



A Study of College Students' Health in Changing Environments



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Healthy Habits in the College Environment

The constantly changing college environment can negatively affect students health, but it can also push students to take charge of their own health once they adjust to the environment.

How does the constantly changing environment of college affect students' practice of healthy habits such as eating, exercise, sleep, and study habits?

Our team created a survey answered by over 100 college students and conducted 10 interviews to discover more about this topic.

Our Findings

Our survey data revealed the following:

- 49.1% of students' exercise habits declined after starting college.
- There is only a small (0.2895) correlation between hours of studying and GPA.
- 64.5% of students feel like they have time to exercise.

From our interviews, we learned the following:

- Students recognize the positive effects of exercise and healthy eating.
- Priorities like school can prevent the practice of healthy habits all the time.
- Students start focusing more on health after freshman year.

Interventions

- Because of our finding that 49.1% of college students feel their health declines in college, we want to spread awareness of how to deal with the pressures and changes of college in hopes that this will help students to maintain focus on their health.
- If students are more aware of simple, quick, and inexpensive ways to practice healthy habits, it will be easier for them to make small changes and choose healthier options in all aspects of their lives.
- Because of our finding that students tend to start focusing on their health more after freshman year, we should offer our tips to incoming and first year students to try and negate the year of getting in a pattern of unhealthy habits.

Our Study in Detail

Project Overview

Project Overview - The Issue

A student's habits often change when they go to college due to the unfamiliar environment and new schedules. This change can have a significant impact on many aspects of overall health. Our project will focus on studying these changes and how their healthy habits such as eating, exercise, and sleep are affected. This is an important issue because it is relevant to all students and everyone can benefit from improving their health habits. The outcomes of this research could potentially impact how much college students care about taking care of their physical and mental health.

Project Overview - The Project Question

How does the constantly changing environment of college affect students' practice of healthy habits such as eating, exercise, sleep, and study habits?

We wrote this research question because it specifically hones in on the aspects of college students' health that we want to look at. Our team wants to see if healthy habits such as exercising, eating healthy, studying, and sleeping well and consistently are affected by the busy and constantly changing environment of being a college student.

Project Overview - The Study Design

- **Data Source:** College Students
- **Methods:** Survey and Interviews
- **Topics:** Physical and Mental Health, Nutrition, Sleep, and Academics
- **Survey**
 - Asks a broad range of questions that later informed our interview protocol.
 - Administered through Google Forms
 - 107 responses
 - Participants recruited via social media platforms including Reddit, Instagram, and Snapchat, as well as by directly sending the survey to friends.
 - Analyzed by creating visualizations and calculating correlations between the various topics we asked about.

Project Overview - The Study Design (cont.)

- **Interviews**

- More focused than the survey to help discern more specific conclusions - protocol was informed by conclusions drawn from the survey data.
- 10 interviews were completed
- Participants recruited via contacting people who took our survey. However, the content of their responses to the survey were not a factor in their selection for interviews.
- Interviews were recorded and transcribed.
- Analyzed by coding the transcripts, compiling all of our codes, and performing a thematic analysis.

Survey Study

Study Design

Our survey asked a broad range of questions on topics like exercise, eating habits, sleep schedule, study habits, GPA, and more. We wanted our survey to be broad so that we could later narrow down our study based on the conclusions we drew from the survey.

Our survey was administered through Google Forms. In total, we had 107 responses. We recruited participants for the survey first by directly sending it to our friends. We then advertised it on social media platforms like Reddit, Instagram and Snapchat.

We then analyzed our results by creating visualizations and calculating correlations between the various topics we asked about.

Survey Analysis

- Our team set out to find out if there was any relation between the constantly changing environment of college and students' practice of healthy habits.
- Overall, our survey research shows that college students' exercise habits decrease when they get to college.
- Each team member dove into a deeper analysis of our survey results
- Upon a deeper analysis, our team also analyzed aspects of our survey data such as how the amount of studying affects students' GPAs, how students' sleeping habits relate to their GPAs, and if there is any correlation between GPA and students' physical health.

Key Findings

- The majority of students (49.1%) responded that their physical activity has decreased since starting college, but an even larger majority (65%) of students feel they have time to work out
- The majority (42.5%) of participants spend 5-7 hours studying per week. Also, the majority (30.2%) of participants have between a 3.0 and 3.4 GPA.
- 92.5% students workout for at least 1-2 days per week, but 65% of people feel like they have time to workout. This means that 27.5% of participants feel like they don't have time but find a place in their schedule to do it.

Why does this happen? How can we better understand our results?

Next Steps

- We created a survey in order to get a general idea of what college students health and fitness were like, after analyzing the findings we created an interview protocol to collect more data and understand our findings.
- The interviews were designed to give a better and deeper understanding of how college students health changes when they come to college.
- We then planned to interview around 10 college students.

Interview Study

Study Design

Our interviews were more focused than the survey to help discern more specific conclusions. We created and informed our protocol by using the conclusions that we found from our survey data.

We completed 10 interviews in total. We recruited our participants by contacting people who had also taken our survey. However, it is important to note that the content of the participant's responses to the survey were not at all a factor in their selection for the interview portion.

Interviews were done in person, and were recorded for later transcription.

Analysis

In order to analyze the data we gathered from our interviews, we performed a thematic analysis on our transcripts. We followed the process below.

1. Transcribe interview recordings
2. Individually code each transcript
3. Compile all team members' codes
4. Separate codes into categories
5. Name categories → themes
6. Define themes using data memos
7. Create a theme map and outline specific findings.

From Categorized Codes to Themes

Please see our interview analysis process document for a complete list of codes. Below is a list of the five themes we determined and a few of the codes that fit into each of them.

1. **Effects of Exercise:** makes working easier; exercise helps academics; more energy; time consuming; helps focus; exercise = more productivity = better mood
2. **Eating Habits:** diet changes, healthy = feeling better, convenience, price, increased freedom, poor diet = low energy
3. **Time/Time Management:** busy, schedule, priorities, school over health
4. **Changes/Differences in New Environment:** less opportunity, less motivation, increased freedom, too tired to study, more active in high school
5. **Pressures Caused by College:** stress of class, balancing social life, responsibilities, mental health, lots going on, rigor of school

Defining Our Themes

In order to fully define and describe our themes, we created data memos to show the link between our data and the theme conclusions we came to. See *our interview analysis process document for the full data memos*.

Theme	Describe/Define	Sample Data	Data Memo
Effects of Exercise	Many college students don't make exercise one of their priorities because they are busy with other things. The effects of exercise are huge and can help students with sleep and in turn help with studying. Exercise also makes you feel better about yourself which gives you more confidence and makes you overall a happier person.	<p>I asked my interviewee how his exercise habits affect his sleep and studying and he responded.</p> <p>"I mean it doesn't. It doesn't too much, just in free time I go to the gym when I can and what not."</p> <p>- Hayden Interview 1</p>	The reason that I chose from my interview 1 data was because I feel like I got the most interesting data that is related to exercise. The first comment that I am looking at shows how my interviewee doesn't put exercise as a priority because he says "I go to the gym when I can". He doesn't make it part of his schedule to go he just goes in his free time which makes it much more inconsistent. Due to this, he is not getting much of the benefits like improved sleep and improved study habits.

Defining Our Themes

Theme	Describe/Define	Sample Data	Data Memo
Eating Habits	This theme encapsulates all of the mentions of Eating Habits over the course of our interviews. This includes both healthy and unhealthy habits. Some of our participants also mentioned things about how the increased freedom of the college environment affects their eating habits, and others mentioned how much or how little of a priority eating habits are in their respective lives.	"I'm currently like where kind of changing my diet. I just started eating vegetarian just to spice things up and I just focus more on eating healthier recently." (Ashley, Participant 2)	This data sample shows another participant who mentioned that healthy eating has become a bigger priority recently. This participant is also a sophomore who is no longer in the dorms and eating at dining halls all the time, so this data sample also supports the idea that students may consider their food choices more when living on their own.

Defining Our Themes

Theme	Describe/Define	Sample Data	Data Memo
Time/Time Management	This theme was recurring as it was mentioned in most interviews as many kids deal with issues on managing time between school, exercise, and sleep. Students express that school takes priority however its what they do in their free time that frustrates them. With a rigorous academic, many students expressed that even they many have time but get distracted or prioritize other things before exercise.	"I'm currently like where kind of changing my diet. I just started eating vegetarian just to spice things up and I just focus more on eating healthier recently." (Ashley, Participant 2)	This data memo shows how college student manage their time in terms of the increased amount of opportunity to workout. The opportunity is there but some find that they don't necessarily need to have it because the balance between every aspect of your college life requires priorities and time management. Since most prioritize school, many people decrease other aspects of their life to focus on one.

Defining Our Themes

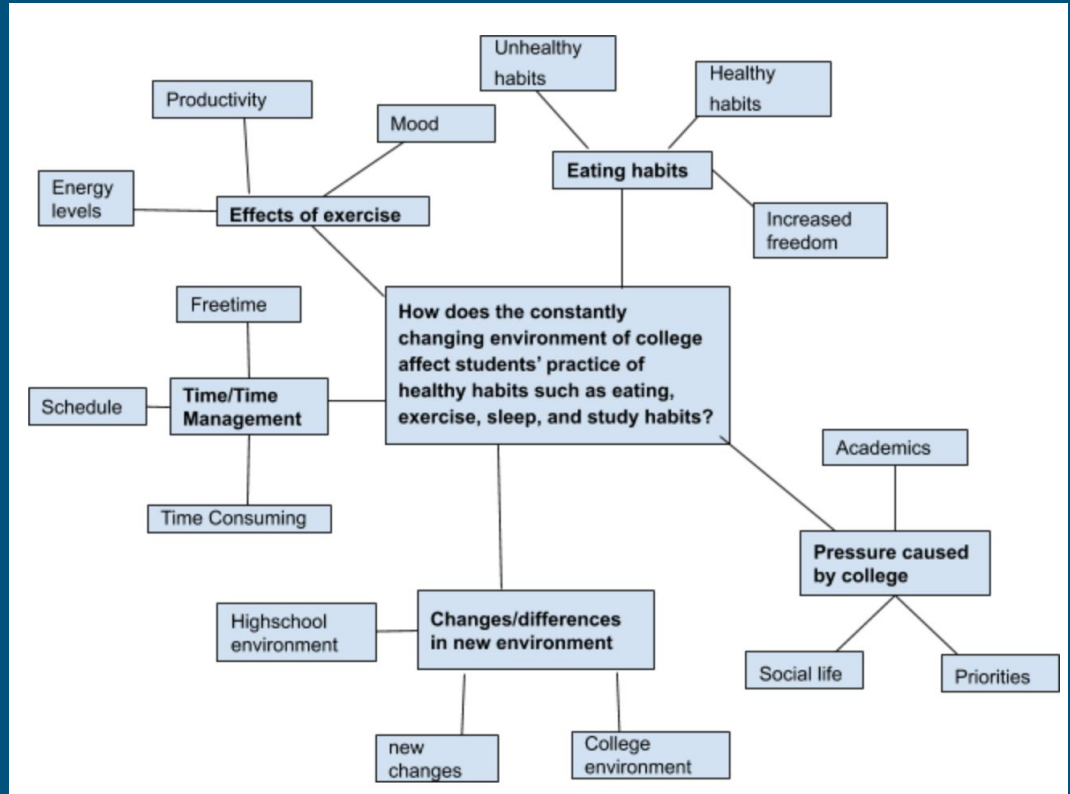
Theme	Describe/Define	Sample Data	Data Memo
Changes/Differences in New Environment	This theme was a recurring one when it came to participants talking about why they have certain habits. Starting college is something all students have in common, obviously, but it creates new challenges that none of us had to deal with in high school. Many said that they were just trying to fit in and get used to college, along with the fact that we are now away from our parents. There is a new freedom that college students have, so there is a need for balance.	"It's big like maybe self-efficacy thing and so like that can stop a lot of people from going to exercise, or just like you're in a new place and you're unsure about what's going on around you. You're just not like confident enough to I think is the big [thing]." (Michael P, Participant 1)	In this data sample, she states explicitly that you're in a new place. Students might not know where to shop in order to eat well. When people are in an unfamiliar place, they have heightened pressure, because of the sheer number of things they must balance, which most did not have to worry about previously.

Defining Our Themes

Theme	Describe/Define	Sample Data	Data Memo
Pressures Caused by College	This theme plays a major role in the reason that so many students' habits change when they begin college. It works hand in hand with our "Changes/differences in a new environment" theme. We found through our interviews that the academic pressures of college have a big impact on the overall well being on students and how they feel in their day to day lives. Academics, responsibility, and finding a balance in college are all pressures that have a major impact.	"I think that it should be a priority, but it's hard sometimes to remember to factor those aspects into your life when you're so focused on your GPA and your social life in college." -Caroline Participant 1 Interview	This data sample shows the pressures of pressures of keeping up good academics and worrying about a job or future plans take priority over exercise or healthy living. It's hard to find a balance in college and many students choose to focus on their social lives or GPA over exercise. I think this data supports our survey results by conveying that students have time to exercise, but choose to spend that time working on other aspects of their life due to the pressure put on them.

Theme Mapping

After defining all of our themes with data memos, we created a theme map that summarizes each theme and the topics that fit into each one.



Key Findings

- We confirmed our finding from the surveys that students' physical activity declines after starting college. The interviews showed that their nutrition also declined.
- Students recognize the positive effects of exercise and healthy eating, such as increased productivity, clear headedness, lessened anxiety, and overall just feeling better.
- Priorities like school can prevent the practice of healthy habits all the time.
- Students start focusing more on health after freshman year.
- Other things like maintaining a social life and drinking/partying culture can also distract students from healthy habits.

Storytelling and Our Findings

Storytelling

After analyzing all of our data and finding conclusions, we combined it all into a one sentence story:

The constantly changing college environment can negatively affect students health, but it can also push students to take charge of their own health once they adjust to the environment.

Interventions

Interventions

With the findings in our research project, we strived to identify trends and patterns among college students to make conclusions about students time management fitness habits, and mental wellbeing. Having concepts that answer these trends provides information that can be shared among peers, classmates, professors, and the surrounding college community. These findings can prompt self reflection for individuals to change their lifestyle habits.

Interventions (cont.)

Here's what our group recommends:

1. We recommend students to find ways to deal with and adjust to the transition of college therefore, helping them stay focused on their health by using health resources around them.
2. Students need to be more aware of simple, quick, and inexpensive ways to practice healthy habits, it will be easier for them to make small changes and choose healthier options in all aspects of their lives.
3. Tips for incoming students to negate unhealthy habits during transitioning to college
 - a. Create a tracker that records sleep, exercise, school work, and eating habits to determine how time is distributed
 - b. Address problems quickly, this can help avoid procrastination in the future
 - c. Manage your free time and create a list of priorities

Limitations

Limitations

- We could have asked participants about drinking, and drug-use in order to see how that may affect students, especially during their first year at college
- We could have compared genders and how they might differ in each category of health that we analyzed
- We mostly surveyed and interviewed our friends, which was not the most ideal sampling technique, and example of selection bias
 - Nearly half of our survey respondents were sophomores
 - We could have sent surveys out to more students from other universities
- There could have been some response bias from our participants, especially during interviews, who maybe wanted to seem healthier than they really are

Future Research Directions

The Pursuit of a Healthy College Experience

After many surveys and interviews we have gained a plethora of knowledge about college students and how their health habits impact their college experience. Our next step is turning our research into a solution by spreading our knowledge about healthy habits to freshman students. We will be creating a business that comes in and talks to freshman about eating healthy and exercise. Our services will include 1 on 1's where we give each student their own personalized meal plan and exercise plan. While making money we will also be gaining more data through our experiences that we can use for future analysis.

Reflections

A Healthy Reflection

This project has been a great learning experience and the data athletes have had a blast doing it. We have learned so much about how healthy habits can completely change the college experience of an individual. The real knowledge came during the findings where we performed thematic analysis. We were all surprised about how much more knowledge we gained from looking closely to what our interview participants said. Once you start picking apart and analyzing everything your interviewee says then you really start to get a grasp of what you are researching. Overall we are going to miss this class so much and we cannot wait to present our findings to the rest of the info community!

Thank you!