

Lab 2

Chi Square

Mood and Food

What is the relationship between one's mood and the choice of food? This question has been asked in the context of various research projects (Christenson, 1993). Consumption of a particular food has been associated with a particular mood state. Lyman (1982) reported that there is an association between participants imagining a mood state and their choice of foods. Junk foods were chosen more frequently when persons were asked to imagine negative mood states (frustration and depression), while healthy foods were preferred when happy mood states were imagined (Jacobson, 1975). There is evidence that removal of a particular food type, simple carbohydrates, regulates negative mood states more effectively than eating simple carbohydrates (Christenson, 1993). The current study investigated food choice after inducing different mood states and it is hypothesized that food choice varies as a function of mood.

Method

Participants

College students at an HBCU in the Mid- Atlantic region were approached and asked to volunteer for a study investigating the relationship between induced mood and choice of food. There were 200 participants, 100 males and 100 females. All were 18 or older and signed an informed consent.

Materials

Four scenarios were designed to elicit a different mood state, happy, sad, tense and calm. Two states were positive (happy and calm) and two states were negative (sad and tense). To validate the presence of the particular mood, the Brief Mood Introspection Scale (Mayer & Gaschke, 1988) was used. Food choices included junk food (ice cream, chips), healthy food (salad, fruit) or no food.

Procedure

Each participant was exposed to one of four scenarios designed to elicit a different mood state, happy, sad, tense or calm and their induced mood measured using the Brief Mood Introspection Scale (Mayer & Gaschke, 1988). Each was then asked to place themselves in the role of the actor in the scenario and asked what the actor would most likely eat given the actor's mood with the choice of junk foods, healthy foods or no food. Their choice was recorded and they were thanked for their participation.

## Results

Food Choice	Mood			
	Happy	Sad	Tense	Calm
Junk	15	35	30	10
Healthy	20	15	20	20
No Food	5	10	10	10

### REQUIRED:

1. Perform a chi square test of association (r x k)
2. Describe the results of the chi square test
3. Present a table or graph to illustrate your findings

## References

Christenson, L. (1993). Effects of eating behavior on mood: A review of the literature. *International Journal of Eating Disorder, 14*, 171-183.

Jacobson, M.F. (1974). *Nutrition Scoreboard*. New York: Avon.

Lyman, B. (1982). The nutritional values and food group characteristics of foods preferred during various emotions. *Journal of Psychology, 112*, 121-127.