



THE EFFECT OF FOOD LABELING, WEIGHT CONSCIOUSNESS, AND GENDER ON EATING BEHAVIOR

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BACKGROUND INFORMATION

- **Food Choice Process Model** (Furst, Connors, Bisogni, Sobal, & Falk, 1996)

- sensory perceptions,
- monetary considerations
- convenience
- health/nutrition
- managing relationships
- quality



- **Test of the Health Halo Effect** (Provencher, Polivy, and Herman, 2008)

STUDY PURPOSE

- What influences people's food choices?
- Two conditions:
 - Healthy
 - Gourmet

HYPOTHESES

1. There will be an interaction between weight consciousness and product type, such that those who are high in weight consciousness will eat more of a “healthy” granola bar than of a “gourmet” granola bar
2. Individuals who are high in weight consciousness and receive a “healthy” granola bar will eat less than those who are low in weight consciousness and receive a “healthy” granola bar
3. Those who receive a “healthy” granola bar will eat more
4. Men will eat more than women
5. There will be an interaction effect between gender and granola bar labeling type, such that women will eat less in the “gourmet” granola bar condition than men

PARTICIPANTS

- 101 Undergraduate students at GRU
 - 37 identified as Caucasian (36.6%)
 - 9 identified as mixed ethnicity (8.9%)
 - 7 identified as Asian (6.9%)
 - 4 identified as Hispanic (4%)
- 19 participants were males (18.8%), and 82 were females (81.2%)
- Participant age ranged from 18 to 39 ($M = 22.09$ years)

MATERIALS

- Granola Bars
 - Pilot testing
- Taste Rating Questionnaire
 - Sample Items:
 - 5 point Likert Scale
- Weight Consciousness Questionnaire
 - Sample Items:
 - 5 point Likert Scale

MATERIALS

- Demographics Questionnaire

- Measurement of Amount Eaten



METHOD

- Participants told they were taking part in a market research study



- A plate containing three granola bars was offered to participants

HEALTHY DESCRIPTION

- The bars were described by the experimenter as follows:

“The granola bar that you have to taste today is a new high in fiber oatmeal snack that contains antioxidants, and is made with healthy ingredients. I’m sure you have heard that oatmeal is good for you due to the soluble fiber it contains. This granola bar is also low in saturated fat and free from trans-fat.”

GOURMET DESCRIPTION

- The bars were be described by the experimenter as follows:

“The granola bar you have to taste today is a decadent, handmade treat filled with luscious high quality ingredients including steel cut oats and imported chocolate pieces that give the bar a great sweet taste. These new granola bars are a delight to consume.”

METHOD

- The experimenter then asked participants to taste the granola bar and answer a series of questions on the provided questionnaires



RESULTS

- We performed a manipulation check by reviewing responses on the taste rating questionnaire
- In the **healthy condition**, when responding to the question “How would you rate the nutritional quality of this granola bar?”:
 - $M = 4.10, SD = .76$
- In the **gourmet condition**, when responding to the question “I would consider this granola bar to be a gourmet product”:
 - $M = 3.00, SD = .97$

MEANS TABLE

Table 1
Means and Standard Deviations of Key Variables by Condition

Variable	Condition			
	Healthy (<i>n</i> = 46)		Gourmet (<i>n</i> = 46)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Amount Eaten ^a	.63	.49	.57	.52
Granola Bar is Nutritious	4.10	.75	3.56	.76
Granola Bar is a Gourmet Product	3.22	.92	3.00	.97
How Likely To Purchase these Bars	3.47	1.19	3.50	.95
Often Pay Attention To Weight	4.06	.86	4.08	1.08
Know How Much They Weigh on Given Day	3.25	1.16	3.48	1.23
Satisfactory Weight is Important Life Goal	3.86	1.13	4.06	1.02
Food Choices Influenced by Current Weight	3.02	1.27	3.50	1.22

^aAmount eaten is a difference score of ounces after experiment subtracted from ounces before the experiment.

RESULTS

- Difference score for granola bars
- Variable of weight consciousness
 - **“I know how much I weigh on any given day”**
 - **“My food choices are influenced by my current weight.”**
 - **“My weight is related to my satisfaction with life”**

RESULTS

- Statistical analyses conducted with 2 x 2 between subjects (ANOVAs)
- First hypothesis that there would be an interaction between weight consciousness and product type produced no significant main effects
- Second hypotheses that individuals who are high in weight consciousness and received a “healthy” granola bar would eat less than those who are low in weight consciousness and received a “healthy” granola bar produced no significant interactions

RESULTS

- An independent samples t-test was used to test the third hypothesis: those who received a “healthy” granola bar would eat more.
- This analysis produced no significant results

RESULTS

- An independent samples t-test was used to test the fourth hypothesis: Men would eat more than women
- This analysis produced no significant results, but there was a trend that may have proven significant with more participants.
- The fifth hypothesis: That there would be an interaction effect between gender and granola bar labeling type was not able to be examined

RESULTS

- We conducted correlational analyses to investigate associations among our variables
 - Those who ate more did report more hunger, $r(99) = .28, p = .004$
 - Those who ate more reported that they paid more attention to their weight. $r(99) = .23, p = .02$
 - Participant weight was significantly correlated with how often participants paid attention to their weight $r(99) = .24, p = .016$
 - Participant weight was moderately correlated with body shape satisfaction $r(99) = -.38, p < .001$
 - Those who rated the taste of the granola bars positively also found them to be nutritious, $r(99) = .31, p = .001$
 - Those who rated the taste of the granola bars positively also found them to be gourmet $r(99) = .34, p = .001$

DISCUSSION

- Hypotheses not supported in this sample of college students.
- Small to moderate correlations found regarding the amount participants ate and participant weight
- Our study did not provide support for the Food Choice Process Model or the Health Halo Effect
- Limitations: sample size, low male turnout, manipulation, product/presentation

FUTURE RESEARCH

- Should consider ways to counter limitations faced by this study
 - **Larger sample size**
 - **More male participants**
 - **Rigorous pilot testing of product used**
 - **Consider portion size**

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REFERENCES

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- Provencher, V., Polivy, J., & Herman, C. P., (2009). Perceived healthiness of food. If it's healthy, you can eat more! *Appetite*, 52(2), 340-344. <http://dx.doi.org.proxygsureg1.galileo.usg.edu/10.1016/j.appet.2008.11.005>



QUESTIONS?