



NUDGES: BEHAVIORAL INTERVENTIONS AT A CLIENT CHOICE FOOD PANTRY

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Introduction

The USDA defines food insecurity broadly as “a household-level economic and social condition of limited or uncertain access to adequate food.” Food pantries provide short-term emergency food supplies to help those experiencing food insecurity. Client Choice/Shopping model pantries often struggle to get clients to choose the food that they have on the shelves

Hypothesis

- Behavioral interventions (nudges), such as recipe cards, meal suggestions, and informational prompts, will increase the likelihood of clients selecting a food item compared to when no nudge is provided.

Methodology

The Falcon Food Pantry operates under a “client choice” model. Any BGSU student, faculty, or staff member may use the pantry once a week and are able to take one of any item. The pantry is open 3 days each week. Each week, a food was selected for study. Each food was given a control day and two nudge days. At the end of each day, the number of items taken was recorded, as well as the number of visitors.

Table 1. Sample Nudges Schedule

| Tested Food | Day 1 | Day 2 | Day 3 |
|--------------------------|-------------------------|-------------------------|----------------|
| Collard Greens (Canned) | Control | Easy Meal Suggestion | Fun Fact |
| Water Chestnuts (Canned) | Personal Recommendation | Control | QR Code Recipe |
| Sweet and Sour Sauce | Takeaway Recipe Cards | “Ordered Too Much” Sign | Control |

Results

Paired T-Test

- Each week, the control and nudge conditions are directly comparable because they involve the same food item and a similar population of pantry visitors.
- A paired t-test accounts for variability across different foods by focusing on the within-week difference.

Result

- The p-value is 0.523 for a two-tailed test with $t = 0.684$ and $df = 5$.

Conclusion

Based on this paired t-test, there is not enough statistical evidence to conclude that the "nudge" significantly increased the ratio of items taken compared to the control condition.

These results may be influenced by the very small sample size. This study will be continuing for at least two more months and those results may change.

Image 1: Experimental Design Examples of Nudges



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