

Knowledge about Health Outcomes in College Students

Anjie Adeyemo, Cameron Pearson, Brooke Bentley, Lora Asberry, Margot Aldana, Giovanni Still, Jeavanie Desarmes, Chase Redd, Shaharazad Muhammad, & Abeer Osman
 Faculty Sponsors: Drs. Amy Buddie & Sharon Pearcey
 Kennesaw State University, Kennesaw, GA 30144

Introduction

The transition to college is associated with an increase in autonomy that may lead to unhealthy behavior choices in new college students. For example, physical inactivity and poor dietary-intake affect overall health and wellbeing. In the U.S. nearly half of all university students are not achieving the recommended levels of exercise (Plotnikoff, 2015). The transition from high school to college is accompanied by worse dietary habits. Studies have shown that college students typically have poor eating habits and tend to eat less fruits and vegetables than non-college students. More specifically, female college students tend to eat more fatty foods than their male counterparts (Deshpande et al., 2009).

Caffeine use is also very common among college students (Bucher, 2019). While caffeine can have positive effects such as increasing alertness, it also has negative effects in that excess caffeine can increase blood pressure and stress levels. Caffeine can also affect sleep by decreasing the total amount of sleep per night and increasing the amount of time it takes to fall asleep (Bucher, 2019).

Food safety issues may become a problem because college students may be preparing their meals for the first time on their own. One study indicated that college students lack knowledge of basic food safety and are at a greater risk of foodborne illness due to poor food handling (McNeilly & Raming, 2018).

The purpose of this research is to determine how health misconceptions have shaped the habits of young adults, specifically college students at Kennesaw State University. A survey was created based on varying health topics to measure health knowledge of college students. Ultimately, this research can give a better picture of how knowledgeable college students are about health. This research will also help educate college students about health misconceptions.

Research Questions

- Q1:** Are science majors more knowledgeable about health topics compared to non-science majors?
- Q2:** Which college classification will answer the most health questions correctly?
- Q3:** Which health topics are students most knowledgeable about?
- Q4:** Which gender is most knowledgeable about health topics?

Participants

Participants were undergraduate students at Kennesaw State University. They participated in an online survey distributed via Qualtrics.

	Males	Females		
N	48	142		
Mean Age (SD)	20.6 (3.5)	20.0 (1.9)		
Age Range	18 - 39	18 - 33		
Classification				
Class	Senior	Junior	Sophomore	Freshman
N	32	52	53	54

Method

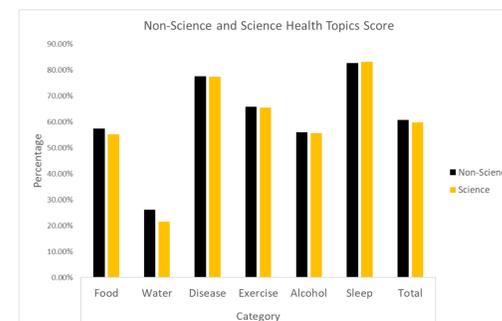
We created a 20 item questionnaire based on various health misconceptions. The questionnaire also included the demographic questions gender, race, classification, and major. In order to help educate our participants on the health information, we attached an answer key to inform students about misconceptions.

Survey Question	Answer Choices
Food Questions	
A large McDonald's quarter pounder with cheese meal (with large fries and large coke) contains approximately	1030 calories
	1330 calories
	2030 calories
Disease and Illness	
Being in cold weather makes you ill.	TRUE
	FALSE
Exercise	
Diet is more important than exercise when it comes to weight	TRUE
	FALSE
Water	
You need to drink eight glasses of water a day to stay healthy.	TRUE
	FALSE
Alcohol	
Binge drinking is typically defined as	consuming 4 drinks for women and 5 drinks for men in one occasion.
	consuming 5 drinks for women and 7 drinks for men in one occasion.
	consuming 6 drinks for women and 8 drinks for men in an hour.
Sleep	
It's possible to catch up on missed sleep over the weekend.	TRUE
	FALSE

Results

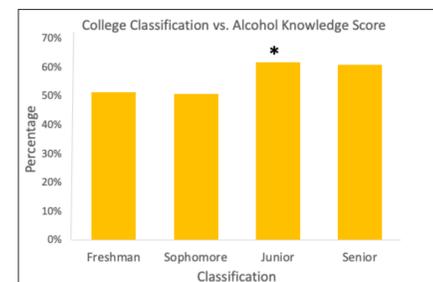
Q1: Are science majors more knowledgeable about health topics compared to non-science majors?

We calculated t-tests between non-science and science majors for each health topic and the overall score. There were no differences between the groups on any of the categories or on the total score..



Q2: Which college classification will answer the most health questions correctly?

We calculated One-way ANOVAs among classification groups for each health topic and the overall score. There was a significant difference in the alcohol scores among the groups, $F(3, 180) = 3.58, p < .05$. Post-hoc tests revealed that juniors (61.7%) scored significantly higher than sophomores (50.9%) in the alcohol category ($p < .1$)



Results Continued

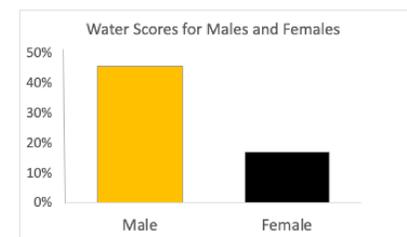
Q3: Which health topics are students most knowledgeable about?

Average scores for each category were calculated. Overall, individuals performed the best on sleep knowledge questions (83.0%) and the worst on water knowledge questions (23.9%).

Category	Average Score
Food	56.37%
Exercise	65.78%
Disease	77.84%
Alcohol	55.57%
Water	23.94%
Sleep	82.98%
Total	60.35%

Q4: Which gender is most knowledgeable about health topics?

T-tests were calculated on all topics for genders. There was a significant difference in the knowledge about water scores between males and females, $t(184) = 5.55, p < .001$. Males had an average score of 46% whereas females had an average score of 17%.



Discussion

We were surprised to see that there wasn't a significant difference in health knowledge between science and non-science majors. This may be due the fact that most of our participants were in their first two years of college and have not been exposed to many of their courses for the major that contain science content. Concerning alcohol knowledge, although we did not hypothesize a difference in knowledge about alcohol, it does make sense that the upper classes scored higher than lower classes because their exposure to alcohol and drinking behavior may be greater. Understanding and adapting healthy behaviors in college is important for continuing these behaviors throughout adulthood. Our findings can be used to educate college students about good health behaviors.

References

Available upon request.

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