

Self-Selected Diets: Exploring the Factors Driving Food Choices and Satisfaction with Dietary Variety

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Importance

Food choices determine the nutrients and other substances that build and maintain our bodies as well as consumer demand for food products. People choose specific foods, and those choices are strongly influenced by many factors. Our goal was to examine the reasons participants gave for choosing each of the foods they consumed during a 4-week study, how those influencers differed for different food classes, and whether the influencers predicted satisfaction with their dietary variety.

Objectives

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Methods

Female (n = 52) and male (n = 50) participants (age ≥ 25 years with a Bachelor's degree) completed a 28-day online food diary with seven eating occasions: breakfast, lunch, dinner, and morning, afternoon, early evening, and late evening snacks. At the completion of each week, participants rated the impact of 13 choice influencers (**Figure 1**) on all items consumed that week using a four-point scale (1: no impact on selection; 4: high impact on selection). Participants rated their satisfaction with the variety in their diets each week using a seven-point scale (1: completely dissatisfied; 7: completely satisfied).

- We observed the frequency of impact ratings of each choice influencer across participants and evaluated the average impact rating by choice influencer for specific food classes
- We averaged the ratings for each of the choice influencers and used linear regression to relate satisfaction with the averaged choice influencer ratings as predictors.

Key Results

Liking had the greatest influence on food choice.

Liking increased satisfaction with variety.

Convenience reduced satisfaction with variety.

Acknowledgements

This research was supported in part by the National Aeronautics and Space Administration (NASA; NNX12AE56G), the Minnesota Agricultural experiment station project MN-18-081, and the Sensory Center at the University of Minnesota Department of Food Science and Nutrition..



Detailed Results

Liking, convenience, and hunger were most frequently selected as highly impacting overall food choice across participants and least frequently selected as not impacting food choice. Special occasion, mood improvement, and only thing served were least frequently selected as highly impacting overall food choice.

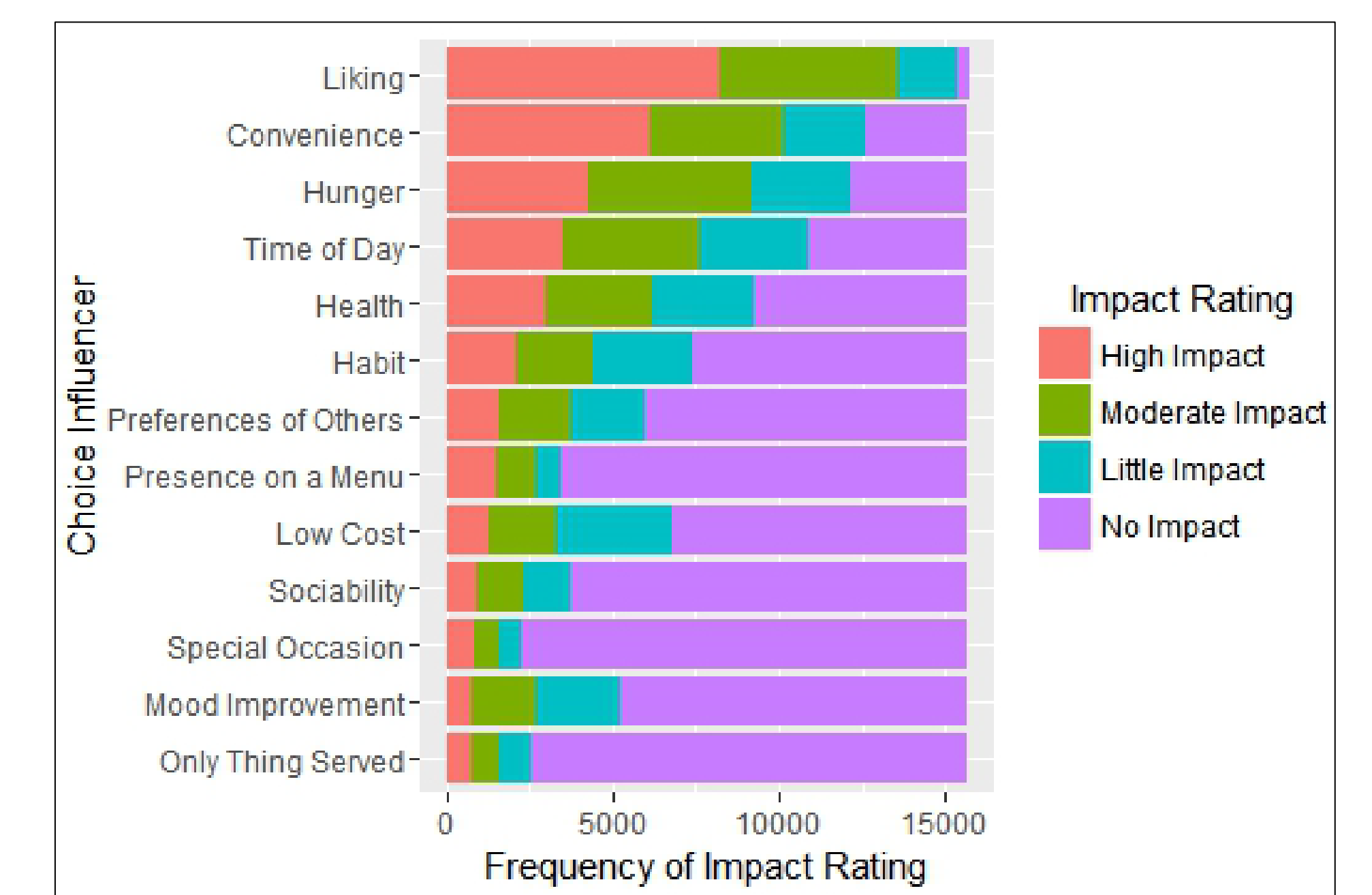


Figure 1. Frequency of impact rating on food choice by choice influencer

Model parameters	Coefficient
Liking	0.74
Convenience	-0.31
Hunger	0.33
Time of day	-0.20
Health	0.08
Habit	-0.14
Preferences of others	0.00
Presence on a menu	0.10
Low cost	0.16
Sociability	-0.20
Special occasion	-0.10
Mood improvement	-0.24
Only thing served	0.25

Table 1. Parameter estimates of linear mixed-effects analyses of the weekly choice influencer impact ratings as independent variables on ratings of satisfaction with weekly variety as dependent variables. Regression coefficients from repeated measures linear mixed-effects model are reported. Shading indicates a significant ($p < 0.05$) impact of the choice influencer on ratings of satisfaction with weekly variety