

FUELING FOR THE DAY: NUTRITIONAL PERCEPTIONS AND BEHAVIORS OF

COLLEGE STUDENTS

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Introduction

A two-factor, within-subjects study assessed the nutritional habits of college students

How do gender and food scenarios relate to a participant's perception of healthy eating and eating frequency?

A survey was sent out to UWEC students, where they were presented with various meal scenarios. Students were then asked to respond to questions related to healthy eating behaviors and eating frequency.

Method

Conducted using Qualtrics via Facebook and email

The final sample entailed 68 UWEC students randomly assigned to one of two conditions of a 2 (gender: male vs. female) x 2 (meal scenario: healthy vs. unhealthy) within-subjects design.

Surveys were randomly assigned to one of two meal scenarios. Each random assignment entailed the same detailed account of four meals, but the gender depended on the randomization.

A 5-point Likert-Type Scale was used to analyze perception and frequency for each food log

Scenarios

Scenario one

- 1) 22-year-old healthy, highly active male
- 2) 20-year-old healthy, non-active male
- 3) 21-year-old healthy, highly active female
- 4) 18-year-old healthy, non-active female

Scenario two

- 1) 22-year-old healthy, highly active female
- 2) 20-year-old healthy, non-active female
- 3) 21-year-old healthy, highly active male
- 4) 18-year-old healthy, non-active male

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Perception Ranking

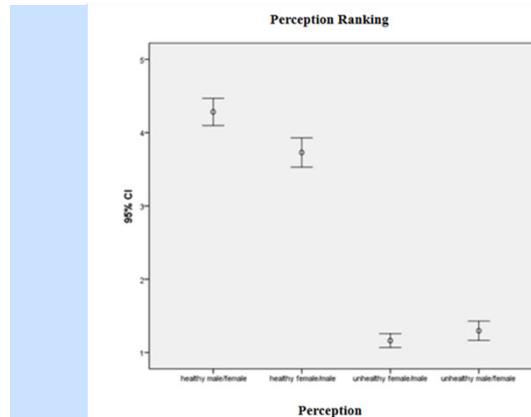


Figure 1. An interaction error bar graph displaying participant's mean scores for healthy eating perception for both meal scenario and gender of character.

Frequency Ratings

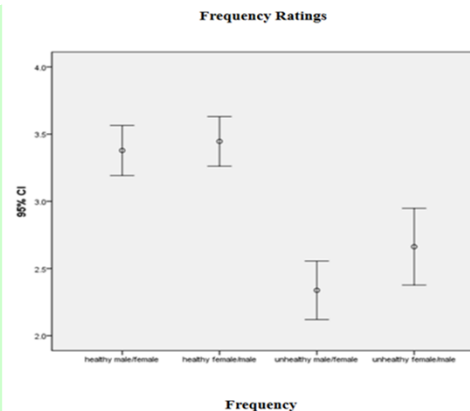


Figure 2. An interaction error bar graph displaying participant's mean scores for frequency ratings for both meal scenario and gender of character.

Operational Definitions

- Likert-Type Scale: a widely used scaling response that is used as a rating scale in survey research
- Qualtrics: a software program that allows users to perform data collection and analysis
- Within-subjects design: a type of experimental design where every participant is exposed to every treatment or condition
- ANOVA (analysis of variance): a statistical model that analyzes the differences among group means and their associated variables

Results

Demographics

Each scenario had same participants (N = 37)
A significance level of 0.05 was used for all statistical analyses

This study was comprised of unequal proportions of females (75.7%) and males (24.3%).

The majority of the participants were approximately 20 years old (18 years old (9.5%), 19 years old (28.4%), 20 years old (35.1%), 21 years old (14.9%), 22 years old (10.8%), or other (1.4%).

Analysis of Meal Scenario

There was a statistically significant main effect of meal scenario on healthy eating perception score, $F(1,73) = 792.45, p < .001, \eta_p^2 = .92$, indicating a large effect size.

There was a significant effect for gender of character in condition on healthy eating perception score, $F(1,73) = 22.54, p < .001, \eta_p^2 = .24$, indicating a medium effect size.

Analysis of Eating Frequency

There was a statistically significant main effect of meal scenario on eating frequency, $F(1, 73) = 49.29, p < .001, \eta_p^2 = .40$, indicating a large effect size.

Students have a higher frequency of eating the healthy conditions ($M_{2\text{healthy}} = 2.50, SD_{2\text{healthy}} = .77$) than the unhealthy conditions ($M_{2\text{unhealthy}} = 1.23, SD_{2\text{unhealthy}} = .37$).

Discussion

The first hypothesis was disconfirmed. The results indicate that scenarios with male subjects had higher perceived healthy eating scores than female subjects. A significant relationship exists, but in the opposite manner than originally predicted.

The second hypothesis was confirmed. The frequency was significantly higher for healthy conditions, compared to unhealthy conditions. A statistically significant number of participants aligned with a regular eating frequency, highlighting positive eating habits of UWEC students.

This study suggests that UWEC students are able to correctly distinguish between healthy and unhealthy eating patterns.

The two primary limitations of the study were time constraints and a limited means of survey distribution.