Health Behaviors of Undergraduate College Students

Danielle Guercio, Alicia Fels, & Lynn McGoey, Ph.D.● St. Joseph's College, NY

Abstract

Young adults are unaware that their health-inhibiting behaviors can have negative long-term consequences. Living a healthy lifestyle includes eating healthy, getting adequate physical activity and minimizing stress. Results suggest educating about what constitutes a healthy lifestyle may be more effective than fear tactics to discourage health-inhibiting behaviors in college students who were unaware of their high levels of these behaviors and its positive correlation with perceived stress.

Introduction

Over the last century, leading causes of death have changed from acute illness such as infections to chronic conditions that are age and lifestyle dependent. In 2016, heart disease and cancer were the leading causes of death in late adulthood followed by cancer (CDC, 2016). However, heart disease and cancer are preventable illnesses and can be prevented with a healthy lifestyle. Knowledge and awareness of this concern is vital to change the lifestyles of the younger population in order to prevent certain chronic conditions.

Young adults are unaware of what health-behaviors promote health and wellbeing and what behaviors prevent and inhibit a healthy lifestyle beyond a surface level understanding of "eating healthy and getting exercise". Some college students are aware of what health promoting behaviors are, but may not fully understand what the guidelines are, what the guidelines mean or choose not to follow these guidelines Other college students are not even aware of what the healthy recommendations are for living a healthy lifestyle and therefore cannot follow guidelines they are not even aware of. Young adults are often not aware of the negative consequences a health-inhibiting behavior can have because these consequences will not become apparent until years later.

There is minimal research on the best method to change health-inhibiting behaviors and promote a healthy lifestyle. Previous attempts to educate students on behavior choices usually focus on either a "fear appeal" or an "educational appeal". The "fear appeal" is an attempt to scare adolescents or young adults from making dangerous decisions. The education appeal attempts to educate individuals into healthy choices.

Previous studies conducted suggested that when utilized within the correct target populations, such as college student and drinking behaviors, the fear appeal is the most effective (Moscatz at al., 2001). Studies have also suggested that the fear appeal is not only effective in promoting the health behavior being discussed but in other health behavior decisions. For example, advertisements using fear to promote healthy eating lead to other more adaptive health behaviors (Krishen & Bui, 2015). However no studies have compared the fear appeal to the education appeal. The fear appeal appears to work in limited scenarios such as avoiding health-inhibiting behaviors but doesn't work to increase health promoting behaviors.

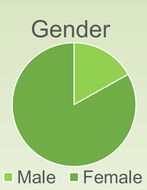
Demographics

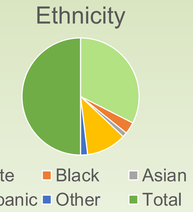
	N	Mean	Std. Dev.	Min.	Max.
Age (years)	77	19.14	2.23	18	28
Weight (Pounds)	77	146.90	34.36	85	239
Height (Inches)	77	63.50	7.69	60	73
Estimated Calories/Day	77	2312.35	6004.00	100	5,000

Method

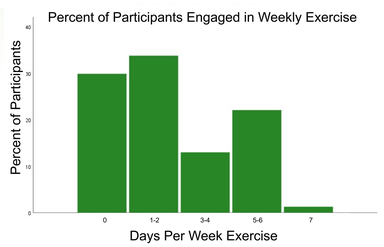
- **Participants**
  - Participants were recruited from a small college using *Sona Systems Ltd.* participant pool software. Participants primarily included those enrolled in Introduction to Psychology and Research Methods, although students from other classes were encouraged to participate. Participation was limited to those aged 18 and older. Participation was kept confidential and individual responses were anonymously collected.
- **Measures**
  - ***Health Behavior Inventory:*** Previous research (McGoey, presented at EPA 2018) suggested education influenced behavior choices more than fear. However, participants demonstrated a lack of health behavior knowledge. This inventory was designed to assess students' self-reported health behaviors and knowledge using open ended responses, multiple-choice responses, and Likert-type scales. Questions addressed the knowledge of health behavior recommendations and their own health behaviors.
  - ***Stress Inventory:*** The perception of stress scale and actual stress experienced scale was created by modifying the stress perception scale (Cohen, 1994) and the Holmes & Rahe Stress Scale, 1967.
- **Procedure:**
  - After giving consent to participate, all participants completed a demographics form stating their age, gender, height, weight and ethnicity. The Health Behavior Inventory and they Stress Inventory were then distributed in a counter-balanced fashion.

Results

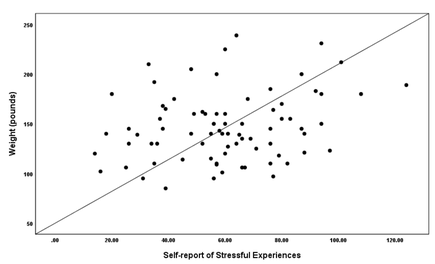


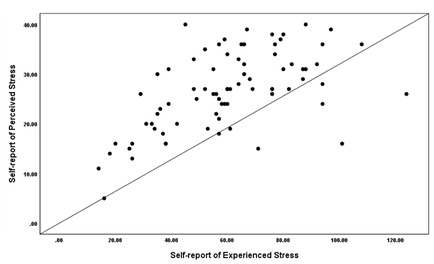


Female participants weighed an average of 138.53 pounds and males were 188.08 pounds which is under the average reported by the CDC (2016) at 166.20 and 195.50 pounds respectively. There was a reported average of 2312.35 calories consumed per day, but a check of actual food consumed suggested that participants underestimated their actual consumption. Although an independent samples *t* – test revealed significant differences in weight between genders, *t* (75) = 5.61, *p* = 0.00 there was no significant difference in the amount of reported calories consumed per day between males (M = 1769.17 ; SD = 725.35) and females (M = 2433.06; SD = 6635.13) , *t* (75) = -.344, *p* = .732.

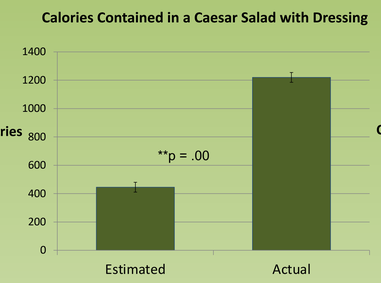


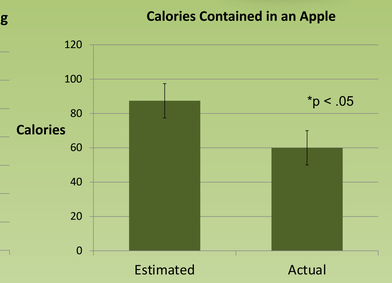
Although the government recommendations for exercise (2015) is at least 2.5 hours per week equivalent to a 30 minutes at least 5 days per week, 30% of participants reported to receiving less than 2.5 hours per week and made no effort to engage in physical activity at least one day per week.



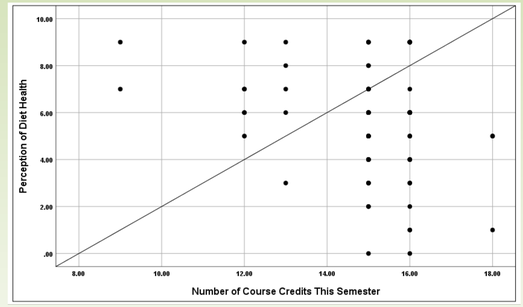


A Pearson's *r* correlation test revealed a significant positive relationship between self-reported stressful experiences and weight, *r* (75) = .244 *p* = .032 and also revealed a positive correlation between self-reported stressful experiences and perceived level of psychological stress by participants, *r* (75) = .574, *p* = 0.00. Positive correlations were also found between self-reported stressful experiences and commute hours, work hours and number of illnesses experienced in the past year.





A one-sample *t*-test revealed that college students were more likely to significantly underestimate the calories found in items that may be healthy but often contain "hidden" calories, fats and sodium and significantly overestimate the calories contained in known healthy foods such as an apple. When asked the number of calories a small sized red apple contained, students estimated an average of 87.39 calories (SD = 86.24) which was significantly higher than the average of 60 calories (*t* (60) = 2.48, *p* = .016). When asked the number of calories a popular chair restaurant's grilled chicken Caesar salad contained, they reported an average of 445.27 calories (SD = 268.74), significantly below the average of 1220 calories is actually contained, (*t* (59) = -22.33, *p* = .000).



A Pearson's *r* correlation test revealed a significant negative relationship between the participant's perception of their diet's health and the number of credits enrolled in, *r* (75) = -.280, *p* = .014.

Conclusions

- Participants were more likely to overestimate calories in healthy foods and underestimate calories in foods that give the perception of health. They also were more likely to underestimate their consumed calories when analyzing their food log.
- There was a relationship found between stress, dietary behaviors, and lifestyle choices. The more health promoting behaviors, the better the reported health outcomes.
- Participants varied in their understanding of the requirements of a healthy diet, the recommended amount of exercise and consequences of health inhibiting behaviors.
- Overall it was found that there is disconnect between what participants believed to be healthy and what they were actually doing.
- There were correlations between self-reports of experienced/perceived stressful life experiences and participants'

Presented at the Eastern Psychological Association's Annual Meeting, March 2019 New York, NY.

Research was funded by St. Joseph's College Office Department of Psychology and the Office of the Executive Dean and Provost.