IE 6200 Project Proposal

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Topic: Do levels of physical activity and screen time affect the stress levels of college students?

In this project we want to explore how the stress levels of college students are affected by the amounts and types of physical activities they routinely engage in and how much screen time they have. Often people are advised to take up physical activities like running, aerobics, or yoga to relieve stress and cut down on screen time; through this project, we aim to conduct statistical analysis on data collected by us to further investigate the veracity of these claims.

For the purpose of this project, our sample will be college students; currently studying at the undergraduate and graduate levels. We are going to be collecting data for our project through a survey that will be sent out to prospective respondents through personal connections and via social media platforms like WhatsApp, Facebook, and LinkedIn. To address the issue of nonresponse and maximize the number of responses, we will aim to keep the survey concise, explain the purpose of collecting data, and offer anonymity to respondents.

To answer our problem statement, we will be asking a series of questions to analyze the statistical relationships between stress, levels of physical activity, and screen time among college students. The following variables will be measured:

- Age
- Student status (home/ out of state/ international)
- Level of study
- Workload (hours worked per week at a job if any)
- Course load (time in hours given to studies including lectures, assignments, and studying)
- Level of physical activity (hours per week)
- Type of physical activity engaged in (top three out of cardio, running/jogging, dance, aerobics, yoga, swimming, cycling, weightlifting, boxing)
- Screen type (hours spent in front of a screen each week including laptop, phone, or television)
- Activity in front of a screen (most time spent doing (three activities) including use of social media, watching movies/ television, working, reading (leisure), studying, talking to people (video calls)
- Stress level (ask students to rate their general stress levels on a Likert scale)
- Mode of classes this semester (in-person, hybrid, online synchronous, online asynchronous)

Our main concern regarding this project is getting enough respondents to get reliable insights and form well-grounded conclusions. People can be reluctant in filling surveys and sometimes give inaccurate data to fill forms quickly which might impact our results. Furthermore, due to the scope of this project, we cannot include data points for various other factors that impact the stress levels of college students such as income levels, physical and mental health issues, levels of nutrition, and the existence of a strong support system; this again will impact the overall results of our project.