minimal Risk (MR)**             **Greater than Minimal Risk (GMR)**

***\*Note:** Studies that are federally funded and/or FDA regulated will be further classified into exempt, expedited, or full board in accordance with the Common Rule 45 CFR 46 and/or 21 CFR parts 50 and 56. See Flowchart.*

**5. Rationale:** *List the primary research questions, hypotheses, and / or objectives guiding this study.*

The primary research objective is to determine if there is a correlation between undergraduate major and physical activity levels. Judging by the courses of public health and kinesiology, an individual’s daily life and interests have a significance on an individual’s lifestyle. It can be assumed that an individual’s major may help a student either indulge in sedentary behavior or may help them push for a less sedentary lifestyle. This study looks to research a possible correlation between the two ideals, thereby also opening the door to possible awareness links if there are certain majors that have higher rates of inactivity.

**6. Procedures:** *Describe the procedures step-by-step, including details on all methods that will be used to collect human subject data from the beginning to the end of the study. Describe what data will be collected (and if it will be individually identifiable); when and where the data will be collected; and how it will be collected (instruments or other measures). Use clear, concise layman’s language that can be easily understood by persons outside your field and provide definitions for any technical terms. Add pictures if needed. **\*Note: Refer to the Types of Research guidance page for a list of specific information required for different types of research.** For GMR research, it is also helpful to provide references or pilot data to support the proposed procedures.*

Essentially my study "Physical activity patterns among undergraduate majors at the University of Texas at Arlington" is researching the significance or insignificance of physical activity levels across each major at the University. The data collected includes major demographic, physical activity levels based on major, and comparisons in the changes in physical activity levels before attending college. The data will be collected via survey created by Google Forms that reflects the questions from the public International Physical Activity Questionnaire, IPAQ, from the time the IRB approves this study until the Honors College Research Symposium Presentation in mid-November, 2019.

- 7. Duration:** *Indicate how many participation sessions, interactions, or follow ups are expected for each subject participant, including the amount of time required for each visit and how long their total participation is expected to take (weeks, months, years, etc.) over the entire duration of the study.*

As my study researches the general demographic of all majors on campus and their physical activity levels via survey, there will be a large number of participants collected in a smaller amount of time. UTA offers approximately 84 baccalaureate degrees. As I am attempting to achieve a general knowledge of the correlation between major and physical activity levels, if I obtain at least 10 students per major, my study will look to have approximately 840 students to complete a survey that takes about 10 minutes to complete.

- 8. Alternatives to Participation:** *Describe subjects' available options if they choose not to participate in the research study and clarify whether individuals that decline participation will still be subjected to the intervention (even if their data will not be utilized for research purposes). If research involves students, describe their alternatives to obtain course / extra credit if applicable. If research involves a health intervention, clarify whether individuals that decline will continue to receive standard care.*

If subjects choose not to participate in the study or decline taking the survey, the student will not be subjected to take it. Rather the student will be allowed to decline sharing information, despite the fact that their answers would remain anonymous.

- 9. Location(s) and Site(s):** *Specify all locations where research procedures are expected to take place and which study procedures will take place at each site. Studies that take place online should specify the websites where data will be collected. Describe if any of the research will take place internationally. For multi-site research studies, review the web page for Collaborative Research. If any part of this study will be conducted in an institution or location administratively separate from UTA, indicate the institution(s) and upload a site permission letter.*

Data will be collected by a self-created evidence-based survey on Google Forms. Students from every major at UTA may be asked to fill out the questionnaire, but have the option not to complete it if it causes a student discomfort or dissatisfaction.

- 10. Personnel Qualifications:** *Describe the relevant qualifications, special training, and experience of the research team/personnel as it pertains to the specific procedures or population of the study. If you (and your faculty advisor, if applicable) do not have any relevant qualifications or experience, please state that; the IRB will consider the risk level of the study and evaluate if additional oversight or input is necessary.*

The study collects data from students at UTA, and I myself am an undergraduate kinesiology student at UTA, while my faculty advisor has been working as a Public Health

Professor at UTA for a number of years. The study collects data pertaining to the physical activity patterns among undergraduate majors at UTA. Our familiarity and knowledge on both kinesiology and public health combines the practices of both subjects and therefore influenced us to delve further into the topic. Surveys and questionnaires pertaining to different information have been created by both myself and my faculty mentor.

- 11. Study Oversight:** *The Principal Investigator has ultimate responsibility for the conduct of this research, protection of subjects, and supervision of all protocol personnel. Describe your plan for oversight and communication to ensure that the entire research team: conducts the research ethically and in accordance with the approved protocol, creates/maintains appropriate study documentation and research records, and protects confidentiality of data.*

For oversight and communication, I as the sole investigator, will ensure that the subjects do not experience any discomfort or dissatisfaction when conducting the questionnaire. All subjects will be notified that if they choose to answer the questionnaire, their identities will remain anonymous. In addition, the subject will be notified that they have the option to not to commit to the survey, therefore ensuring ethical research with approved protocol.

### **SECTION C: POPULATION & ENROLLMENT**

- 12. Population(s):** *Describe the target population(s) of the study, for example: UTA students, competent or healthy adults, children, prisoners, non-English speaking, pregnant women, individuals with impaired decision making capacity, other vulnerable populations.*

UTA undergraduate students (across all majors)

**\*Note: Additional forms may be required for your population. Obtain these from the Forms & Templates Page.**

*For Individuals with Impaired Decision Making Capacity: Upload Form 2A.*

*For Pregnant Women, Fetuses, Women Undergoing In-Vitro Fertilization, or newborns: Upload Form 2B.*

*For Prisoners (Individuals involuntarily detained): Upload Form 2C.*

*For Children (Under 18 or the local legal adult age): Upload Form 2D.*

- 13. Inclusion Criteria:** *List all criteria for including subjects, and explain the methods you will use to determine whether a subject is eligible based on your criteria (i.e. pre-screen, medical chart review). If your study is/will be funded, ensure that the inclusion criteria listed here match the details in your proposal.*

A subject is eligible to participate in the study if they are an undergraduate student at UTA and if they are pursuing a specific major on campus.

- 14. Exclusion Criteria:** *Explain any specific factors or contraindications that would make a subject ineligible to participate in this study, even if they would otherwise meet the inclusion criteria listed above. If your study is/will be funded, ensure that the exclusion criteria listed here match the details in your proposal.*

If a subject is not an undergraduate student at UTA or if they are not pursuing a specific major on campus, they are not eligible to participate in the study. In addition, if they do not desire to take the survey, they also have that option. Minors (ages 17 and below) are also not eligible to participate in the study as it follows adults, rather than younger

populations.

- 15. Number of Subjects:** *Provide the number of subjects (or subject records/data sets) you intend to enroll over the course of the study. This information will be utilized by the IRB to understand the scope and logistics of the study; you may provide a projected range.*

As I am attempting to achieve a general knowledge of the correlation between major and physical activity levels, if I obtain at least 10 students per major, my study will look to have approximately 840 students to complete a survey that takes about 10 minutes to complete.

**\*Note:** *For MR research, there is no cap on enrollment (enrollment can exceed the number provided here when needed for the study).*

*For GMR research, the proposed number of subjects must be supported by statistical justification and/or references; please provide that information here. Enrollment for GMR research is capped (IRB will approve a specific range or maximum number of participants and enrollment must not exceed that approved number unless the IRB approves a modification request).*

- 16. Recruitment Strategies:** *Describe how you will identify and contact potential participants, and how you will obtain their contact information. Upload permission letters/emails as needed from individuals or organizations providing access to private contact information. Upload a copy of all planned recruitment materials (i.e. letters/emails; website/social media posts; printed flyers; telephone scripts; subject pool posts (SONA, Mechanical Turk, Research Match); scripts for recruitment in-person).*

As my study is looking to gather information from students across all majors at UTA, it is necessary to contact potential participants somehow.

Considering emails, social media posts, flyers, telephone scripts, and scripts for recruitment in-person, I will essentially have the following "elevator speech:"

Hi, my name is Mikki Bandelaria and I am an Honors Kinesiology student looking for subjects to answer a quick survey about physical activity patterns among undergraduate majors at UTA for my Honors College Thesis Project. Essentially, this questionnaire researches the correlation between undergraduate major and physical activity levels/sedentary behaviors while also combining the practices of both public health and kinesiology. Your identity will be kept anonymous, and please note that your participation will be greatly appreciated. It will not take too long, but again it will mean so much if you take the time out of your busy day to complete it. Thank you so much.

#### **SECTION D: COMPENSATION AND COSTS**

**\*Note:** *You are responsible for maintaining accurate and confidential records regarding payment of your subjects. Per Accounting Services procedures, compensation must be documented for tax purposes using a W-9 form unless an exception is granted by the Accounting department. Obtaining an exception should be considered for cases of sensitive research or when disclosure of a subject's identity would expose them to high risk. Exception requests are submitted through the Business Affairs Exceptions Tracker (BAET) in SharePoint. Refer to knowledge base article*

*KB0010632 for guidance. Contact Business Technology Services at 817-272-2155 or submit a ServiceNow ticket at <https://uta.service-now.com/selfservice/> for assistance.*

- 17. Compensation:** *Describe any compensation to subjects for participation, including monetary payments, gift cards, course/extra credit, raffle prizes, goods or services, donations to charity, etc. Describe how and when you will provide the payment to the subjects, and how confidentiality will be maintained (for example, use of coding in payment log books/receipts). If you intend to hold a raffle, explain when you expect that the raffle will be drawn, and how participants will be contacted if they win the drawing. For course / extra credit, alternative non-research assignments must be offered for an equal amount of credit.*

There will be no compensation to subjects for participation except for a piece of candy or a small snack. Those who complete the survey online (i.e. not in-person) are encouraged to send me an email confirming their completion of the survey and may schedule to meet with me to obtain said snack/candy.

- 18. Costs:** *Describe any costs or expenses (monetary or non-monetary) subjects will incur as a result of participation.*

Subjects will not be asked or required to spend money as a result of participation.

#### **SECTION E: INFORMED CONSENT**

**\*Note:** *The ethical foundation of human subject research is informed consent. It is important to ensure that subjects are provided with sufficient information to understand the requirements of their participation and the use/purpose of their data. You also cannot obtain information about a person through another individual (such as a family member) unless that person has undergone the informed consent process themselves. Use the Office of Human Research Protection (OHRP) informed consent checklist (<http://www.hhs.gov/ohrp/policy/consentckls.html>) and the IRB's Templates as guidance.*

- 19. Informed Consent, Broad Consent, & Assent:** *Describe the informed consent process, including when, where, and how subjects will be consented. If children or mentally disabled or incapacitated persons will be subjects, explain the assent process. If broad consent (consent to use data for future studies) will be requested, describe the scope and the process for tracking subjects' accept/decline responses. Upload finalized copies of all consent, assent, and / or verbal consent script documents in the electronic system. **There are several consent form templates available for your use on the Forms & Templates Page.***

Subjects will be asked to read the informed consent process prior to taking the survey. As the questionnaire is a minimal risk activity, I will submit a completed Minimal Risk Consent form template to turn in.

**19a. Requesting a Waiver of Consent or Waiver of Written Documentation:** *If you wish to waive some or all of the requirements of informed consent, or the requirement for written/signed informed consent, please describe (if your study is federally funded or FDA-regulated, also upload Form 3 from the Forms Page).*

- 20. Incomplete Disclosure / Deception:** *Describe if your study will withhold information from subjects regarding the purpose of the research or the nature of the intervention, interaction,*

or procedures. Provide scientific justification for utilizing deception (if your study is federally funded, also upload Form 3).

My study will not withhold information from subjects.

## SECTION F: RISKS & BENEFITS

- 21. Risks to Subjects:** Explain any potential risks to subjects that could result from the research intervention/procedures, including **physical risks** (i.e. fainting, falls, infections, muscle soreness, pain, broken bones, physical fatigue, headache, burns, medication side effects); **psychological risks** (i.e. depression, anger, stress, guilt, embarrassment, damage to self-esteem); **social risks** (i.e. potential damage to financial standing, reputation, or employability); **risks to privacy or confidentiality** (i.e. exposing someone as a research subject, release or breach of sensitive data); and/or **risk of perceived coercion/undue influence** (i.e. if investigator could have influence by nature of their relationship or status, such as a teacher & student, manager & employee, doctor & patient).

Potential risks to the subjects as a result of the research could be: psychological risks pertaining to embarrassment or stress from the questionnaire and following questions about their activity levels, risk of perceived coercion as subjects may feel a push to complete the survey, or may feel damage to their self-esteem if their answers do not line up to how they feel about their own activity patterns.

- 22. Strategies to Minimize Risks:** Explain the strategies that the research team will use to minimize the potential risks listed above.

To minimize the potential risks, I will ensure that the subjects know that the survey is optional. In addition, before the presentation of the survey, I will ensure that if the participants feel any small hint of discomfort or dissatisfaction, to let me know as soon as possible and will be asked instead to discontinue the survey and will be given the option to take a candy or small piece of snack as a reward for trying. If a student looks uncomfortable (i.e. confused facial expressions, hesitance to complete the survey, if they are taking longer than 15 minutes to complete the survey, if their face indicates that they do not wish to continue, any other face or body expression that is not content or pleased) while filling out the questionnaire, I will be sure to ask them if they are okay and if they want to discontinue the study. Essentially, if I see or notice any indication that a student may be having a difficult time pursuing the survey, I will be sure to ask them how they are doing and will remind them that if they wish to discontinue, it is completely allowed. For the students taking it online in particular (i.e. not in person), in the consent form, I have added a portion to where students know that they are able to discontinue the survey if they do not want to. In addition, I have also added to the survey an acknowledgement checkmark box indicating and ensuring that the participant knows that they may discontinue the survey at any time. I want to ensure that all participants do not feel a decrease in their self-esteem, but rather feel a sense of purpose and feel pride in increasing UTA's and my own fields of knowledge.

- 23. Health & Safety Considerations:** Specify whether the study involves any hazardous materials, locations, or equipment that is relevant to the health and safety of either the subjects or the protocol personnel (i.e. handling of human blood/body fluid/tissue, chemical or biological hazards, radiation/X-rays, lasers, or carcinogens). List any related authorizations/approvals from the Environmental Health & Safety Office.

The study does not involve any hazardous materials, locations, or equipment that is relevant to the health and safety of the subjects or protocol personnel.

- 24. Benefits:** *List potential benefits that may accrue directly to the study subjects as a result of their participation, if any (other than compensation). Also describe the expected or potential benefits of this study to the field or society at large.*

As a result of their participation, this study will be the first (if not, at least one of the first) major studies that researches the correlation of undergraduate major and physical activity patterns. The potential benefits this study has to society and the fields of kinesiology and public health is quite large. This study increases the awareness of how different fields of study may help individuals indulge in sedentary and unhealthy behavior, and as a result affect an individual's happiness or self-esteem.

#### **SECTION G: PRIVACY & CONFIDENTIALITY**

- 25. Privacy:** *How will the privacy of subjects be protected during the course of the study (privacy refers to controlling the environment and circumstances of interactions with subjects to prevent situations where they might be embarrassed, exposed, or stigmatized)?*

The privacy of subjects will be protected during the course of the study because participants will be asked individually to fill out the survey on their own phones or devices to ensure a sense of familiarity and comfort. Students will then have a better feel and understanding that may prevent them from feeling embarrassed or exposed, especially as it is only focusing on the individual's answers and perceptions, not their neighbor's.

- 26. Confidentiality & Data Security:** *Explain if the data collected (including biospecimens) will be anonymous, identifiable/coded, or de-identified\*. Explain the precautions that will be taken to protect confidentiality of subject data and information, and how these precautions will be communicated to subjects (during informed consent or another process). Security should be considered for each phase of data's life cycle, including: collection, transmission, accessing, collaboration, storage, analysis, reporting, and disposition. Consider the tools and resources that will be utilized for data collection, how access to identifiable data will be limited only to authorized research personnel, and who will be responsible for storage and disposition.*

**Recordkeeping:** *UTA and the IRB must be able to access research records and consent forms at any time; therefore, **all paper documents in their original form must be stored on the UTA campus unless the IRB grants an exception. All electronic data must be maintained on UTA servers utilizing sanctioned storage tools** unless the Office of Information Security grants an exception. **Record Retention Period:** All records (paper or electronic) must be maintained and kept secure for at least 3 years after the closure of the protocol or in accordance with funding agency requirements (whichever is longer). Student PIs should address long-term storage arrangements if planning to leave UTA prior to the end of the retention period.*

**Visit the [UTA IRB's Web Page on Human Subjects Data Security](#) for allowable data storage options and more helpful information about DO's and DON'Ts with human subject data!**

Each subject that participates in the study will have an anonymous identity. As the study is only researching the correlation between major and physical activity levels, demographic and personal information will not be asked and will not be shared. The survey does not ask any questions pertaining to one's personal life or name.



The data collected by Google Forms will be unidentifiable/anonymous, in that the information will be recorded so that the subjects' identity cannot be readily accessed, non-sensitive, in that any disclosure of the subjects' responses outside of the research would not put them at any risk of criminal or civil liability or be damaging to their reputation or even financial standing. The information obtained by the survey will be recorded in such a manner that any form of identity is hidden and confidential. Google Form responses are stored in a worksheet that can only be accessed through the owner's specific Google account login. The survey is conducted online and can be accessed by an individual's phone, computer, or laptop as long as they are connected to the internet. The data/worksheet providing the information is maintained and kept secure for as long as desired even after the closure of the protocol. The data is secure and no questions concerning sensitive information will be asked at all. With each question, (except for their major) the subject is asked to answer questions through multiple choice, leaving no room for personal or additional comments, questions, or concerns. Essentially, the subject is not even given an opportunity to provide sensitive information as well.

***\*Note:** "Anonymous" means that the data is unidentifiable (personally identifiable information will not be collected or accessed). "Identifiable" means that data obtained will be recorded in such a manner that subjects' identity can be readily ascertained, either directly or indirectly through identifiers linked to the subjects (research involving a coding mechanism that links to identifiable data is considered identifiable, but it is a helpful measure to protect confidentiality). "De-identified" means that all direct personal identifiers are permanently removed, no code or key exists to link the data to its original source, and the remaining information cannot reasonably be used by anyone to identify the source.*

**26a. Legal Limits to Confidentiality:** *If any part of this study could result in the potential identification of child abuse, elderly abuse, communicable diseases, or criminal activities that would / could not have been otherwise identified, explain this possibility and estimate the likelihood of disclosure. Describe the plan of action that you will take if this occurs. In rare circumstances when research reveals these issues, confidentiality should be maintained to the extent that the law allows.*

No

- 27. Data Sharing:** *If you intend to share, release, or present any identifiable subject data from this study, explain where, when, and to whom the identifiable information will be shared, presented or released, and how this will be communicated to the subjects beforehand.*

Each subject that participates in the study will have an anonymous identity. The findings, results, and statistics of the study however will be presented to the Honors College during Honors Research Symposium Day. This will be communicated to the subjects before they begin their questionnaire.

#### **SECTION H: CONFLICT OF INTEREST**

- 28. Conflicts of Interest (COI):** *Does the Investigator or any protocol personnel have an affiliation, arrangement, or financial interest that could be perceived as a conflict of interest? If yes, please describe.*

No

**\*Note:** All Covered Individuals in GMR research are required to have a current COI disclosure on file in Mentis (this must be complete prior to approval of the protocol). Covered Individuals are those with responsibilities for the conduct, design, or reporting of this research study.

## **SECTION I: REQUIRED ADDITIONAL ATTACHMENTS**

### **29. Upload finalized versions of the following documents as applicable to your study in the electronic submission system:**

- Survey instruments / questionnaires (and any versions translated into other languages)
- Demographics surveys
- Interview questions / prompts
- Focus group instructions / questions / prompts
- Observation data collection sheets
- Psychological & educational tests
- Educational materials
- All recruitment materials including flyers, ads, scripts, emails, social media posts, etc.
- Informed Consent Documents / cover letters and translated versions (See Forms Page for Templates)
- Permission letters from non-UTA study sites / collaborating organizations  
Signed Non-UTA Collaborator Forms & HSP Training (Collaborative Research Page)

APPENDIX B  
FLYER WITH QR CODE

# THINK YOUR MAJOR IS MORE ACTIVE THAN OTHERS?

**PARTICIPATE IN OUR SHORT SURVEY TO BE A PART OF THIS ANONYMOUS STUDY!**

ONLY ABOUT 10 MINUTES!

**OUR PRIMARY OBJECTIVE:**

**DETERMINE THE CORRELATION BETWEEN UNDERGRADUATE MAJOR AND PHYSICAL ACTIVITY LEVELS AT UTA**

**SCAN THE QR CODE BELOW TO GET STARTED:**



**OR TYPE:**

<https://tinyurl.com/y6ygcms4>

- ➔ How many hours do you sit in a day?
- ➔ How much do you walk in a day?
- ➔ How much do you use transportation?

Email [jeannemichael.bandelaria@mavs.uta.edu](mailto:jeannemichael.bandelaria@mavs.uta.edu) indicating your completion to obtain a small reward (snack/candy).

AS DESCRIBED BY THE INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE (IPAQ)  
DYLAN HALL, 3E, TRIATHLETE

APPENDIX C  
CONSENT FORM



The University of Texas at Arlington (UTA)

## Informed Consent for Minimal Risk Studies with Adults

My name is Jeanne Michael “Mikki” Bandelaria, and I am asking you to participate in a UT Arlington research study titled, “Physical activity patterns among undergraduate majors at the University of Texas at Arlington.” This research study is about researching the correlation between undergraduate major and physical activity levels/sedentary behaviors. You can choose to participate in this research study if you are at least 18 years old and an undergraduate student at UTA pursuing a specific major.

Reasons why you might want to participate in this study include to share your experience as an undergraduate student at UTA, or to feel a sense of purpose or community with the other participants of UTA, but you might not want to participate if you are uncomfortable sharing experiences with a collective group, or if you are not able to commit to taking a survey over fifteen minutes in one sitting. Your decision about whether to participate is entirely up to you. If you decide not to be in the study, there won’t be any punishment or penalty; whatever your choice, there will be no impact on any benefits or services that you would normally receive. Even if you choose to begin the study, you can also change your mind and quit at any time without any consequences.

If you decide to participate in this research study, the list of activities that I will ask you to complete for the research are to read the following consent form (and should you wish to participate), to fill out the following questions to the best of your ability with complete honesty, and to submit the completed survey. It should take about ten to fifteen minutes of your time. Although you probably won’t experience any personal benefits from participating except for receiving candy, a small snack, or the fulfilling feeling of adding your own information to an important research study, the study activities are not expected to pose any additional risks beyond those that you would normally experience in your regular everyday life or during routine medical / psychological visits. It is highly encouraged as well for those who complete the survey online (i.e. not in person) to email me at [jeannemichael.bandelaria@mavs.uta.edu](mailto:jeannemichael.bandelaria@mavs.uta.edu) a screenshot of the completed essay and a plausible time to meet to receive a small reward (snack or candy) for your participation.

You will not be paid for completing this study. There are no alternative options to this research project.

The research team is committed to protecting your rights and privacy as a research subject. We may publish or present the results, but your name will not be used. While absolute confidentiality cannot be guaranteed, the research team will make every effort

to protect the confidentiality of your records as described here and to the extent permitted by law. If you have questions about the study, you can contact me at [jeannemichael.bandelaria@mavs.uta.edu](mailto:jeannemichael.bandelaria@mavs.uta.edu). For questions about your rights or to report complaints, contact the UTA Research Office at 817-272-3723 or [regulatoryservices@uta.edu](mailto:regulatoryservices@uta.edu).

You are indicating your voluntary agreement to participate by completing and returning the survey.

APPENDIX D  
SURVEY AS ADMINISTERED



# Physical activity patterns among undergraduate majors/colleges at the University of Texas at Arlington

As described by the International Physical Activity Questionnaire (IPAQ).

\* Required

My name is Jeanne Michael “Mikki” Bandelaria, and I am asking you to participate in a UT Arlington research study titled, “Physical activity patterns among undergraduate majors at the University of Texas at Arlington.” This research study is about researching the correlation between undergraduate major and physical activity levels/sedentary behaviors. You can choose to participate in this research study if you are at least 18 years old and an undergraduate student at UTA pursuing a specific major.

Reasons why you might want to participate in this study include to share your experience as an undergraduate student at UTA, or to feel a sense of purpose or community with the other participants of UTA, but you might not want to participate if you are uncomfortable sharing experiences with a collective group, or if you are not able to commit to taking a survey over fifteen minutes in one sitting. Your decision about whether to participate is entirely up to you. If you decide not to be in the study, there won't be any punishment or penalty; whatever your choice, there will be no impact on any benefits or services that you would normally receive. Even if you choose to begin the study, you can also change your mind and quit at any time without any consequences.

If you decide to participate in this research study, the list of activities that I will ask you to complete for the research are to read the following consent form (and should you wish to participate), to fill out the following questions to the best of your ability with complete honesty, and to submit the completed survey. It should take about ten to fifteen minutes of your time. Although you probably won't experience any personal benefits from participating except for receiving candy, a small snack, or the fulfilling feeling of adding your own information to an important research study, the study activities are not expected to pose any additional risks beyond those that you would normally experience in your regular everyday life or during routine medical / psychological visits. It is highly encouraged as well for those who complete the survey online (i.e. not in person) to email me at [jeannemichael.bandelaria@mavs.uta.edu](mailto:jeannemichael.bandelaria@mavs.uta.edu) a screenshot of the completed essay and a plausible time to meet to receive a small reward (snack or candy) for your participation.

You will not be paid for completing this study. There are no alternative options to this research project.

The research team is committed to protecting your rights and privacy as a research subject. We may publish or present the results, but your name will not be used. While absolute confidentiality cannot be guaranteed, the research team will make every effort to protect the confidentiality of your records as described here and to the extent permitted by law. If you have questions about the study, you can contact me at [jeannemichael.bandelaria@mavs.uta.edu](mailto:jeannemichael.bandelaria@mavs.uta.edu). For questions about your rights or to report complaints, contact the UTA Research Office at 817-272-3723 or [regulatoryservices@uta.edu](mailto:regulatoryservices@uta.edu).

You are indicating your voluntary agreement to participate by completing and returning the survey.

1. I acknowledge that if I feel uncomfortable or dissatisfied with the questions, I am able to discontinue the survey at any time without penalty. \*

Mark only one oval.

Yes

No

2. I indicate my voluntary agreement to participate by completing and returning the survey. \* Mark only one oval.

Yes

No

## Extra Credit

If completing this survey will provide you extra credit for a class, answer the following questions. If not, continue onto the next section.

3. If so, what class (indicate course AND section)?

---

## Disclaimer:

If you feel uncomfortable providing your name/Student ID and would like to keep your identity anonymous, you may. However, doing so might put you at risk of not obtaining the extra credit. Email [jeannemichael.bandelaria@mavs.uta.edu](mailto:jeannemichael.bandelaria@mavs.uta.edu) if you have any questions.

4. What is your name? (first and last)

---

5. Student ID?

---

## Physical activity patterns among undergraduate majors at the University of Texas at Arlington

As described by the International Physical Activity Questionnaire (IPAQ).

6. What College are you a part of? \* Mark

only one oval.

College of Architecture, Planning, and Public Affairs

College of Business

College of Education

College of Engineering

College of Liberal Arts

College of Nursing and Health Innovation

- College of Science
- School of Social Work
- Other: \_\_\_\_\_

**7. What is your major?**

*\* Mark only one oval.*

- Accounting
- Architecture
- Art/Art History
- Bioengineering
- Biology
- Business Administration
- Chemistry & Biochemistry
- City & Regional Planning
- Civil Engineering
- Communication
- Computer Science & Engineering
- Construction Management
- Criminology & Criminal Justice
- Curriculum & Instruction
- Earth & Environmental Sciences
- Economics
- Educational Leadership & Policy Studies
- Electrical Engineering
- English
- Finance & Real Estate
- History
- Industrial & Manufacturing Systems Engineering
- Information Systems & Operation Management
- Interior Design
- Kinesiology
- Linguistics
- Management
- Marketing
- Materials Science & Engineering
- Mathematics
- Mechanical & Aerospace Engineering
- Modern Languages
-

Music

- Nursing & Health Innovation
- Philosophy & Humanities
- Physics
- Political Science
- Psychology
- Social Work
- Sociology & Anthropology
- Theatre Arts
- Other: \_\_\_\_\_

## Part 1: Job-Related/Major-Related Physical Activity

The first section is about your work. This includes paid jobs, farming, volunteer work, course work, and any other unpaid work that you did outside your home. Do not include unpaid work you might do around your home, like housework, yard work, general maintenance, and caring for your family. These are asked in Part 3.

8. **Do you currently have a job or do any unpaid work outside your home?** \* *Mark only one oval.*

Yes  
 No

**The next questions are about all the physical activity you did in the last 7 days as part of your paid or unpaid work. This does not include travelling to and from work.**

9. **During the last 7 days, on how many days did you do vigorous (activities that take hard physical effort and make you breathe harder than normal) physical activities like heavy lifting, heavy construction, or climbing up long flights of stairs as part of your work or major?** This is only about the physical activities that you did for at least 10 minutes at a time. \*  
*Mark only one oval.*

	0	1	2	3	4	5	6	7	
0	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7

10. **Approximately how much time did you usually spend on one of those days doing vigorous physical activities as part of your work or major?** \*  
*Mark only one oval.*

0 minutes/no time spent doing vigorous physical activities  
 15 minutes  
 30 minutes  
 45 minutes  
 1 hour  
 2 hours  
 3 hours  
 4 hours  
 5+ hours

11. **Again, think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 days, on how many days did you do moderate physical activities like carrying light loads as part of your work or major? Please do not include walking. \***

*Mark only one oval.*

0	1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. **Approximately how much time did you usually spend on one of those days doing moderate physical activities as part of your work or major? \***

*Mark only one oval.*

- 0 minutes/no time spent doing moderate physical activities
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5+ hours

13. **During the last 7 days, on how many days did you walk for at least 10 minutes at a time as part of your work or major? Please do not count any walking you did to travel to or from work or major. \***

*Mark only one oval.*

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. **Approximately how much time did you usually spend on one of those days walking as part of your work or major? \***

*Mark only one oval.*

- 0 minutes/no time spent walking
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5+ hours

## Part 2: Transportation

These questions are about how you traveled from place to place, including to places like work, stores, movies, and so on.

15. **During the last 7 days, on how many days did you travel in a motor vehicle like a car, train, bus, or tram? \***

*Mark only one oval.*

	0	1	2	3	4	5	6	7	
0	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7

16. **Approximately how much time per day did you usually spend on one of those days travelling in a car, train, bus, tram, or other kind of motor vehicle? \***

*Mark only one oval.*

- 0 minutes/no time spent travelling in a motor vehicle
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5+ hours

**Now think only about the bicycling and walking you might have done to travel to and from work, to do errands, or to go from place to place.**

---

17. **During the last 7 days, on how many days did you bicycle for at least 10 minutes at a time to go from place to place? \***

*Mark only one oval.*

	0	1	2	3	4	5	6	7	
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	



18. **Approximately how much time did you usually spend on one of those days to bicycle from place to place? \***

*Mark only one oval.*

- 0 minutes/no time spent bicycling
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5+ hours

19. **During the last 7 days, on how many days did you walk for at least 10 minutes at a time to go from place to place? \***

*Mark only one oval.*

0	1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. **Approximately how much time did you usually spend on one of those days walking from place to place? \***

*Mark only one oval.*

- 0 minutes/no time spent walking
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5+ hours

### Part 3: Housework, House Maintenance, and Caring for Family

This section is about some of the physical activities you might have done in the last 7 days in and around your home, like housework, gardening, yard work, general maintenance work, and caring for your family

21. **Think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 days, on how many days did you do vigorous physical activities like heavy lifting, chopping wood, shoveling snow, or digging in the garden or yard? \***  
*Mark only one oval.*

0	1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. **Approximately how much time did you usually spend on one of those days doing vigorous physical activities in the garden or yard? \***  
*Mark only one oval.*

- 0 minutes/no time spent doing vigorous physical activities
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5+ hours

23. **Again, think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 days, on how many days did you do moderate activities like carrying light loads, sweeping, washing windows, and raking in the garden or yard? \***  
*Mark only one oval.*

0	1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. **Approximately how much time did you usually spend on one of those days doing moderate physical activities in the garden or yard? \***  
*Mark only one oval.*

- 0 minutes/no time spent doing moderate physical activities in the garden or yard
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour

- 2 hours
- 3 hours
- 4 hours
- 5+ hours

25. **Once again, think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 days, on how many days did you do moderate activities like carrying light loads, washing windows, scrubbing floors and sweeping inside your home? \***  
*Mark only one oval.*

0	1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. **Approximately how much time did you usually spend on one of those days doing moderate physical activities inside your home? \***  
*Mark only one oval.*

- 0 minutes/no time spent doing moderate physical activities inside your home
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5+ hours

## Part 4: Recreation, Sport, and Leisure-Time Physical Activity

This section is about all the physical activities that you did in the last 7 days solely for recreation, sport, exercise or leisure. Please do not include any activities you have already mentioned.

27. **Not counting any walking you have already mentioned, during the last 7 days, on how many days did you walk for at least 10 minutes at a time in your leisure time? \***  
*Mark only one oval.*

0	1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

28. **Approximately how much time did you usually spend on one of those days walking in your leisure time? \***  
*Mark only one oval.*

- 0 minutes/no time spent walking
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5+ hours

29. **Think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 days, on how many days did you do vigorous physical activities and exercise like aerobics, running, fast bicycling, or fast swimming in your leisure time? \***  
*Mark only one oval.*

0	1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. **Approximately how much time did you usually spend on one of those days doing vigorous physical activities in your leisure time? \***  
*Mark only one oval.*

- 0 minutes/no time spent doing vigorous physical activities
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours

- 
- 5+ hours

31. **Again, think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 days, on how many days did you do moderate physical activities exercising leisurely like bicycling at a regular pace, swimming at a regular pace, and doubles tennis in your leisure time? \***

*Mark only one oval.*

0	1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. **Approximately how much time did you usually spend on one of those days doing moderate physical activities in your leisure time? \***

*Mark only one oval.*

- 0 minutes/no time spent doing moderate physical activity
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5+ hours

## Part 5: Time Spent Sitting

The last questions are about the time you spend sitting while at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading or sitting or lying down to watch television. Do not include any time spent sitting in a motor vehicle that you have already told me about.

33. **During the last 7 days, how much time did you usually spend sitting on a weekday?** \* *Mark only one oval.*

- 0 minutes/no time spent sitting
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5 hours
- 6 hours
- 7 hours
- 8 hours
- 9 hours
- 10+ hours

34. **During the last 7 days, how much time did you usually spend sitting on a weekend day?** \* *Mark only one oval.*

- 0 minutes/no time spent sitting
- 15 minutes
- 30 minutes
- 45 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5 hours
- 6 hours
- 7 hours
- 8 hours
- 9 hours
- 10+ hours

**This is the end of the questionnaire, thank you for participating.**

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APPENDIX E  
IPAQ LONG FORM



# INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE (October 2002)

## LONG LAST 7 DAYS SELF-ADMINISTERED FORMAT

### FOR USE WITH YOUNG AND MIDDLE-AGED ADULTS (15-69 years)

The International Physical Activity Questionnaires (IPAQ) comprises a set of 4 questionnaires. Long (5 activity domains asked independently) and short (4 generic items) versions for use by either telephone or self-administered methods are available. The purpose of the questionnaires is to provide common instruments that can be used to obtain internationally comparable data on health-related physical activity.

#### **Background on IPAQ**

The development of an international measure for physical activity commenced in Geneva in 1998 and was followed by extensive reliability and validity testing undertaken across 12 countries (14 sites) during 2000. The final results suggest that these measures have acceptable measurement properties for use in many settings and in different languages, and are suitable for national population-based prevalence studies of participation in physical activity.

#### **Using IPAQ**

Use of the IPAQ instruments for monitoring and research purposes is encouraged. It is recommended that no changes be made to the order or wording of the questions as this will affect the psychometric properties of the instruments.

#### **Translation from English and Cultural Adaptation**

Translation from English is encouraged to facilitate worldwide use of IPAQ. Information on the availability of IPAQ in different languages can be obtained at [www.ipaq.ki.se](http://www.ipaq.ki.se). If a new translation is undertaken we highly recommend using the prescribed back translation methods available on the IPAQ website. If possible please consider making your translated version of IPAQ available to others by contributing it to the IPAQ website. Further details on translation and cultural adaptation can be downloaded from the website.

#### **Further Developments of IPAQ**

International collaboration on IPAQ is on-going and an **International Physical Activity Prevalence Study** is in progress. For further information see the IPAQ website.

#### **More Information**

More detailed information on the IPAQ process and the research methods used in the development of IPAQ instruments is available at [www.ipaq.ki.se](http://www.ipaq.ki.se) and Booth, M.L. (2000). *Assessment of Physical Activity: An International Perspective*. Research Quarterly for Exercise and Sport, 71 (2): s114-20. Other scientific publications and presentations on the use of IPAQ are summarized on the website.

## INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.

Think about all the **vigorous** and **moderate** activities that you did in the **last 7 days**. **Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal.

**PART 1: JOB-RELATED PHYSICAL ACTIVITY**

The first section is about your work. This includes paid jobs, farming, volunteer work, course work, and any other unpaid work that you did outside your home. Do not include unpaid work you might do around your home, like housework, yard work, general maintenance, and caring for your family. These are asked in Part 3.

2. Do you currently have a job or do any unpaid work outside your home?

Yes

No



**Skip to PART 2: TRANSPORTATION**

The next questions are about all the physical activity you did in the **last 7 days** as part of your paid or unpaid work. This does not include traveling to and from work.

3. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, heavy construction, or climbing up stairs **as part of your work**? Think about only those physical activities that you did for at least 10 minutes at a time.

**days per week**

No vigorous job-related physical activity



**Skip to question 4**

4. How much time did you usually spend on one of those days doing **vigorous** physical activities as part of your work?

**hours per day**  
**minutes per day**

5. Again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads **as part of your work**? Please do not include walking.

**days per week**

No moderate job-related physical activity



**Skip to question 6** How much time did you usually spend on one of those days doing **moderate** physical activities as part of your work?

**hours per day**  
**minutes per day**

6. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time **as part of your work**? Please do not count any walking you did to travel to or from work.

**days per week**

No job-related walking



**Skip to PART 2: TRANSPORTATION**

7. How much time did you usually spend on one of those days **walking** as part of your work?

**hours per day**  
**minutes per day**

**PART 2: TRANSPORTATION PHYSICAL ACTIVITY**

These questions are about how you traveled from place to place, including to places like work, stores, movies, and so on.

8. During the **last 7 days**, on how many days did you **travel in a motor vehicle** like a train, bus, car, or tram?

**days per week**

No traveling in a motor vehicle



**Skip to question 10**

9. How much time did you usually spend on one of those days **traveling** in a train, bus, car, tram, or other kind of motor vehicle?

**hours per day**  
**minutes per day**

Now think only about the **bicycling** and **walking** you might have done to travel to and from work, to do errands, or to go from place to place.

10. During the **last 7 days**, on how many days did you **bicycle** for at least 10 minutes at a time to go **from place to place**?

**days per week**

No bicycling from place to place



**Skip to question 12**

11. How much time did you usually spend on one of those days to **bicycle** from place to place?

**hours per day**  
**minutes per day**

12. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time to go **from place to place**?

**days per week**

No walking from place to place



**Skip to PART 3: HOUSEWORK,  
HOUSE MAINTENANCE, AND  
CARING FOR FAMILY**

12. How much time did you usually spend on one of those days **walking** from place to place?

**hours per day**  
**minutes per day**

**PART 3: HOUSEWORK, HOUSE MAINTENANCE, AND CARING FOR FAMILY**

This section is about some of the physical activities you might have done in the **last 7 days** in and around your home, like housework, gardening, yard work, general maintenance work, and caring for your family.

13. Think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, chopping wood, shoveling snow, or digging **in the garden or yard**?

**days per week**

No vigorous activity in garden or yard



**Skip to question 16**

14. How much time did you usually spend on one of those days doing **vigorous** physical activities in the garden or yard?

**hours per day**

**minutes per day**

15. Again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** activities like carrying light loads, sweeping, washing windows, and raking **in the garden or yard**?

**days per week**

No moderate activity in garden or yard



**Skip to question 18**

How much time did you usually spend on one of those days doing **moderate** physical activities in the garden or yard?

**hours per day**

**minutes per day**

15. Once again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** activities like carrying light loads, washing windows, scrubbing floors and sweeping **inside your home**?

**days per week**

No moderate activity inside home



**Skip to PART 4: RECREATION,  
SPORT AND LEISURE-TIME  
PHYSICAL ACTIVITY**

16. How much time did you usually spend on one of those days doing **moderate** physical activities inside your home?

**hours per day**

**minutes per day**

**PART 4: RECREATION, SPORT, AND LEISURE-TIME PHYSICAL ACTIVITY**

This section is about all the physical activities that you did in the **last 7 days** solely for recreation, sport, exercise or leisure. Please do not include any activities you have already mentioned.

17. Not counting any walking you have already mentioned, during the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time **in your leisure time**?

**days per week**

No walking in leisure time



***Skip to question 22***

18. How much time did you usually spend on one of those days **walking** in your leisure time?

**hours per day**

**minutes per day**

19. Think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **vigorous** physical activities like aerobics, running, fast bicycling, or fast swimming **in your leisure time**?

**days per week**



No vigorous activity in leisure time

***Skip to question 24***

19. How much time did you usually spend on one of those days doing **vigorous** physical activities in your leisure time?

**hours per day**  
**minutes per day**

20. Again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** physical activities like bicycling at a regular pace, swimming at a regular pace, and doubles tennis **in your leisure time**?

**days per week**

No moderate activity in leisure time



***Skip to PART 5: TIME SPENT  
SITTING***

20. How much time did you usually spend on one of those days doing **moderate** physical activities in your leisure time?

**hours per day**  
**minutes per day**

**PART 5: TIME SPENT SITTING**

The last questions are about the time you spend sitting while at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading or sitting or lying down to watch television. Do not include any time spent sitting in a motor vehicle that you have already told me about.

21. During the **last 7 days**, how much time did you usually spend **sitting** on a **weekday**?

**hours per day**  
**minutes per day**

22. During the **last 7 days**, how much time did you usually spend **sitting** on a **weekend day**?

**hours per day**  
**minutes per day**

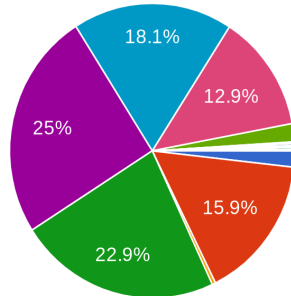
**This is the end of the questionnaire, thank you for participating.**

APPENDIX F  
QUESTIONNAIRE CHARTS



## What College are you a part of?

503 responses

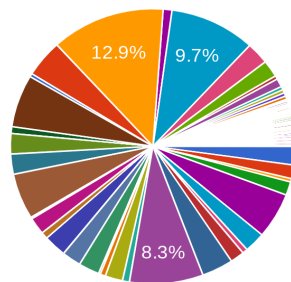


- College of Architecture, Planning,...
- College of Business
- College of Education
- College of Engineering
- College of Liberal Arts
- College of Nursing and Health Inn...
- College of Science
- School of Social Work

▲ 1/2 ▼

## What is your major?

503 responses

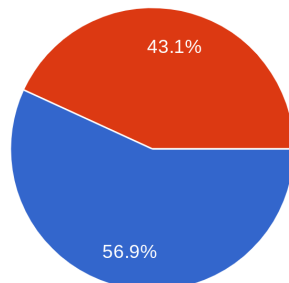


- Accounting
- Architecture
- Art/Art History
- Bioengineering
- Biology
- Business Administration
- Chemistry & Biochemistry
- City & Regional Planning

▲ 1/10 ▼

## Do you currently have a job or do any unpaid work outside your home?

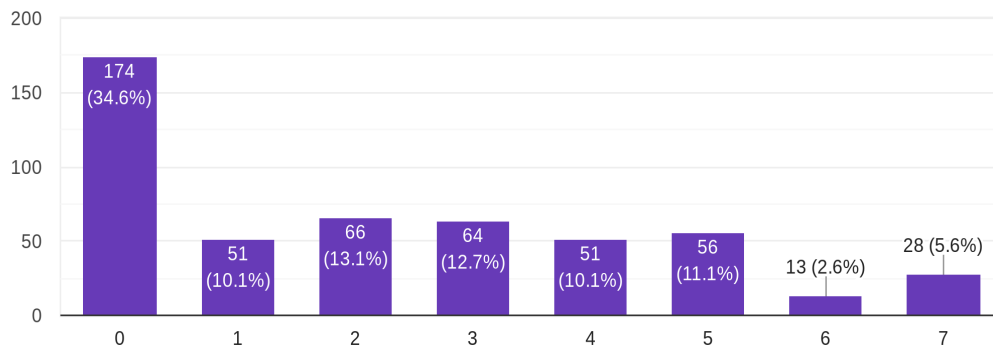
503 responses



- Yes
- No

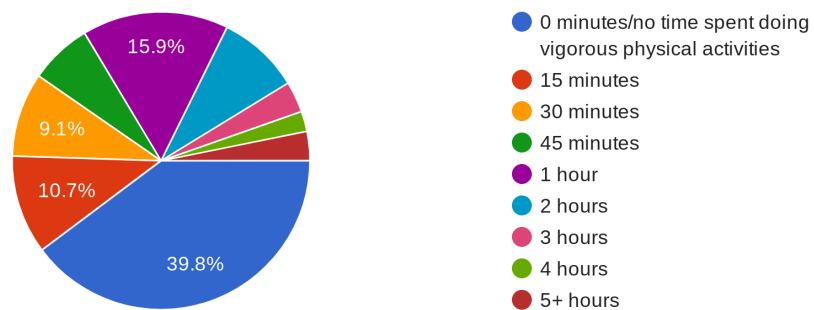
During the last 7 days, on how many days did you do vigorous (activities that take hard physical effort and make ... did for at least 10 minutes at a time.

503 responses



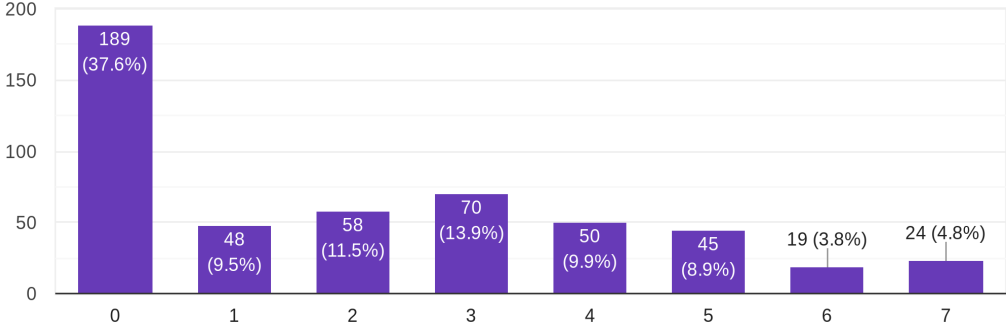
Approximately how much time did you usually spend on one of those days doing vigorous physical activities as part of your work or major?

503 responses



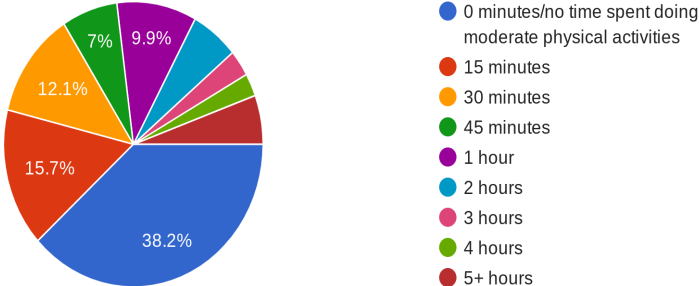
Again, think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 da...major? Please do not include walking.

503 responses



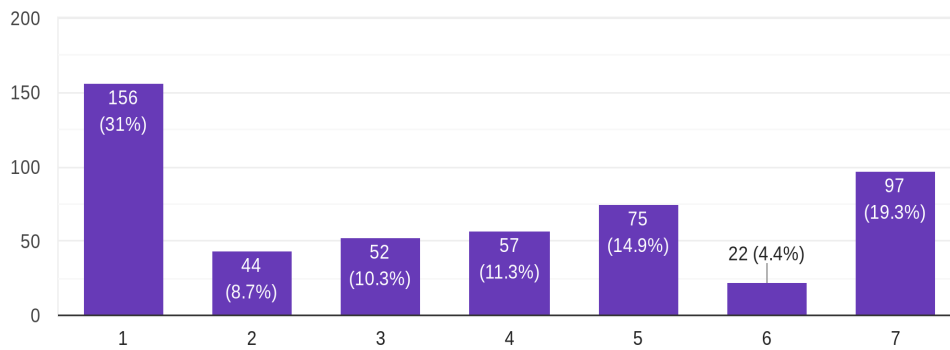
Approximately how much time did you usually spend on one of those days doing moderate physical activities as part of your work or major?

503 responses



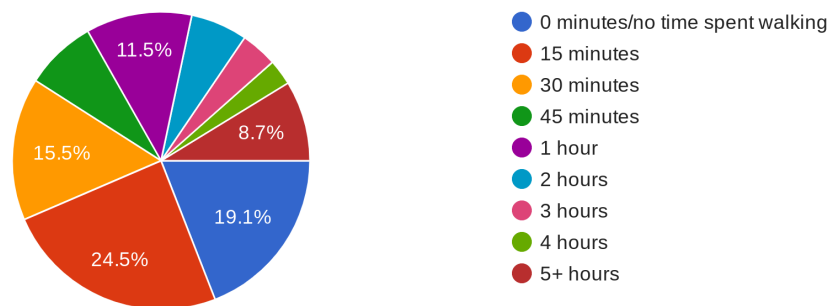
During the last 7 days, on how many days did you walk for at least 10 minutes at a time as part of your work or major to travel to or from work or major.

503 responses



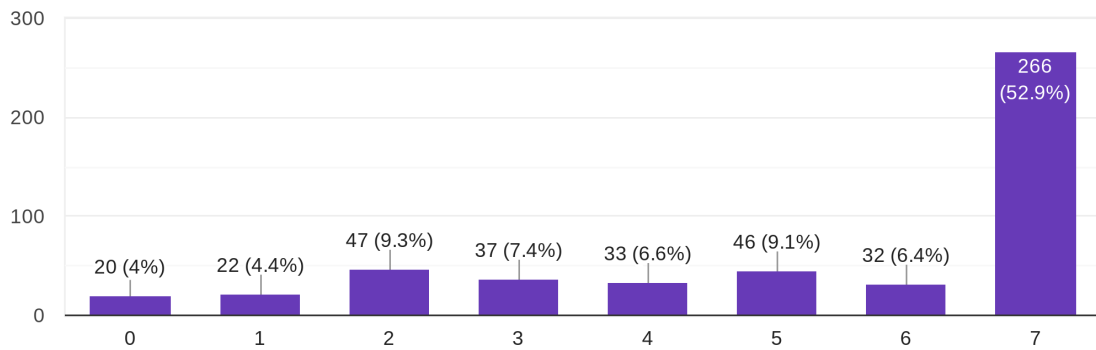
Approximately how much time did you usually spend on one of those days walking as part of your work or major?

503 responses



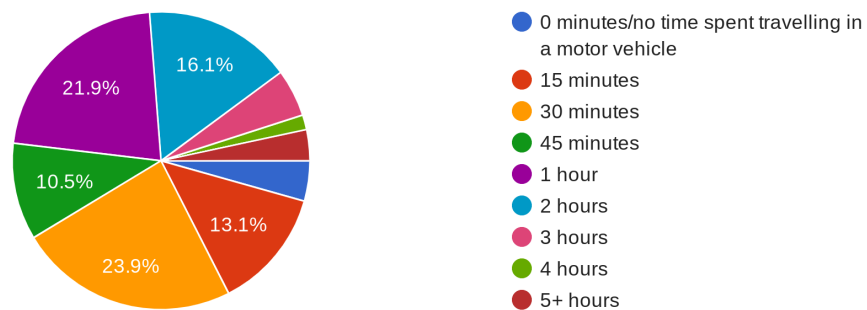
During the last 7 days, on how many days did you travel in a motor vehicle like a car, train, bus, or tram?

503 responses



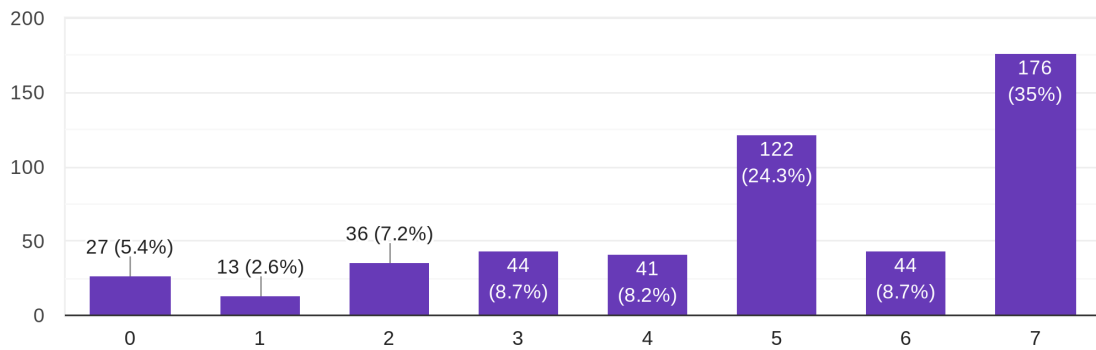
Approximately how much time per day did you usually spend on one of those days travelling in a car, train, bus, tram, or other kind of motor vehicle?

503 responses



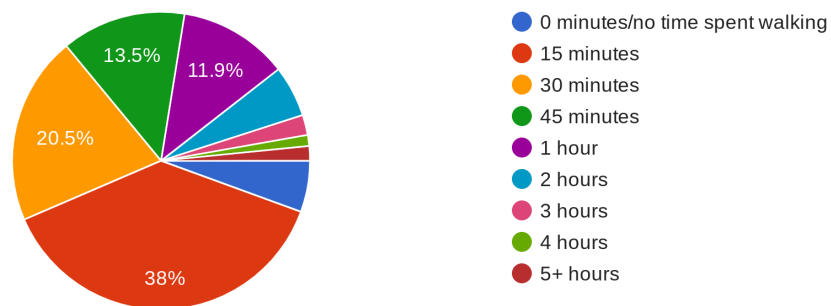
During the last 7 days, on how many days did you walk for at least 10 minutes at a time to go from place to place?

503 responses



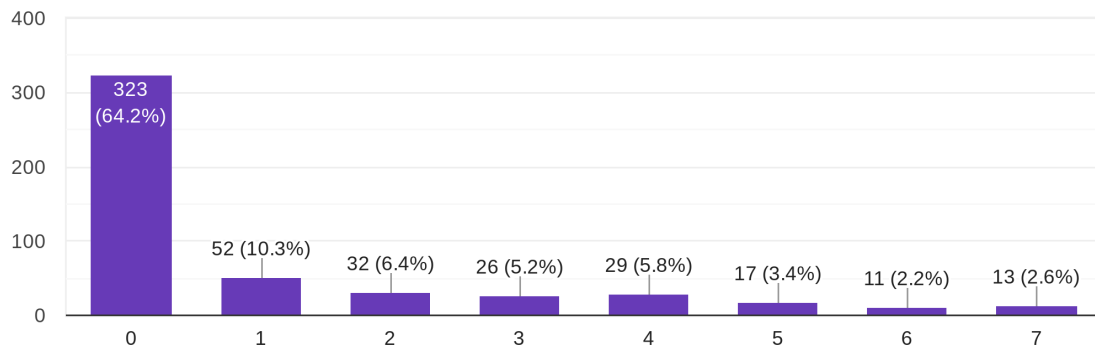
Approximately how much time did you usually spend on one of those days walking from place to place?

503 responses



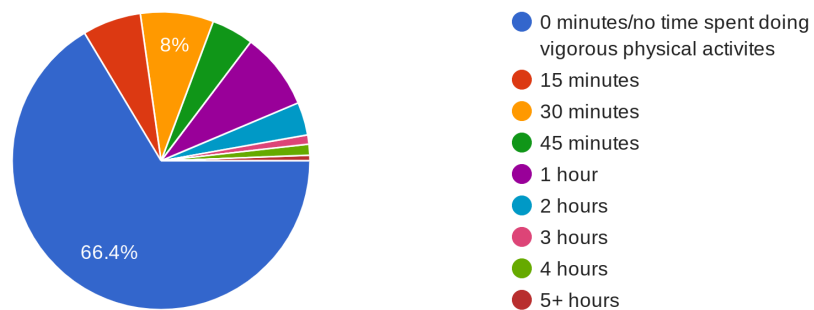
Think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 day...now, or digging in the garden or yard?

503 responses



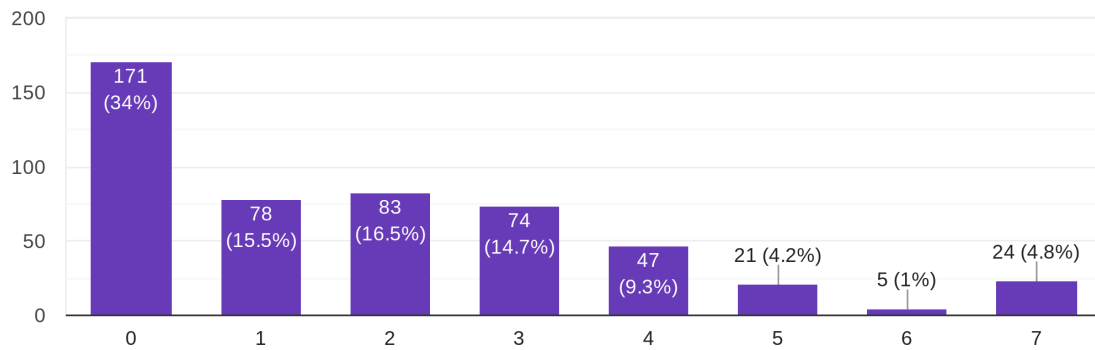
Approximately how much time did you usually spend on one of those days doing vigorous physical activities in the garden or yard?

503 responses



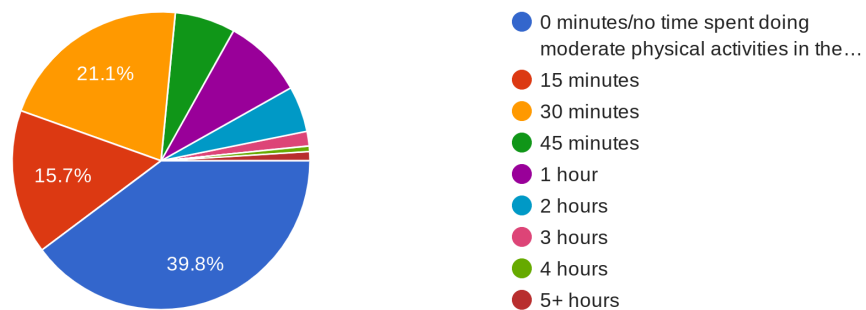
Again, think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 days, and raking in the garden or yard?

503 responses



Approximately how much time did you usually spend on one of those days doing moderate physical activities in the garden or yard?

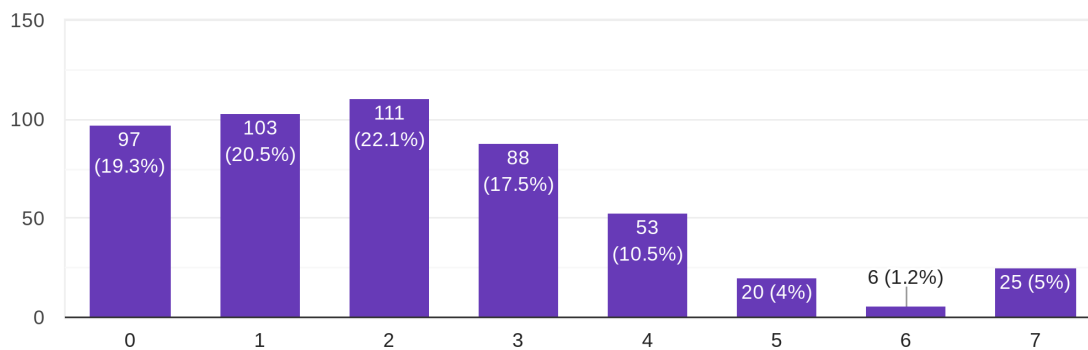
503 responses





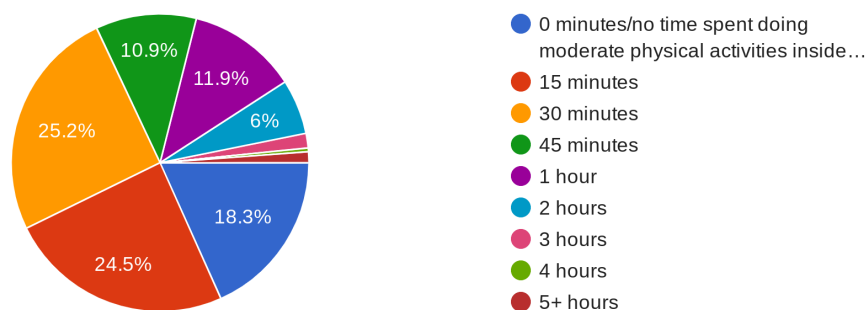
Once again, think about only those physical activities that you did for at least 10 minutes at a time. During the...loors and sweeping inside your home?

503 responses



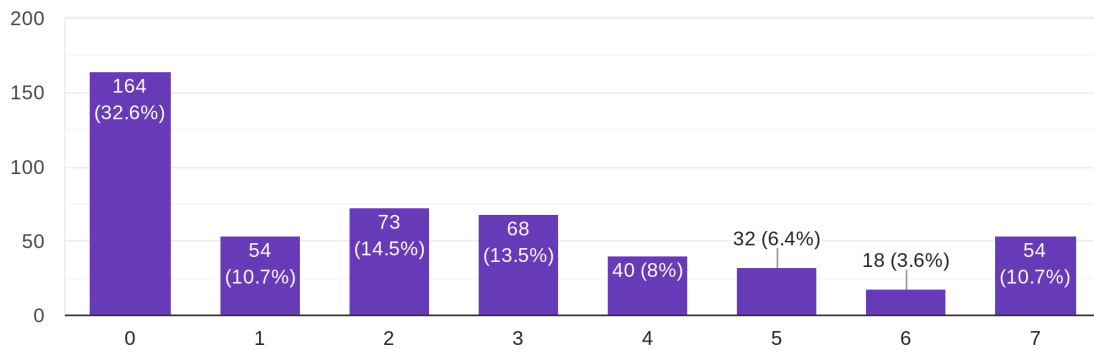
Approximately how much time did you usually spend on one of those days doing moderate physical activities inside your home?

503 responses



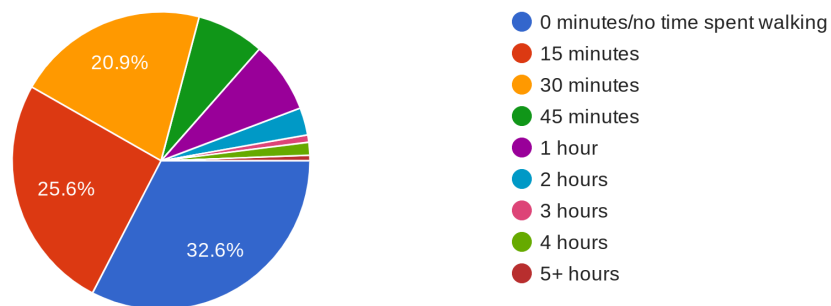
Not counting any walking you have already mentioned, during the last 7 days, on how many days did you walk for...inutes at a time in your leisure time?

503 responses



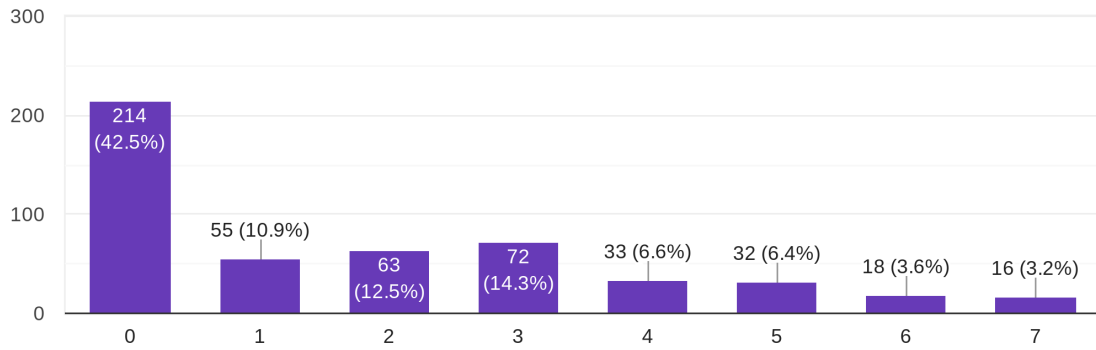
Approximately how much time did you usually spend on one of those days walking in your leisure time?

503 responses



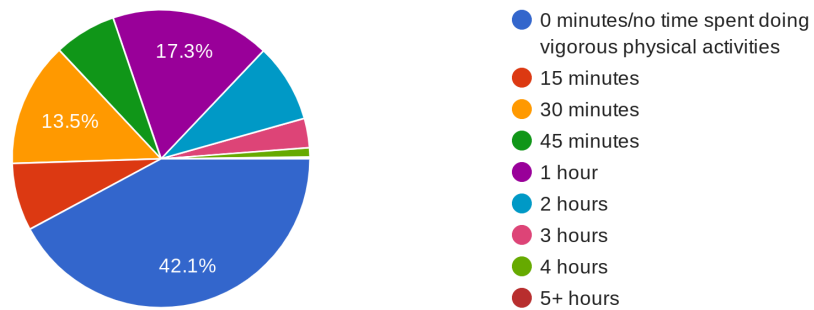
Think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 da...or fast swimming in your leisure time?

503 responses



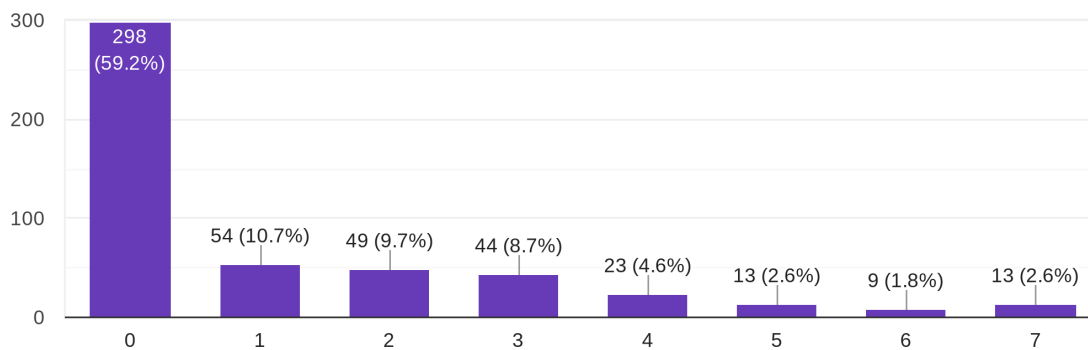
Approximately how much time did you usually spend on one of those days doing vigorous physical activities in your leisure time?

503 responses



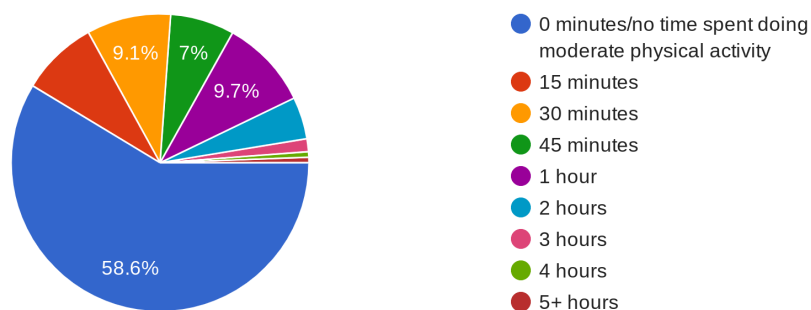
Again, think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 da...nd doubles tennis in your leisure time?

503 responses



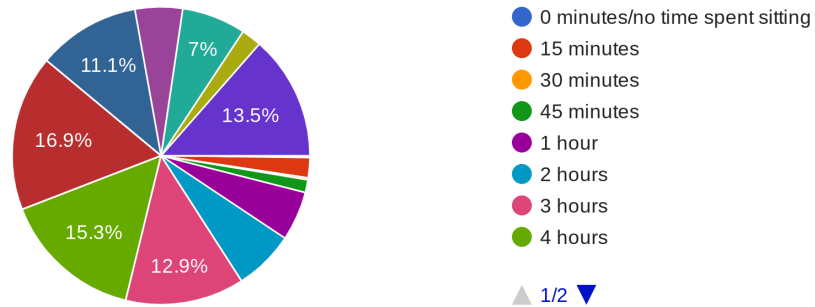
Approximately how much time did you usually spend on one of those days doing moderate physical activities in your leisure time?

503 responses



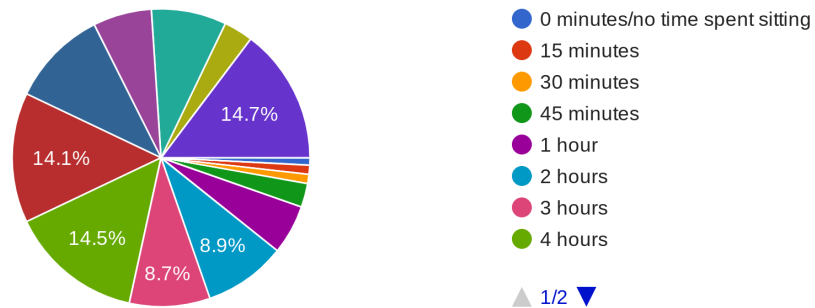
### During the last 7 days, how much time did you usually spend sitting on a weekday?

503 responses



### During the last 7 days, how much time did you usually spend sitting on a weekend day?

503 responses



APPENDIX G  
SUBJECT ANSWERS & AVERAGES

What College are you a part of?	Vigorous Activity	Moderate Activity	Walking	Walking to and from	Vigorous in garden
College of Architecture, Planning, and Public Affairs	0	210	210	210	0
College of Architecture, Planning, and Public Affairs	0	0	45	180	60
College of Architecture, Planning, and Public Affairs	0	30	30	75	0
College of Architecture, Planning, and Public Affairs	600	45	90	120	15
College of Architecture, Planning, and Public Affairs	30	30	480	2100	0
College of Architecture, Planning, and Public Affairs	720	0	420	105	60
College of Architecture, Planning, and Public Affairs	900	0	600	600	0
College of Architecture, Planning, and Public Affairs	180	180	420	225	180
College of Architecture, Planning, and Public Affairs	60	60	210	150	0
College of Business	1200	1800	900	120	120
	<b>369</b>	<b>235.5</b>	<b>340.5</b>	<b>388.5</b>	<b>43.5</b>

Moderate in garden	Moderate in home	Walking leisure	Vigorous Leisure	Moderate Leisure
1680	420	180	0	0
60	30	30	0	0
0	60	0	0	0
0	15	135	480	0
120	180	960	45	0
0	30	0	0	0
0	0	150	0	0
360	90	210	180	0
180	90	420	90	90
240	120	180	0	60
<b>264</b>	<b>103.5</b>	<b>226.5</b>	<b>79.5</b>	<b>15</b>

Time sitting on a weekday	Time sitting on weekend day?
600	600
60	30
600	360
60	300
600	600
240	420
600	600
180	180
300	360
240	30
<b>348</b>	<b>348</b>



What College are you a part of?	Vigorous Activity	Moderate Activity	Walking	Walking to and from	Vigorous in garden
College of Business	1200	1800	900	120	120
College of Business	30	0	150	180	45
College of Business	0	0	0	90	0
College of Business	225	90	60	180	120
College of Business	0	0	180	105	0
College of Business	120	60	120	120	0
College of Business	0	0	240	480	0
College of Business	120	135	135	60	90
College of Business	240	0	15	150	0
College of Business	0	0	420	360	300
College of Business	1500	90	45	225	0
College of Business	45	75	120	60	0
College of Business	0	0	15	270	0
College of Business	300	90	1260	1440	0
College of Business	210	420	210	210	90
College of Business	60	900	900	150	900
College of Business	15	1800	1800	15	0
College of Business	0	45	75	75	120
College of Business	180	360	315	210	90
College of Business	120	60	120	120	0
College of Business	0	120	600	30	0
College of Business	0	0	90	150	0
College of Business	0	240	600	30	0
College of Business	900	900	900	0	1680
College of Business	240	60	1200	315	0
College of Business	360	180	720	1260	30

College of Business	240	120	75	75	240
College of Business	0	0	0	0	0
College of Business	0	0	15	75	0
College of Business	180	30	60	90	0
College of Business	300	180	840	315	0
College of Business	180	1680	1080	75	0
College of Business	0	0	0	0	0
College of Business	0	360	315	840	0
College of Business	0	480	900	105	0
College of Business	0	0	75	210	0
College of Business	90	60	180	150	0
College of Business	600	30	0	150	0
College of Business	420	240	600	90	60
College of Business	360	210	300	300	0
College of Business	1500	0	60	60	0
College of Business	0	90	1680	90	0
College of Business	0	960	30	30	0
College of Business	0	0	15	210	15
College of Business	960	720	1440	2100	0
College of Business	1260	840	1260	105	420
College of Business	1260	300	75	0	84
College of Business	90	30	30	90	90
College of Business	0	0	0	270	0
College of Business	315	0	315	420	0
	<b>273</b>	<b>309.8</b>	<b>436.4</b>	<b>235.8</b>	<b>113.2</b>

Moderate in garden	Moderate in home	Walking leisure	Vigorous Leisure	Moderate Leisure
240	120	180	0	60
90	30	90	0	0
0	15	15	15	15
15	180	150	30	60
60	15	75	0	0
0	120	120	120	60
0	0	240	360	240
90	90	90	60	135
0	90	0	0	0
90	180	360	300	180
0	0	0	0	0
480	90	45	0	0
60	60	15	0	15
0	0	1080	840	0
30	30	0	420	45
900	120	150	120	0
0	1680	0	0	0
90	30	90	90	120
0	150	0	360	180
0	120	120	120	60
180	180	0	360	30
180	240	30	0	0
0	0	150	300	180
0	0	0	0	0
90	30	60	0	0
180	360	15	15	0
60	135	90	0	0
0	60	45	0	0
0	30	0	0	0
60	30	45	60	0
0	0	60	0	0
0	30	0	180	1080
90	90	105	0	0
0	240	210	480	360
30	30	0	0	15
0	30	0	0	0
15	15	45	90	15
0	60	75	600	0
90	120	240	900	180
0	180	60	0	0
0	0	30	300	0
180	60	0	0	0
120	120	15	240	0
90	90	0	1200	120
0	120	240	0	0
0	225	105	1260	1260
210	15	0	1260	225
90	15	30	60	15
0	0	120	60	0
180	90	45	30	135
420	420	420	360	420
0	0	0	180	0

0	30	15	45	45
0	60	0	225	45
0	0	75	480	240
135	180	60	90	0
0	0	15	0	0
240	540	60	600	60
0	30	0	0	0
210	210	105	0	0
0	1080	960	180	0
30	0	30	0	0
30	45	0	360	30
0	0	0	0	0
480	480	0	60	60
120	180	120	900	0
120	135	360	60	60
30	90	0	0	0
0	0	0	0	0
45	180	105	240	150
150	420	60	0	0
30	30	30	0	0
960	960	960	960	960
90	60	0	0	0
180	480	315	240	240
<b>96.8</b>	<b>151</b>	<b>111</b>	<b>202.8</b>	<b>94.6</b>

Time sitting on weekday	Time sitting on weekend day?
240	30
360	600
360	600
120	180
300	420
240	240
300	300
240	240
360	480
240	240
240	480
300	240
480	360
60	120
180	60
600	600
600	600
300	240
360	240
240	240
420	420
360	240

300	420
240	300
180	180
180	180
300	360
240	360
420	540
540	45
60	120
60	180
600	600
420	600
60	60
120	300
300	420
180	180
180	60
600	300
120	300
240	180
420	420
120	240
180	360
240	240
120	0
30	60
300	300
45	45
60	60
420	420
15	30
300	240
240	600
180	240
120	120
180	60
600	600
600	600
600	60
420	120
300	420
420	420
600	120
240	240

240	240
420	120
120	120
240	480
300	480
480	480
240	240
240	240
180	480
<b>286</b>	<b>290</b>

What College are you a part of?	Vigorous Activity	Moderate Activity	Walking	Walking to and from	Vigorous in garden
College of Engineering	0	2100	0	0	0
College of Engineering	60	180	1680	0	0
College of Engineering	0	480	1680	2100	0
College of Engineering	30	0	105	315	0
College of Engineering	0	0	0	420	0
College of Engineering	120	120	210	210	0
College of Engineering	300	300	300	420	180
College of Engineering	30	90	315	315	0
College of Engineering	0	0	0	420	0
College of Engineering	0	0	150	75	0
College of Engineering	30	0	15	0	0
College of Engineering	15	15	75	150	0
College of Engineering	180	45	60	840	15
College of Engineering	15	0	0	300	0
College of Engineering	0	0	0	30	0
College of Engineering	0	0	0	210	0
College of Engineering	0	0	75	75	0
College of Engineering	180	360	45	90	0
College of Engineering	0	0	15	315	0
College of Engineering	120	225	120	1440	480
College of Engineering	0	0	0	45	240
College of Engineering	1500	120	240	300	90
College of Engineering	2100	360	30	1260	240
College of Engineering	120	90	60	60	0
College of Engineering	300	90	960	210	135

College of Engineering	0	0	105	105	15
College of Engineering	0	0	0	105	0
College of Engineering	240	0	45	45	0
College of Engineering	0	15	75	150	0
College of Engineering	0	90	30	75	0
College of Engineering	180	120	2100	15	60
College of Engineering	300	600	60	75	30
College of Engineering	0	0	0	225	0
College of Engineering	0	1260	60	0	180
College of Engineering	240	1260	105	75	0
College of Engineering	0	0	0	105	0
College of Engineering	30	480	240	300	0
College of Engineering	0	0	30	60	0
College of Engineering	0	0	60	315	15
College of Engineering	300	90	0	15	0
College of Engineering	0	0	900	105	60
College of Engineering	300	150	30	150	0
College of Engineering	60	0	360	45	0
College of Engineering	30	0	420	0	0
College of Engineering	2100	900	60	1260	60
College of Engineering	0	0	210	30	0
College of Engineering	420	225	315	45	300
College of Engineering	0	0	210	210	0
College of Engineering	0	0	0	75	0
College of Engineering	0	180	90	180	135
College of Engineering	30	900	45	45	0
College of Engineering	0	0	0	60	0



College of Engineering	0	0	15	225	0
College of Engineering	0	0	15	210	90
College of Engineering	225	30	90	60	45
College of Engineering	15	0	600	105	240
College of Engineering	15	30	0	420	0
College of Engineering	240	900	150	0	0
College of Engineering	0	45	420	210	0
College of Engineering	720	180	135	90	225
College of Engineering	0	120	60	30	0
College of Engineering	0	0	0	105	0
College of Engineering	150	360	1260	90	120
College of Engineering	0	0	30	30	0
College of Engineering	90	180	150	135	135
College of Engineering	0	0	0	150	0
College of Engineering	180	120	150	0	0
College of Engineering	600	720	270	270	360
College of Engineering	45	135	30	45	60
College of Engineering	720	720	240	300	0
College of Engineering	300	240	60	90	0
College of Engineering	240	60	120	90	0
College of Engineering	60	30	60	105	0
College of Engineering	15	15	360	30	0
College of Engineering	0	0	135	120	0
College of Engineering	0	0	1500	1500	90
College of Engineering	0	45	60	315	15
College of Engineering	0	0	0	225	0
College of Engineering	1500	315	900	1260	0

College of Engineering	0	0	15	420	0
College of Engineering	0	0	15	30	0
College of Engineering	0	0	180	90	0
College of Engineering	135	135	180	135	135
College of Engineering	360	90	180	720	180
College of Engineering	0	0	300	90	0
College of Engineering	0	0	300	90	0
College of Engineering	15	15	0	105	0
College of Engineering	15	15	225	225	0
College of Engineering	90	720	300	30	30
College of Engineering	120	60	75	105	90
College of Engineering	30	30	105	105	0
College of Engineering	30	15	150	120	0
College of Engineering	60	150	360	315	30
College of Engineering	840	240	300	420	1680
College of Engineering	30	45	240	45	120
College of Engineering	0	45	600	600	0
College of Engineering	0	0	0	210	0
College of Engineering	0	0	0	315	0
College of Engineering	0	0	15	150	0
College of Engineering	0	15	15	30	0
College of Engineering	0	0	105	45	30
College of Engineering	15	105	210	315	15
College of Engineering	45	75	30	90	0
College of Engineering	180	0	2100	105	15
College of Engineering	90	0	180	180	0
College of Engineering	0	120	15	210	0

College of Engineering	120	240	240	180	240
College of Engineering	15	60	90	60	30
	<b>154.0277778</b>	<b>159.8611111</b>	<b>231.6666667</b>	<b>233.4722222</b>	<b>57.5</b>

	Moderate in home	Walking leisure	Vigorous Leisure	Moderate Leisure
0	0	0	0	0
30	45	90	120	0
900	480	90	0	240
60	60	30	180	90
0	30	90	90	30
0	0	60	0	0
180	135	840	600	600
420	600	0	45	0
0	0	0	0	0
60	120	0	0	0
0	0	0	0	0
0	0	0	0	0
90	90	60	60	90
0	0	60	180	45
15	60	0	0	0
30	15	210	60	0
30	15	45	0	0
60	90	135	30	0
0	0	60	180	180
135	90	300	180	240
0	0	60	240	60
90	240	0	240	360
180	60	0	120	0
30	30	120	0	120
15	15	0	0	0
15	15	45	0	0
15	90	30	0	0
0	60	0	60	0
0	0	0	0	0
0	60	0	180	60
15	30	135	180	120
90	60	0	0	0
0	0	0	0	0
90	90	90	0	0
0	45	30	0	0
0	180	105	60	60
120	120	30	0	0
0	0	0	60	0
30	360	210	0	90
0	30	30	600	180
60	60	0	420	0
0	30	0	180	60
0	0	0	0	0
0	0	0	30	60
120	60	0	0	0
0	30	75	30	60

45	30	150	240	180
0	90	90	210	0
0	0	0	105	0
60	60	240	180	240
0	0	0	0	0
0	420	0	0	0
0	0	0	0	0
90	45	0	30	0
90	30	90	30	30
0	0	60	90	0
0	60	150	0	0
60	30	0	30	0
30	30	105	30	0
45	90	60	480	60
0	45	0	0	0
0	0	45	45	45
150	600	360	135	240
90	90	0	120	60
135	135	135	90	135
30	30	0	120	0
30	0	0	0	0
135	135	60	240	300
60	60	90	60	30
180	120	180	0	90
0	0	225	0	0
0	90	90	0	0
90	45	30	45	0
60	30	60	0	0
0	15	0	240	360
240	30	240	180	180
75	210	150	15	15
30	30	90	90	90
30	15	210	300	300
210	90	210	30	30
0	15	0	0	0
90	90	90	0	0
90	135	135	90	90
180	120	90	225	120
0	0	75	120	45
0	0	75	120	45
15	30	105	150	420
30	30	0	0	0
0	15	0	90	90
45	45	60	360	180
75	45	0	30	0
30	15	90	0	0
30	15	60	30	0
840	1260	420	300	300
30	120	30	0	0
30	30	90	0	0
0	0	45	0	0
60	60	120	360	360
0	90	15	0	60

15	15	0	0	0
90	30	45	60	30
15	210	105	45	30
0	0	0	0	75
90	15	120	60	0
30	30	0	0	0
0	0	120	0	135
480	240	180	135	480
15	30	30	30	15
<b>65.97222222</b>	<b>81.80555556</b>	<b>76.38888889</b>	<b>87.63888889</b>	<b>70.41666667</b>

Time spent sitting on a weekday	Time spent sitting on a weekend day
0	600
240	360
480	480
240	360
240	120
600	600
480	480
600	180
360	360
360	600
600	480
60	120
15	600
180	300
600	600
300	360
120	180
300	60
180	360
240	540
360	360
600	480
120	300
600	600
360	120
240	240
300	300
240	300
180	240
420	360
600	300
600	120

600	600
300	300
180	300
60	180
300	480
300	360
180	420
180	240
300	180
540	600
300	600
300	300
120	300
300	240
600	240
600	600
600	600
45	45
300	360
600	600
360	360
600	600
360	420
360	480
600	600
180	15
360	180
240	600
600	600
180	60
480	300
300	180
300	420
300	480
480	600
240	240
300	45
300	120
420	180
120	240
240	180
300	360

240	120
300	420
360	540
480	480
45	360
300	420
600	600
480	600
60	45
360	480
600	60
600	60
480	240
600	600
300	300
480	300
180	360
240	120
360	240
240	300
480	480
300	600
420	600
300	120
300	300
300	360
15	30
180	300
540	600
540	600
540	600
300	300
600	360
180	240
<b>346.666667</b>	<b>355.555556</b>

What College are you a part of?	Vigorous Activity	Moderate Activity	Walking	Walking to and from	Vigorous in garden
College of Liberal Arts	0	30	30	30	0
College of Liberal Arts	15	0	15	15	0
College of Liberal Arts	2100	2100	1680	75	210
College of Liberal Arts	0	30	120	45	0
College of Liberal Arts	0	60	90	60	0
College of Liberal Arts	90	90	90	90	60
College of Liberal Arts	135	1800	1800	75	60
College of Liberal Arts	135	30	15	75	0
College of Liberal Arts	0	0	0	225	0
College of Liberal Arts	30	540	720	15	0
College of Liberal Arts	60	0	0	105	30
College of Liberal Arts	120	1800	420	600	0
College of Liberal Arts	90	240	240	720	0
College of Liberal Arts	90	360	90	30	0
College of Liberal Arts	0	0	60	45	0
College of Liberal Arts	960	840	2100	2100	1680
College of Liberal Arts	1500	1200	1500	0	0
College of Liberal Arts	0	0	0	420	0
College of Liberal Arts	135	0	15	105	60
College of Liberal Arts	0	0	0	15	0
College of Liberal Arts	60	0	30	270	0
College of Liberal Arts	0	0	150	0	360
College of Liberal Arts	45	300	840	90	0
College of Liberal Arts	0	0	0	315	720
College of Liberal Arts	180	540	240	315	60
College of Liberal Arts	0	0	300	1260	0



College of Liberal Arts	0	0	120	420	0
College of Liberal Arts	15	60	315	420	0
College of Liberal Arts	315	135	180	420	420
College of Liberal Arts	225	225	210	210	0
College of Liberal Arts	600	900	600	420	0
College of Liberal Arts	105	60	210	105	0
College of Liberal Arts	0	0	180	300	0
College of Liberal Arts	60	15	45	45	0
College of Liberal Arts	0	0	360	600	0
College of Liberal Arts	30	0	105	315	0
College of Liberal Arts	0	0	0	135	135
College of Liberal Arts	120	0	30	210	0
College of Liberal Arts	0	0	15	270	225
College of Liberal Arts	60	0	0	75	0
College of Liberal Arts	0	0	0	105	0
College of Liberal Arts	0	0	0	105	0
College of Liberal Arts	0	0	0	150	30
College of Liberal Arts	0	15	0	210	15
College of Liberal Arts	300	360	720	90	270
College of Liberal Arts	180	135	210	150	0
College of Liberal Arts	0	0	0	75	0
College of Liberal Arts	60	360	900	840	0
College of Liberal Arts	30	15	15	60	0
College of Liberal Arts	150	180	225	240	270
College of Liberal Arts	45	120	15	105	0
College of Liberal Arts	135	0	225	270	30
College of Liberal Arts	180	1200	30	75	0

College of Liberal Arts	180	300	315	420	0
College of Liberal Arts	60	60	30	75	0
College of Liberal Arts	480	0	420	150	0
College of Liberal Arts	300	0	300	300	0
College of Liberal Arts	720	420	840	840	30
College of Liberal Arts	0	0	75	75	0
College of Liberal Arts	360	180	900	720	0
College of Liberal Arts	0	960	960	0	0
College of Liberal Arts	180	135	300	135	60
College of Liberal Arts	180	30	60	60	0
College of Liberal Arts	1200	120	180	105	0
College of Liberal Arts	135	0	0	45	0
College of Liberal Arts	0	0	2100	150	0
College of Liberal Arts	30	0	0	150	0
College of Liberal Arts	0	0	0	75	0
College of Liberal Arts	0	240	360	60	0
College of Liberal Arts	180	180	105	420	420
College of Liberal Arts	120	420	45	60	0
College of Liberal Arts	15	90	180	75	15
College of Liberal Arts	2100	2100	2100	315	840
College of Liberal Arts	0	0	15	75	0
College of Liberal Arts	1080	360	360	270	15
College of Liberal Arts	0	0	180	120	0
College of Liberal Arts	0	15	30	840	0
College of Liberal Arts	105	0	840	840	0
College of Liberal Arts	120	180	180	300	0
College of Liberal Arts	240	1200	90	2100	0

College of Liberal Arts	105	75	180	210	0
College of Liberal Arts	240	240	240	315	0
College of Liberal Arts	90	30	300	90	0
College of Liberal Arts	0	0	1260	840	120
College of Liberal Arts	120	30	60	180	0
College of Liberal Arts	135	60	0	105	0
College of Liberal Arts	0	0	360	300	0
College of Liberal Arts	360	600	1080	360	240
College of Liberal Arts	720	90	30	45	0
College of Liberal Arts	0	30	15	75	0
College of Liberal Arts	0	1500	1500	150	0
College of Liberal Arts	0	0	0	420	0
College of Liberal Arts	240	0	0	105	0
College of Liberal Arts	0	0	30	60	0
College of Liberal Arts	0	0	0	210	0
College of Liberal Arts	0	15	45	45	0
College of Liberal Arts	0	0	30	300	0
College of Liberal Arts	0	0	0	150	0
College of Liberal Arts	0	960	60	120	0
College of Liberal Arts	210	210	210	75	300
College of Liberal Arts	0	0	0	30	0
College of Liberal Arts	0	0	45	150	30
College of Liberal Arts	90	30	210	210	0
College of Liberal Arts	480	840	2100	420	0
College of Liberal Arts	240	720	420	420	180
College of Liberal Arts	720	960	900	360	960
College of Liberal Arts	1500	1500	75	105	0

College of Liberal Arts	0	15	15	105	0
College of Liberal Arts	0	0	0	75	0
College of Liberal Arts	0	0	0	180	0
College of Liberal Arts	0	0	600	420	15
College of Liberal Arts	0	0	60	120	0
College of Liberal Arts	135	90	0	480	0
College of Liberal Arts	60	60	120	420	120
College of Liberal Arts	720	0	0	105	0
College of Liberal Arts	15	75	0	15	0
College of Liberal Arts	120	120	720	150	60
College of Liberal Arts	0	0	15	60	0
	<b>190.1694915</b>	<b>245.5932203</b>	<b>312.7118644</b>	<b>256.5254237</b>	<b>68.13559322</b>

Moderate in garden	Moderate in home	Walking leisure	Vigorous Leisure	Moderate Leisure
0	15	15	60	0
0	120	180	180	240
120	90	15	60	15
300	135	0	0	0
60	30	60	0	0
60	240	135	120	180
120	60	135	135	0
480	480	135	0	0
0	0	120	540	0
0	135	15	90	0
30	60	0	0	0
135	300	0	0	0
180	180	0	0	30
0	0	0	0	0
90	90	0	0	0
840	2100	840	600	2100
30	90	90	0	0
30	30	0	300	300
60	30	30	120	90
45	45	0	0	0
0	30	150	600	45
240	240	30	0	0
135	240	120	0	0
720	0	270	360	360
180	60	60	0	0
120	120	840	0	0
0	0	0	240	0

60	180	420	0	120
315	315	315	210	210
45	45	60	45	0
0	0	420	0	0
105	45	420	0	0
0	120	0	0	0
0	15	60	0	0
0	135	240	60	90
15	15	315	0	0
180	135	90	135	135
0	60	0	120	0
75	135	30	135	180
15	15	90	60	0
0	30	180	420	210
0	0	0	0	0
0	90	120	240	240
90	30	0	60	30
0	0	90	180	90
90	0	0	180	0
0	30	0	0	0
30	90	120	0	0
15	30	0	0	0
120	360	30	90	90
30	30	30	0	0
180	30	150	135	0
1200	120	0	0	0
1260	1260	300	0	0
120	120	0	30	90
0	0	60	0	15
0	0	105	120	0
60	60	420	120	0
0	30	30	0	0
0	0	720	45	0
0	360	0	0	0
480	480	0	360	360
15	15	60	0	0
60	60	240	240	240
0	0	0	45	0
2100	2100	180	0	0
0	0	0	0	0
0	90	105	0	0
90	0	0	0	0
420	420	420	420	420
30	120	0	360	0
0	60	75	90	15
120	1200	315	0	0
0	0	30	480	240
60	60	0	0	0
0	120	105	60	0
0	0	210	540	0
0	150	210	720	0
60	180	180	0	0
2100	2100	180	120	45

30	30	30	0	0
240	240	420	240	0
0	60	0	60	0
60	60	120	180	0
45	30	15	0	0
0	0	105	0	0
15	15	0	0	0
1200	1080	720	720	720
60	60	0	180	0
30	60	45	60	30
60	60	0	0	0
60	60	30	90	15
75	75	15	240	0
0	15	0	0	0
0	15	135	135	0
60	60	15	0	0
0	45	0	45	0
0	0	0	0	0
0	360	0	0	0
270	300	15	300	45
360	1200	60	360	0
0	315	15	0	30
60	60	30	15	15
105	105	0	0	0
240	240	30	90	90
1080	900	540	1200	1440
240	240	0	0	0
60	0	30	0	0
0	0	240	0	0
0	240	0	360	0
0	15	30	0	600
0	0	0	0	0
0	30	840	60	0
120	240	120	120	240
0	0	105	720	0
0	15	0	0	0
60	60	15	90	240
0	60	0	0	0
<b>152.9237288</b>	<b>189.0254237</b>	<b>119.3644068</b>	<b>122.7966102</b>	<b>81.73728814</b>

Time spent sitting on a weekday	Time spent sitting on a weekend day
600	600
240	300
180	240
300	300
45	120
15	15
180	60
300	360
360	60
240	300
240	120
300	420

120	180
300	300
360	180
600	360
180	240
300	360
240	180
480	240
180	480
15	15
120	300
15	240
360	240
120	120
300	540
360	360
60	60
120	180
480	600
300	300
180	240
300	180
180	120
420	360
120	120
360	300
480	300
180	180
120	180
180	300
240	120
300	240
15	45
240	45
180	300
240	45
180	300
60	60
300	480
240	120
240	240
600	600
180	300
360	600
240	360
360	240
600	600
600	540
300	480
420	240
300	360
480	540
600	480

600	120
360	360
240	360
240	360
60	60
420	540
180	300
60	180
360	120
240	540
360	480
300	300
180	240
300	420
600	240
240	240
480	360
540	600
600	600
120	120
600	600
300	420
240	600
240	60
360	360
360	360
420	300
300	360
300	360
60	45
120	300
180	240
420	480
240	420
360	240
480	540
360	540
240	240
300	120
120	180
420	480
240	0
300	120
600	600
360	420
120	300
60	60
180	240
60	60
120	240
420	600
180	300
360	600



<b>285.6355932</b>	<b>299.2372881</b>
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What College are you a part of?	Vigorous Activity	Moderate Activity	Walking	Walking to and from	Vigorous in garden
College of Nursing and Health Innovation	15	150	300	315	0
College of Nursing and Health Innovation	240	150	45	75	240
College of Nursing and Health Innovation	60	90	315	105	0
College of Nursing and Health Innovation	0	0	0	105	0
College of Nursing and Health Innovation	0	0	1260	105	0
College of Nursing and Health Innovation	0	300	300	360	0
College of Nursing and Health Innovation	0	0	15	30	0
College of Nursing and Health Innovation	0	0	0	105	0
College of Nursing and Health Innovation	45	0	0	75	0
College of Nursing and Health Innovation	0	45	45	45	15
College of Nursing and Health Innovation	180	900	1500	210	0
College of Nursing and Health Innovation	120	120	480	105	45
College of Nursing and Health Innovation	45	0	30	315	0
College of Nursing and Health Innovation	0	60	15	0	0
College of Nursing and Health Innovation	60	15	30	210	0

Health Innovation					
College of Nursing and Health Innovation	240	840	2100	720	0
College of Nursing and Health Innovation	120	0	720	75	0
College of Nursing and Health Innovation	0	0	0	75	0
College of Nursing and Health Innovation	840	0	0	0	0
College of Nursing and Health Innovation	0	0	120	600	0
College of Nursing and Health Innovation	960	960	240	225	300
College of Nursing and Health Innovation	360	360	180	225	0
College of Nursing and Health Innovation	600	1680	210	420	15
College of Nursing and Health Innovation	720	225	180	90	720
College of Nursing and Health Innovation	0	0	420	105	0
College of Nursing and Health Innovation	420	270	360	180	480
College of Nursing and Health Innovation	0	0	0	90	0
College of Nursing and Health Innovation	0	0	105	105	0
College of Nursing and Health Innovation	0	0	0	75	0
College of Nursing and Health Innovation	0	0	0	0	75

Health Innovation					
College of Nursing and Health Innovation	0	0	0	210	0
College of Nursing and Health Innovation	1080	180	0	150	180
College of Nursing and Health Innovation	0	0	45	60	0
College of Nursing and Health Innovation	60	60	60	90	45
College of Nursing and Health Innovation	0	0	270	180	0
College of Nursing and Health Innovation	90	120	90	105	180
College of Nursing and Health Innovation	120	60	2100	540	0
College of Nursing and Health Innovation	360	480	2100	150	0
College of Nursing and Health Innovation	720	1800	30	225	240
College of Nursing and Health Innovation	0	0	0	840	720
College of Nursing and Health Innovation	0	0	0	315	0
College of Nursing and Health Innovation	0	0	0	90	0
College of Nursing and Health Innovation	15	15	105	105	30
College of Nursing and Health Innovation	90	60	150	210	0
College of Nursing and Health Innovation	0	0	0	300	0

Health Innovation					
College of Nursing and Health Innovation	90	60	720	0	0
College of Nursing and Health Innovation	0	0	30	840	0
College of Nursing and Health Innovation	0	0	30	105	0
College of Nursing and Health Innovation	45	0	30	315	0
College of Nursing and Health Innovation	480	120	120	150	0
College of Nursing and Health Innovation	480	120	120	150	0
College of Nursing and Health Innovation	0	0	210	210	0
College of Nursing and Health Innovation	0	0	840	1680	0
College of Nursing and Health Innovation	1260	225	150	75	840
College of Nursing and Health Innovation	240	90	210	210	120
College of Nursing and Health Innovation	120	60	180	135	30
College of Nursing and Health Innovation	300	135	75	60	0
College of Nursing and Health Innovation	0	0	0	75	0
College of Nursing and Health Innovation	840	720	900	180	240
College of Nursing and Health Innovation	120	45	360	150	0

Health Innovation					
College of Nursing and Health Innovation	0	30	0	15	0
College of Nursing and Health Innovation	60	30	180	60	0
College of Nursing and Health Innovation	0	30	840	210	15
College of Nursing and Health Innovation	600	30	270	210	0
College of Nursing and Health Innovation	240	90	30	30	0
College of Nursing and Health Innovation	0	0	225	225	0
College of Nursing and Health Innovation	0	0	240	60	0
College of Nursing and Health Innovation	0	180	0	15	0
College of Nursing and Health Innovation	1500	60	45	210	0
College of Nursing and Health Innovation	15	15	60	90	0
College of Nursing and Health Innovation	600	480	2100	2100	0
College of Nursing and Health Innovation	0	0	0	225	210
College of Nursing and Health Innovation	0	180	105	105	0
College of Nursing and Health Innovation	90	90	15	105	0
College of Nursing and Health Innovation	120	240	60	15	0

Health Innovation					
College of Nursing and Health Innovation	30	0	210	30	0
College of Nursing and Health Innovation	30	45	60	105	0
College of Nursing and Health Innovation	900	0	45	90	0
College of Nursing and Health Innovation	240	120	720	90	60
College of Nursing and Health Innovation	0	0	900	0	0
College of Nursing and Health Innovation	0	15	75	210	0
College of Nursing and Health Innovation	0	0	150	0	0
College of Nursing and Health Innovation	360	15	105	315	15
College of Nursing and Health Innovation	300	0	225	75	0
College of Nursing and Health Innovation	0	0	0	60	0
	<b>195.5294118</b>	<b>143.1176471</b>	<b>288.8823529</b>	<b>208.2352941</b>	<b>56.64705882</b>

Moderate in garden	Moderate in home	Walking leisure	Vigorous Leisure	Moderate Leisure
0	30	300	0	90
90	90	45	180	90
45	45	90	60	180
45	30	15	90	0
420	420	0	0	0
0	0	0	0	0
90	90	30	0	0
15	15	30	30	0
0	60	0	0	0
15	15	30	30	15
300	300	150	0	0
360	120	180	600	0

0	120	0	0	0
0	0	0	0	0
0	60	105	15	0
135	120	240	360	120
0	0	0	360	0
0	180	60	360	135
0	0	420	840	420
0	0	360	0	0
0	120	0	300	0
30	30	0	30	30
600	840	0	30	30
0	15	0	0	0
30	30	45	0	0
60	60	120	135	45
0	120	30	30	0
45	15	0	90	0
15	135	0	0	0
30	30	60	15	15
0	0	75	315	315
90	30	105	600	180
30	15	15	0	0
30	30	0	0	0
0	45	30	0	0
75	105	30	15	0
90	180	135	0	0
480	480	120	0	0
420	420	0	300	0
60	30	0	90	0
0	0	0	0	0
0	30	45	180	30
30	90	240	90	60
0	0	0	0	0
30	30	150	300	300
0	0	90	0	0
75	75	60	120	0
0	150	45	300	300
0	120	0	0	0
180	180	0	180	180
180	180	0	180	180
60	30	210	210	210
0	90	90	0	0
270	45	180	150	270
105	150	0	120	0
0	0	15	30	30
0	120	0	30	0
60	300	0	0	0
240	480	90	240	180
45	120	45	45	60
0	0	0	240	30
60	315	90	0	90



120	30	210	90	60
90	90	60	300	75
60	90	90	0	0
135	135	0	0	0
30	30	0	120	60
15	15	0	180	60
0	0	210	180	0
0	0	0	0	0
900	600	900	0	0
0	270	1440	1200	225
315	180	180	15	15
90	180	60	0	0
90	240	135	15	15
0	30	15	15	0
45	45	90	0	0
0	0	60	480	180
45	30	15	120	90
90	90	0	0	0
0	60	45	90	45
0	60	30	0	0
15	0	60	240	0
0	15	30	180	180
225	180	30	120	0
<b>84.70588235</b>	<b>109.4117647</b>	<b>92.11764706</b>	<b>125.1176471</b>	<b>54</b>

Time spent sitting on a weekday	Time spent sitting on a weekend day
180	300
240	60
420	480
420	300
480	300
360	360
300	600
360	600
240	300
15	15
240	240
360	240
480	600
600	600
600	300
300	420
180	240
600	300
240	240
360	480
300	540
600	480
60	180
240	180
360	300

420	300
300	600
180	120
360	600
45	180
180	600
60	240
360	300
300	420
240	240
180	60
420	180
240	360
300	420
180	360
360	120
240	240
300	120
180	300
600	600
180	120
60	60
240	240
480	600
180	240
180	240
180	180
360	540
60	60
240	180
360	300
120	240
480	240
60	60
300	300
360	120
15	60
180	120
60	180
360	360
300	480
600	600
600	420
240	240
540	420
240	240
180	45
120	120
120	60
360	300
360	300

600	360
300	180
60	240
45	240
600	600
420	240
300	240
300	240
600	480
<b>297.8823529</b>	<b>300</b>

What College are you a part of?	Vigorous Activity	Moderate Activity	Walking	Walking to and from	Vigorous in garden
College of Science	120	30	60	75	0
College of Science	240	30	840	315	0
College of Science	0	0	1800	75	0
College of Science	90	135	135	90	60
College of Science	0	0	30	420	0
College of Science	600	120	210	480	60
College of Science	0	0	0	150	0
College of Science	15	0	75	0	0
College of Science	45	240	600	60	0
College of Science	0	120	1200	225	60
College of Science	120	0	105	30	0
College of Science	300	300	840	300	300
College of Science	480	30	60	45	30
College of Science	0	0	0	150	180
College of Science	0	0	0	600	0
College of Science	45	0	30	210	30
College of Science	150	75	30	105	75
College of Science	180	0	0	45	0
College of Science	0	0	0	105	0
College of Science	0	0	0	105	0
College of Science	0	0	0	420	0
College of Science	600	120	360	180	30
College of Science	0	0	30	45	240
College of Science	0	0	1500	225	0
College of Science	0	0	0	0	30
College of Science	0	0	0	120	0

College of Science	720	360	720	240	0
College of Science	0	0	0	315	0
College of Science	1680	420	840	420	0
College of Science	0	0	180	210	0
College of Science	0	0	0	75	0
College of Science	240	840	1260	210	30
College of Science	240	75	90	300	0
College of Science	0	0	600	420	0
College of Science	0	0	30	0	0
College of Science	360	480	600	60	0
College of Science	0	0	300	840	0
College of Science	30	0	150	75	0
College of Science	300	900	300	0	60
College of Science	45	1800	2100	105	0
College of Science	0	0	75	150	0
College of Science	180	135	180	600	0
College of Science	60	300	180	150	0
College of Science	360	15	210	180	180
College of Science	45	1800	2100	105	0
College of Science	0	0	15	15	0
College of Science	600	0	60	60	0
College of Science	900	180	120	75	1080
College of Science	0	0	60	180	30
College of Science	300	480	1200	300	240
College of Science	0	0	0	210	300
College of Science	0	0	0	105	0
College of Science	1440	60	60	75	1080

College of Science	540	900	600	300	0
College of Science	0	0	225	60	0
College of Science	0	0	0	75	0
College of Science	15	0	225	225	0
College of Science	90	600	15	210	0
College of Science	2100	1200	600	540	1200
College of Science	0	0	15	45	0
College of Science	0	0	30	75	0
College of Science	135	0	15	225	0
College of Science	90	90	180	0	0
College of Science	0	120	0	0	0
College of Science	0	45	60	30	0
	<b>207</b>	<b>184.6153846</b>	<b>327.6923077</b>	<b>182.0769231</b>	<b>81.46153846</b>

Moderate in garden	Moderate in home	Walking leisure	Vigorous Leisure	Moderate Leisure
0	30	60	0	0
60	0	90	180	0
90	540	30	0	0
90	90	360	360	180
45	45	0	0	0
180	135	30	0	0
0	120	45	0	0
0	60	0	0	0
30	15	300	0	0
0	0	210	0	0
60	120	75	0	0
300	300	0	0	0
15	45	15	480	90
240	180	0	135	0
0	30	15	0	0
60	60	45	0	0
120	15	0	180	60
15	15	0	60	90
15	60	75	360	0
0	90	30	30	30
0	45	0	60	0
240	240	420	30	15
90	90	0	240	0
120	180	0	360	360

30	30	240	240	240
45	45	0	0	0
0	225	120	90	360
0	0	2100	360	2100
120	120	15	1260	0
90	90	60	0	0
0	30	15	90	0
300	120	105	315	315
0	60	300	150	0
0	840	90	180	120
0	0	45	0	240
90	90	0	0	0
15	15	105	0	0
15	60	60	0	0
120	120	0	60	30
0	90	0	0	0
0	15	360	0	0
30	30	90	120	45
0	45	120	0	0
300	180	240	0	60
0	90	0	0	0
0	0	30	0	0
0	0	0	0	0
180	0	120	0	0
0	45	0	30	0
480	120	315	90	90
150	15	0	45	30
0	0	30	0	0
120	120	15	720	0
240	60	225	0	0
0	0	0	0	0
0	0	150	0	0
0	15	15	0	0
45	45	0	180	0
0	720	360	120	0
0	0	0	0	0
0	15	0	0	0
30	30	45	180	0
0	0	0	0	0
180	180	0	0	0
0	75	30	90	90
<b>66.92307692</b>	<b>96</b>	<b>110.7692308</b>	<b>104.5384615</b>	<b>69.92307692</b>

Time spent sitting on a weekday	Time spent sitting on a weekend day
360	120
420	420
360	45
180	180
180	120

480	480
480	480
480	300
240	420
360	180
240	300
45	120
180	300
300	300
300	420
540	420
180	360
300	540
240	420
120	180
120	30
360	240
360	420
180	480
600	600
600	240
240	120
180	0
360	600
240	240
480	480
120	240
600	240
180	240
240	360
480	300
300	480
180	180
480	480
180	300
480	600
360	360
60	180
600	600
180	300
600	600
420	240
120	15
480	480
300	120
480	180
480	480
15	480
540	600



240	360
300	240
240	600
420	120
120	120
600	600
600	300
240	360
600	480
600	540
480	300
<b>338.7692308</b>	<b>332.7692308</b>

What College are you a part of?	Vigorous Activity	Moderate Activity	Walking	Walking to and from	Vigorous in garden
School of Social Work	0	120	300	0	0
School of Social Work	0	0	0	300	0
School of Social Work	225	225	225	315	0
School of Social Work	0	60	15	180	0
School of Social Work	90	30	0	105	0
School of Social Work	0	30	15	315	0
School of Social Work	225	0	150	225	0
School of Social Work	120	75	300	150	15
School of Social Work	0	0	0	315	0
School of Social Work	120	720	720	45	0
	<b>78</b>	<b>126</b>	<b>172.5</b>	<b>195</b>	<b>1.5</b>

Moderate in garden	Moderate in home	Walking leisure	Vigorous Leisure	Moderate Leisure
30	45	60	0	0
60	90	90	840	840
90	90	90	120	0
15	60	15	30	30
0	180	0	0	0
0	0	180	1800	0
0	0	75	225	0
0	60	0	15	15
0	15	0	30	0
0	30	60	60	60
<b>19.5</b>	<b>57</b>	<b>57</b>	<b>312</b>	<b>94.5</b>

Time spent sitting on a weekday	Time spent sitting on a weekend day
600	480
180	180
60	120
300	120
600	600

300	360
240	360
240	360
300	300
240	240
<b>306</b>	<b>312</b>

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- Shen, J., Barbera, J., & Shapiro, C. M. (2006). Distinguishing sleepiness and fatigue: focus on definition and measurement. *Sleep medicine reviews, 10*(1), 63-76.
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## BIOGRAPHICAL INFORMATION

Jeanne Michael “Mikki” Bandelaria is a Senior Kinesiology student minoring in Psychology. With her degree, she plans to become an Occupational Therapist working in a variety of settings with different patients. She hopes to open a therapy clinic on her own one day in an area with lower-income families. Mikki plans to offer rehabilitation workshops, volunteer opportunities, and learning opportunities for the patients she sees and their families to gain extra knowledge for their own benefit.

Mikki Bandelaria began attending the University of Texas at Arlington in 2016 and since then has engaged in countless learning opportunities. She is currently interning at FitSteps for Life, a free research exercise program for cancer patients and survivors and is working as a Go Center/College and Career Mentor at a local high school in Fort Worth. Throughout her academic career, the Kinesiology program allowed her to research topics including the effects of sleep deprivation on exercise performance, the effects of sunlight on microbial growth, and the effects of endometriosis in women. Mikki describes that, “Without everything [she] learned and experienced at University of Texas at Arlington, [she] would simply not be the same person [she] is today.”