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Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

Buying Into Comparative Pricing: Exploring Purchase Intention and Satisfaction

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**Buying Into Comparative Pricing:
Exploring Purchase Intention and Satisfaction**

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Executive Summary

In this study, we aimed to investigate how comparative pricing strategies influence purchase satisfaction and intent to purchase among UBC students. We conducted a between subjects design to explore how providing a reference price alongside the at-cost price of an item affects consumers' purchase intent and satisfaction of purchase. We anticipated that consumer purchase intent and satisfaction would increase when consumers were provided with a reference price compared to when only the at-cost price is presented. Using a Qualtrics survey, participants (N=135) were randomly assigned to one of two conditions. In the control condition, they were presented with six food items with only the at-cost price, and in the experimental condition, participants were presented with the same items with both the at-cost price and reference price. In both conditions, we examined our data using a satisfaction Likert scale and a dichotomous Yes or No questionnaire on purchase intention. Our results indicated a statistically significant increase in purchase satisfaction and intent when consumers were presented with both the at-cost price and reference price of food items. The results supported our notion that using comparative pricing strategies can improve consumer purchase satisfaction and purchase intent in an at-cost context.

Introduction

From massive campus-wide protests to debates over funding, food security has risen in visibility as a topic important in students' lives. Food insecurity is the limited access to consistently safe and nutritious meals¹. According to the UBC Wellness annual report, 37% of UBC students experience food insecurity¹³, which aligns with the estimated one-third of food insecure university students across Canada¹². This growing issue is one of importance, as having access to healthy meals is a necessity for wellbeing¹, and food insecurity is associated with poorer psychological and physical outcomes, including lower academic performance, increased levels of stress, and an increased risk of chronic disease¹. Thus, in an effort to combat financially driven food insecurity, UBC's student-run Food Hub Market opened in 2021 to provide groceries and household items at-cost. At-cost, in this context, means the sale of products at no profit to the seller¹⁰.

A number of studies have looked into the types of behavioural interventions that can be used to improve consumer decision-making. A kind of behavioural intervention is nudging, which is an element of choice architecture that predictably modifies a consumer's behavior⁶. The effectiveness of nudges has been highlighted in many realms, including nudging consumers to make more eco-friendly choices².

To facilitate a nudge, one must understand the two key factors that influence consumption choices: taste and cost⁴. We will focus on the latter, as cost has been found to be the most significant factor for younger consumers, women, and individuals with lower incomes⁴, all of whom encapsulate a sizable portion of UBC's population¹⁴. To explore potential actions the Food Hub Market can take, we have examined past research on a cost-related marketing strategy that has been found crucial in influencing food and beverage consumption: comparative price advertising, specifically reference pricing.

Comparative price advertising is when a company markets the prices of their products as being lower comparatively to other prices, whether that be the price at other companies, historical or previous prices, or what have you, to indicate savings and the monetary value of purchasing their items at their cost¹¹. The use of comparative price advertising can be beneficial for both consumers and sellers³. This advertising provides consumers with valuable information regarding potential deals and money they can save³. Comparative price marketing has been documented in the literature to impact purchasing habits. Grewal et al. (1998) found that when comparative price advertising is implemented, consumers place more value on their purchases, and this is the mechanism that increases purchase likelihood. Research has also found this link between promoting a comparative price and the likelihood of purchase with discounted items¹¹. One way comparative price advertising can be implemented is by placing a reference price beside an offering price to render the offering price more appealing³. It is known that providing a reference price that is higher than the offering price increases a consumer's willingness to pay, but only when the reference price is plausible⁹. The profitable influence of providing reference prices on consumer spending has been recognised in a realm of different contexts, including pay-what-you-want models⁸. Research has even looked at how to format reference prices for the biggest impact⁷.

So, while research has extensively investigated reference pricing in a variety of contexts, there has yet to be an exploration into the context of products being sold at-cost. Furthermore, the focus of research on comparative price advertising in general focuses heavily on its impact on intent and likelihood of purchase, but there lacks an investigation into its effect on consumer satisfaction. We still have yet to understand how marketing strategies that utilise the comparison

between conventional and at-cost food prices impact the UBC demographic. Given that cost is a critical factor in food selection and UBC students are disproportionately food insecure, it is imperative that we implement a marketing strategy so as to inform students of the resources available while simultaneously increasing Food Hub sales.

Research Question and Hypothesis

With this study, we aim to investigate the following question: how does providing a consumer with the conventional prices of food items alongside its at-cost price impact purchase satisfaction and intent to purchase? We hypothesise that providing consumers with the conventional price of food alongside its at-cost price will increase their satisfaction and intent to purchase food items compared to when only an at-cost price is provided.

Our hypothesis is based on the past literature discussed previously. In other contexts, providing the reference price did increase the consumer's intention to purchase, so we predict that this finding will apply to this at-cost frame. As for satisfaction, as stated, research found that comparative price advertising increased the perceived value of the item, and we predict that this may translate to satisfaction.

Methods

Participants:

In a power analysis (assuming a minimum effect size = 0.2, alpha = 0.05, power = 0.8), our target sample size was a minimum of 620 participants. Despite our best collective efforts, however, our survey garnered a total of 135 participants. Out of these participants, seven had to be excluded due to incomplete survey responses or failure of attention-check questions. The remaining majority of the remaining participants (N=135) were in their 3rd or 4th year of study (61.4%) with a mean age of 21.13 years (SD 3.93). Critically, 22% of the sample reported experiencing food insecurity in the past 12 months (see Appendix Table 10 for demographics).

Conditions:

This study was a between-subjects design in which there were two conditions. Participants were randomly assigned to either the control or experimental condition. Our Qualtrics survey presented participants in the control condition with a picture of a food item with its price at the Food Hub as representative of the current real-life model. Participants in the experimental condition were given the same items and the Food Hub price, with a note informing them of the Save-on-Foods price. This note of Save-On-Foods price was in the form of an FYI statement in parentheses next to the Food Hub price and represents how we operationalized our independent variable: comparative pricing. This was continued for a total of six items. When selecting our six products, we based our selection on those currently being sold at both locations and ensured products had few associated allergies or dietary restrictions. We also selected items with varying prices and price discrepancies between Food Hub and Save-On-Foods. We then measured how comparative pricing affected both intent to purchase and purchase satisfaction (the dependent variables).

Measures:

Each of the six food items in both conditions was accompanied by two items measuring intent to purchase and purchase satisfaction, respectively. Intent to buy was measured with a dichotomous response choice of "yes" or "no" to whether or not participants would purchase the item at the Food Hub price. Purchase satisfaction was measured by asking participants how satisfied they would be if they purchased the item at Food Hub. Responses were measured on a seven-point Likert scale ranging from "extremely dissatisfied" (coded as -3) to "extremely satisfied" (coded as 3). The survey also contained two questions to check for attention: one in the

control and experimental conditions, and another in the demographics section. Participants who failed one or both attention checks were omitted from analysis.

Procedure:

Our survey began with a consent form (Appendix B), after which the participants were faced with the hypothetical scenario of shopping at Food Hub Market and presented information that Food Hub is an at-cost market on the UBC campus. They would then proceed through the survey items in their assigned condition, viewing each of the six items one at a time. These items appeared to participants in a random order to eliminate order effects. Finally, some brief demographic questions were presented, including one asking if participants had experienced food insecurity in the last 12 months. After demographics, participants were thanked for their participation and debriefed (Appendix B). Participants were recruited using social media, the personal and professional networks of the researchers, and through in-class announcements in various UBC psychology classes from March 7th-31st, 2023. The main challenge was recruiting enough participants to satisfy the amount given by our power analysis (620), which proved to be insurmountable given our resources.

Results

For our hypothesis on consumer purchase satisfaction, we used the mean of all six items' satisfaction scores for each participant to do an independent sample t-test as they are measured on a seven-point Likert scale. Using a Shapiro Wilk normality test on SPSS, where the initial hypothesis is that the sample is normal, we found a p -value of .439, which suggests that our data is normally distributed (Appendix Table 1). We found that on average, participants in the control condition scored on average right between "neither satisfied nor dissatisfied" and "somewhat satisfied" ($M = .690$, $Std = .778$) while participants in the experimental condition scored on average right between "somewhat satisfied" and "satisfied" ($M = 1.384$, $Std = .814$) (Appendix Table 2). As a result, consumers who were shown the conventional reference price reported greater purchase satisfaction than the consumers who were only shown the at-cost price ($t(125) = , p < .001$, 95% CI [-.974, -.415], $d = -.873$) (Appendix Table 3-4). In addition, we found that comparative pricing had an effect size of .873 on consumers' purchase satisfaction. With this effect size in mind and a power of .873, we would have only needed 34 participants to achieve power (Appendix Figure 1).

As for our hypothesis on consumer's intent to purchase, we used the sum of all six items intent to purchase scores to give us an interval scale. Using a Shapiro-Wilk test of normality, we found that our sample was not normally distributed ($p < .001$) (Appendix Table 5). Thus, instead of using an independent sample t-test, we should use the Mann-Whitney U test to compare two independent non-normal distributions. This test showed that the mean rank order in the control condition is 56.76 while that of the experimental condition is 71.59 (Appendix Table 6). This suggests that participants in the experimental condition intended to purchase more items on average than participants in the control condition. This relationship was statistically significant, $U(127) = 15444.500$, $p_{1-tail} = .01$ (Appendix Table 7). From the mean and standard deviations of consumer's intent to purchase in each condition (Appendix Table 11), we can calculate an effect size of .399 (Appendix Figure 2). A Mann-Whitney U power analysis revealed we only needed 166 participants to achieve power (Appendix Figure 3).

Although we had a wide range of items participants were exposed to, we also wanted to explore if participants were more sensitive to price comparisons of certain types of items. For participants' intent to purchase, we found that apples had the largest differences in scores, where participants scored on average .52 in the control condition, and .87 in the experimental condition

(Table 8). This was then closely followed by pretzels and rice. Interestingly, there didn't seem to be much difference between flour and olive oil. In addition, we found that purchase satisfaction decreased for cheerios.

Finally, we wanted to explore how food insecurity affected consumers' decision-making. The only trend we were able to see was that participants who had experienced food insecurity within the last 12 months had overall lower purchase satisfaction scores (control : .65, experimental: 1.19) than participants who did not experience food insecurity (control: .70 , experimental: 1.44) (Table 9). This suggests that food insecurity may affect purchase satisfaction even if it is a correlational relationship. In addition, participants who have experienced food insecurity also had comparable intent to purchase scores in the control condition ($M = 4.21$, $Std = 1.19$) and the experimental condition ($M = 4.14$, $Std = 1.35$) (Table 9).

Discussion

Our results indicate that providing the conventional price of food items alongside the at-cost price nudges consumers' intentions to purchase that item as well as helped increase purchase satisfaction compared to when only the at-cost price is presented. Both of these effects were statistically significant. Our results are consistent with our hypothesis as well as past literature. Since past research and our results are compatible, we believe the observed trend that reference pricing increases the perceived value of items, which in turn impacts consumer decision-making, is at play in our results. Moreover, as our hypothesis is supported, this strengthens the idea that comparative pricing still has an impact in an at-cost context and with the UBC demographic, and this influence is consistent across contexts in the form of increasing purchase intention.

Our findings that the presence of a reference price had a higher effect on items like apples or pretzels between conditions could suggest that participants are more sensitive to fresh items like produce and easily consumable items like pretzels and rice instead of cooking items like flour and olive oil. As for purchase satisfaction, similar trends have emerged (Table 9). Easy-to-consume items like apples and rice had the greatest increase in purchase satisfaction, followed by pretzels, olive oil, and flour. Interestingly, we found that satisfaction with purchasing cheerios decreased in the experimental condition. To look further into this, future replications should include a more extensive list of easily consumable food items as well as cooking supplies. Our finding that people who currently experience food insecurity had lower purchase satisfaction could suggest that perhaps it is food anxiety that hinders consumers' purchase satisfaction. Overall, this finding warrants some further investigation to find out why this was the case, and what can be done to increase the satisfaction of those people. Our finding that intent to purchase was the same in both conditions could suggest that food insecurity is acting as a moderator in the relationship between food pricing and consumers' intent to purchase. Although the conclusions here are limited, they offer some potential avenues for further research.

Relevance to wellbeing:

Resources such as the Food Hub Market could play an important role in minimising food insecurity at UBC, which afflicts 37% of its students¹³. Although the university has undertaken several initiatives (such as opening the Food Hub market), their effectiveness in minimising food insecurity could be bolstered by increasing students' awareness and utilisation of them. We provided support for the notion that comparative pricing can increase intent to purchase, which may be used in marketing campaigns to draw in new customers to Food Hub, while increased purchase satisfaction will increase the likelihood of repeated use of the market. With increased frequency of use, it could reach more students who suffer from food insecurity and help Food

Hub reduce the severity of food insecurity for some. This could have positive impacts on the physical and psychological health of those students, and thereby on their academic performance as well¹.

Limitations

Our largest limitation was that we did not have enough participants for our second hypothesis. This could suggest that we found a relationship that doesn't necessarily exist, and therefore our results are less robust. In addition, since this was an online survey, participants only imagined themselves walking through Food Hub instead of actually walking through it. This could be a threat to internal validity and limit the generalisations we can make. Future research could explore these relationships in a more realistic setting. In addition, all of the data we collected was self-report data, which could reflect some participant bias. Indeed, food insecurity could be seen as undesirable, which could skew participants' self-reports.

Recommendations For Client

Our findings indicate that using comparative pricing strategies increases both purchase intent and satisfaction, and therefore, our recommendations for UBC and the UBC Food Hub Market are primarily focused on the types of marketing strategies that could be implemented. UBC Food Hub Market could put into effect comparative pricing strategies on a smaller and larger scale, depending on time constraints and feasibility. On a smaller scale, the Food Hub Market could implement comparative pricing strategies on individual items in the form of reference pricing. As an example, the conventional price of an item could be placed beside the at-cost price of the item. The conventional price could be placed in the form of a sticker or written in. On a larger scale, which could prove to be more time-efficient, Food Hub Market could place signage at the entrance of the market indicating the overall average cost difference of items compared to other stores. This could look like: "Here at Food Hub Market, your groceries will cost you around ___ less dollars than at any other grocery store." The advertising of the cost differential could be stated in a percentage or as an absolute number, depending on the client's preference and ease. We want to allow for creative freedom of our client, so please note that these are just examples of how comparative pricing strategies and reference pricing could be implemented.

Due to our study being conducted through a Qualtrics survey, additional research could focus on how sales are affected before and after comparative pricing is implemented at the Food Hub Market. Additionally, future research could examine which method of presenting both conventional and at-cost prices is most effective. For example, is the use of stickers labelling the reference price more effective in relaying information than when the reference price is slashed off beside the at-cost price? This study could also be conducted using different items available at Food Hub to see if the pattern we observed that reference pricing is the most effective in influencing the purchase of fresh food items still holds. Furthermore, future research could investigate the most cost-effective and time-efficient manner to implement comparative pricing advertising for the Food Hub Market. This study provides boundless possibilities for further investigation.

We hope that our research and overall findings have provided UBC Food Hub with possible avenues to increase sales and customer experience. We hope the contributions from our project will nudge students to utilise this resource more and will aid Food Hub in their mission to provide affordable food and combat food insecurity on campus.

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Appendix A

Table A1

Test of Normality for Purchase Satisfaction

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mean_sat	.065	127	.200*	.989	127	.439

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table A2

Descriptive Statistics for Purchase Satisfaction

T-Test

Group Statistics

	1 = control, 2 = experimental	N	Mean	Std. Deviation	Std. Error Mean
	Mean_sat	control	65	.6897	.77777
experimental		62	1.3844	.81403	.10338

Table A3

Independent Sample t-test for Purchase Satisfaction

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means								
	F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
					One-Sided p	Two-Sided p			Lower	Upper	
Mean_sat	Equal variances assumed	.043	.836	-4.918	125	<.001	<.001	-.69467	.14125	-.97421	-.41512
	Equal variances not assumed			-4.913	123.926	<.001	<.001	-.69467	.14140	-.97454	-.41479

Table A4

Purchase Satisfaction Effect Sizes

Independent Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
Mean_sat				Lower	Upper
	Cohen's d	.79567	-.873	-1.236	-.507
	Hedges' correction	.80049	-.868	-1.228	-.504
	Glass's delta	.81403	-.853	-1.230	-.471

- a. The denominator used in estimating the effect sizes.
 Cohen's d uses the pooled standard deviation.
 Hedges' correction uses the pooled standard deviation, plus a correction factor.
 Glass's delta uses the sample standard deviation of the control group.

Table A5

Test of Normality for Intent to Purchase

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
sum_purchase	.156	127	<.001	.915	127	<.001

- a. Lilliefors Significance Correction

Table A6

Descriptive Statistics for Intent to Purchase

Ranks

		1 = control, 2 = experimental	N	Mean Rank	Sum of Ranks
sum_purchase	control		65	56.76	3689.50
	experimental		62	71.59	4438.50
	Total		127		

Table A7

Mann Whitney U test Statistics for Intent to Purchase

Test Statistics^a

sum_purchase	
Mann-Whitney U	1544.500
Wilcoxon W	3689.500
Z	-2.330
Asymp. Sig. (2-tailed)	.020

a. Grouping Variable: 1 = control,
2 = experimental

Table A8

Descriptive Statistics per item.

	1 = control, 2 = experimental			
	control		experimental	
	Mean	Standard Deviation	Mean	Standard Deviation
Flour_Purchase	.65	.48	.76	.43
Cheerio_Purchase	.88	.33	.63	.49
Apple_Purchase	.52	.50	.87	.34
Olive_Purchase	.75	.43	.76	.43
Rice_Purchase	.71	.46	.84	.37
Pretzel_Purchase	.52	.50	.68	.47

Table A9

Food Insecurity Descriptive Statistics

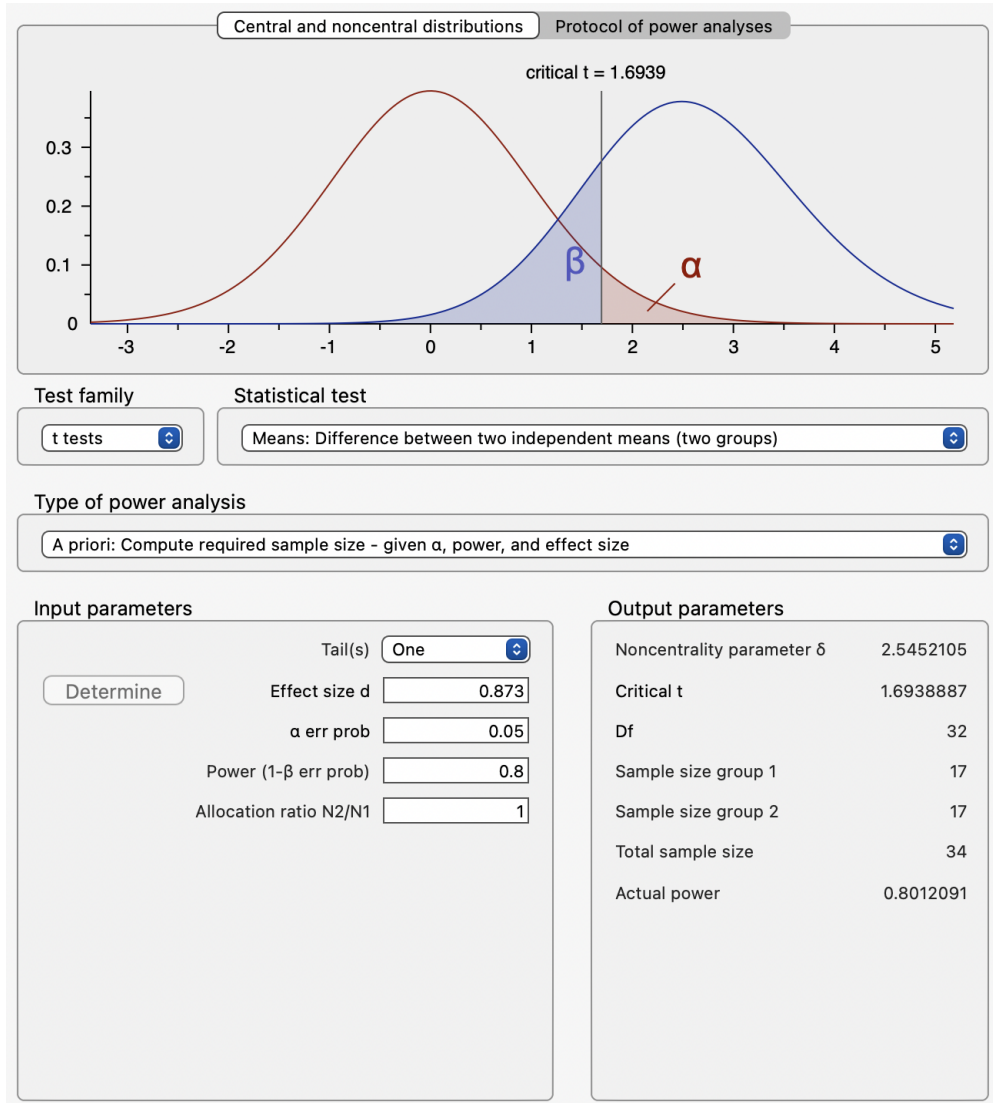
Food Insecurity	Yes	Condition	Mean_sat		sum_purchase	
			Mean	Standard Deviation	Mean	Standard Deviation
		control	.65	.67	4.21	1.19
			experimental	1.19	.93	4.14
	No	control	.70	.79	4.00	1.20
			experimental	1.44	.76	4.60
	Not sure / prefer not to say	control	.67	1.01	3.86	1.57
			experimental	1.43	1.03	5.00

Table A10

Participant Demographics

		Mean	Standard Deviation	Column N %
What is your age in years? – Place slider on your age.		21.13	3.93	
Do you attend UBC?	Yes			90.6%
	No			9.4%
What level of schooling are you currently in? – Selected Choice	First Year Undergraduate			7.9%
	Second Year Undergraduate			19.7%
	Third Year Undergraduate			30.7%
	Fourth Year Undergraduate			30.7%
	Fifth+			7.1%
	Graduate			2.4%
	None of the above (please specify)			1.6%
Food insecurity is the inability or the uncertainty of acquiring or consuming nutritionally adequate and safe foods in socially acceptable ways. Over the past 12 months have you experienced food insecurity?	Yes			22.0%
	No			68.5%
	Not sure / prefer not to say			9.4%
1 = control, 2 = experimental	control			51.2%
	experimental			48.8%

Figure A1: Purchase Satisfaction Power Analysis



Mean group 1	<input type="text" value="4.0308"/>
Mean group 2	<input type="text" value="4.5323"/>
SD σ group 1	<input type="text" value="1.22453"/>
SD σ group 2	<input type="text" value="1.28953"/>

 Effect 0.398823

Figure A2: Intent to Purchase Effect Size

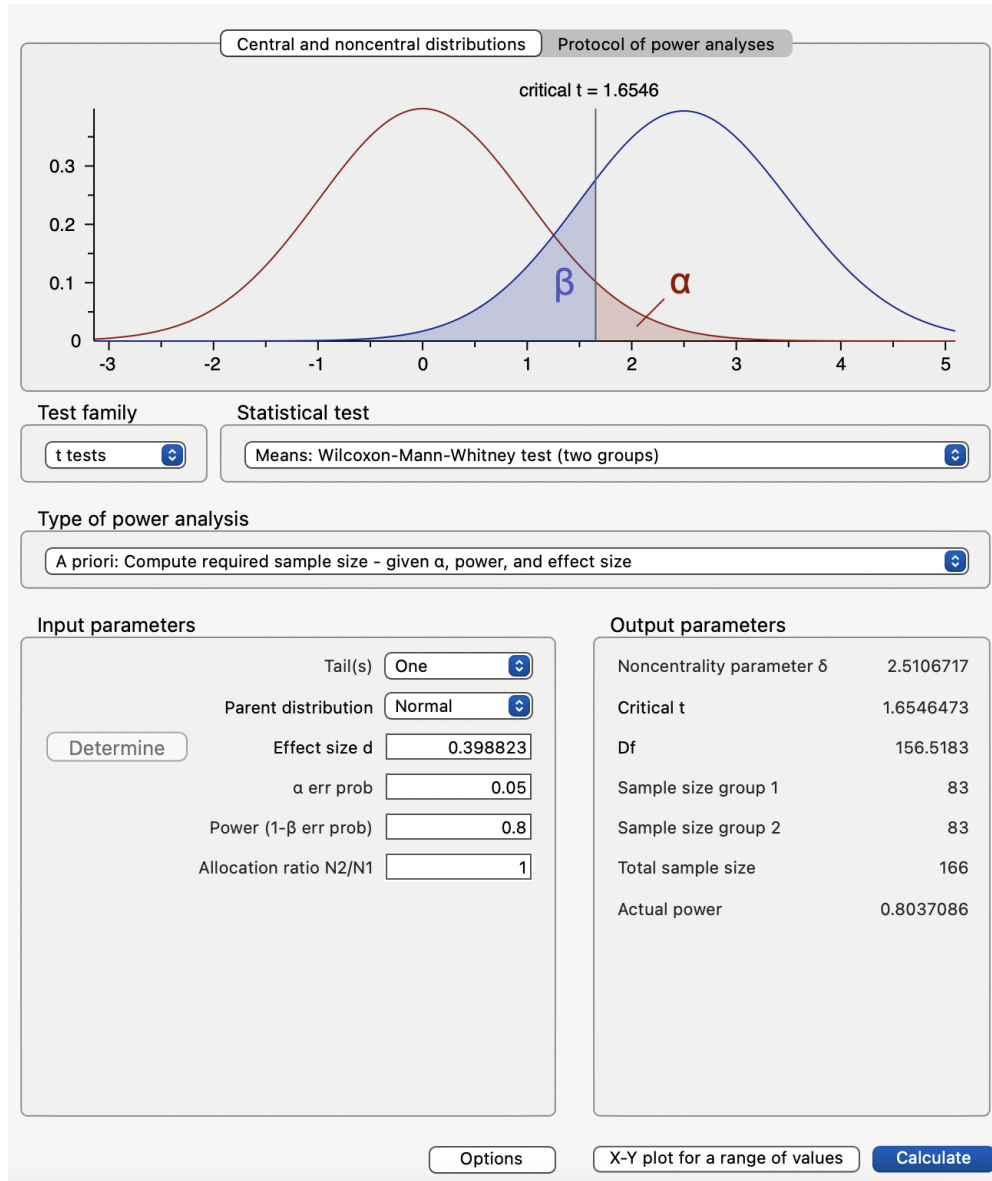


Figure A3: Intent to Purchase Power Analysis

Appendix B:

Qualtrics Survey Screenshots in Order of Consent Form - Control - Experimental

Condition - Demographics - Debrief

The screenshot shows a Qualtrics survey interface for a consent form. At the top, it identifies the University of British Columbia and the Department of Psychology. The form is titled 'Consent Form' and is for 'Class Research Projects in PSYC 421 - Environmental Psychology'. The Principal Investigator is Dr. Jiyang Zhao, a Course Instructor in the Department of Psychology, Institute for Resources, Environment and Sustainability, with email jiyang@psych.ubc.ca. The form includes sections for 'Introduction and Purpose', 'Study Procedures', 'Confidentiality', and 'Remuneration'. The 'Remuneration' section states there is no remuneration for participation. The 'Consent' section explains that participation is voluntary and that participants can withdraw at any time. At the bottom, there is a question 'Do you consent to participate in this study?' with radio buttons for 'Yes' and 'No'. The survey ID is 007 and the form version is 4, dated June 20, 2022, with ethics ID H17-02929. There are buttons for 'Import from library' and 'Add new question' at the bottom right.

Figure B1: Participants Consent Form

Import from library


Apple

AppleCont_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

AppleCont_2

Apple (red delicious), Food Hub price: \$0.49



AppleCont_Purchase

Would you purchase this item at Food Hub for \$0.49? ★ x→

Yes

No

AppleCont_Sat

If you had purchased this item how satisfied would you be with your purchase? ★ x→ (x)

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

Import from library

Figure B2: Apple Control Condition

Flour


FlourCont_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an all-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

[+ Add page break](#)

FlourCont_2

Flour 10kg, Food Hub price: \$6.31



FlourCont_Purchase

Would you purchase this item at Food Hub for \$6.31?

Yes

No

FlourCont_Sat

If you had purchased this item how satisfied would you be with your purchase?

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

Import from library [+ Add new question](#)

Figure B3: Flour Control Condition


rice

RiceCont_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

RiceCont_2

White Basmati Rice 907g, Food Hub price: **\$3.04**



RiceCont_Purchase

Would you purchase this item at Food Hub for \$3.04?

Yes

No

ABCHK_1

Select "No"

Yes

No

RiceCont_Sat

If you had purchased this item how satisfied would you be with your purchase?

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

Import from library Add new question

Figure B4: Rice Control Condition


▼ Cheerio

CheerioCont_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

CheerioExp_2 | Item 5: Pasta sauce 680ml, \$1.92 at Food Hub

Honey Nut Cheerios 430g, Food Hub price: **\$4.40**



+ Add page break

CheerioCont_Purchase ★ x+

Would you purchase this item at Food Hub for \$4.40?

Yes

No

CheerioCont_Sat ★ x+ (x)

If you had purchased this item how satisfied would you be with your purchase?

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied


Satisfied

Extremely satisfied

Figure B5: Cheerios Control Condition

PretzelCont_2

Pretzel Sticks 200g, Food Hub price: **\$1.18**



PretzelCont_Purchase ★ x→ (x)

Would you purchase this item at Food Hub for \$1.18?

Yes

No

PretzelCont_Sat ★ x→ (x)

If you had purchased this item how satisfied would you be with your purchase

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

Figure B6: Pretzel Control Condition


▼ Olive oil

OliveCont_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

OliveCont_2

Olive oil 500ml, Food Hub price: **\$5.46**



OliveCont_Purchase ★ x+

Would you purchase this item at Food Hub for \$5.46?

Yes

No

OliveCont_Sat ★ x+ (x)

If you had purchased this item how satisfied would you be with your purchase?

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

[Import from library](#) [Add new question](#)

▲

Figure B7: Olive oil Control Condition


flour experimental

FlourExp_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

FlourExp_2

Flour 10kg, Food Hub price: ~~\$6.31~~ (FYI, Save-On-Foods Price: ~~\$9.99~~)



FlourExp_Purchase ★ x→

Would you purchase this item at the Food Hub at \$6.31?

Yes

No

FlourExp_Sat ★ x→ (x)

If you had purchased this item how satisfied would you be with your purchase?

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

[Import from library](#) [Add new question](#)

Cherrios experimental

Figure B8: Flour Experimental Condition


▼ Cheerios experimental

CheerioExp_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

CheerioExp_2

Honey Nut Cheerios 430g, Food Hub price: \$4.40 (FYI Save-On-Foods price: \$5.99)



CheerioExp_Purchase

Would you purchase this item at Food Hub for \$4.40?

Yes

No

CheerioExp_Sat

If you had purchased this item how satisfied would you be with your purchase?

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

Import from library Add new question

▼ Apple experimental

Figure B9: Cheerios Experimental Condition

Import from library Add new question


Apple experimental

AppleExp_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

AppleExp_2

Apple (red delicious), Food Hub price: \$0.49 (FYI Save-On-Foods price: \$1.67)



AppleExp_Purchase ★ x+

Would you purchase this item at Food Hub for \$0.49?

Yes

No

AppleExp_Sat ★ x+ (x)

If you had purchased this item how satisfied would you be with your purchase?

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

Import from library Add new question

Figure B10: Apple Experimental Condition


pretzel experimental

PretzelExp_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

PretzelExp_2

Pretzel Sticks 200g, Food Hub price: **\$1.18** (FYI Save-On-Foods price: **\$1.99**)



PretzelExp_Purchase

Would you purchase this item at Food Hub for \$1.18? ☆ x→

Yes

No

PretzelExp_Sat

If you had purchased this item how satisfied would you be with your purchase? ☆ x→ (x)

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

import from library + Add new question

Figure B11: Pretzel Experimental Condition


olive oil experimental

OliveExp_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

OliveExp_2

Olive oil 500ml, Food Hub price: \$5.46 (FYI Save-On-Foods price: \$7.99)



OliveExp_Purchase ★ x+

Would you purchase this item at Food Hub for \$5.46?

Yes

No

ATCK_2 x+ (x)

Select "yes"

Yes

No

OliveExp_Sat ★ x+ (x)

If you had purchased this item how satisfied would you be with your purchase?

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

Import from library
+ Add new question

Figure B12: Olive Oil Experimental Condition


rice experimental

RiceExp_1

For the next section of the survey, imagine you are shopping at Food Hub Market. Food Hub Market is an at-cost grocery store located on UBC Vancouver campus. Please read each question carefully and answer as honestly as you can.

RiceExp_2

White Basmati Rice 907g, Food Hub price: \$3.04 (FYI Save-On-Foods Price: \$5.79)



RiceExp_Purchase ★ x+

Would you purchase this item at Food Hub for \$3.04?

Yes

No

RiceExp_Sat ★ x+ (x)

If you had purchased this item how satisfied would you be with your purchase?

Extremely dissatisfied

Dissatisfied

Somewhat dissatisfied

Neither satisfied nor dissatisfied

Somewhat satisfied

Satisfied

Extremely satisfied

[Import from library](#) [Add new question](#)

Figure B13: Rice Experimental Condition

Demographics

UBC ★

Do you attend UBC?

Yes

No

YearOfSchooling ★

What level of schooling are you currently in?

First Year Undergraduate

Second Year Undergraduate

Third Year Undergraduate

Fourth Year Undergraduate

Fifth+

Graduate

None of the above (please specify)

Age ★

What is your age in years?

18 27 36 45 54 63 72 81 90 99

Place slider on your age.

AtCHK_3 x+ (x)

Select "some of the time"

All the time

Some of the time

Rarely

Never

FoodSec ★

Food insecurity is the inability or the uncertainty of acquiring or consuming nutritionally adequate and safe foods in socially acceptable ways.

Over the past 12 months have you experienced food insecurity?

Yes

No

Not sure / prefer not to say

[Import from library](#) [Add new question](#)

Figure B14: Demographic Questionnaire

debrief

Debrief

Thank you for participating in our study. We will now provide you with a detailed explanation of the study.

The purpose of our study was to examine how presenting consumers with the conventional price of food items alongside its at-cost price impacts consumer satisfaction and intent to purchase. Some of you were assigned to the first condition, where you were given only the at-cost price of food items, while some of you were assigned to the second condition, where you were given both the conventional price and the at-cost price of food items. In both conditions, participants were presented with six food items and asked to rate their intent to purchase and their purchase satisfaction.

We expect that participants will have a higher intent to purchase food items as well as be more satisfied with their purchase when presented with both the conventional and at-cost price.

Many students at UBC are food insecure, and it is imperative that this issue be addressed as food insecurity is associated with lower academic performance as well as poor mental and physical health outcomes (Bruening et al., 2017). In order to tackle food insecurity caused by a lack of financial resources, UBC's student-run Food Hub Market began selling groceries and household items at an at-cost price in 2021. We intend for this study and the data you provided us to impact marketing strategies to improve sales at Food Hub Market, as well as help find strategies to better inform the student population of cheaper food options at UBC.

Thank you for your time and your cooperation.

Bruening, M., Argo, K., Payne-Sturges, D., & Laska, M. N. (2017). The struggle is real: A systematic review of food insecurity on Postsecondary Education campuses. *Journal of the Academy of Nutrition and Dietetics*, 117(11), 1767–1791. <https://doi.org/10.1016/j.jand.2017.05.022>

Import from library Add new question

Add Block

End of Survey

We thank you for your time spent taking this survey.
Your response has been recorded.

Figure B15: Debrief Survey

Appendix C

Contributions of Each Team Member

Worksheet for client

- All equally contributed to the creation of worksheet, except Maxime who was absent

Proposal

- Collaboratively brainstormed and came up with general ideas
- Elisabeth wrote up the entirety of the proposal, except the background literature
- Background literature was collaboratively written by Jax, Maxime, Meilee
- Max D. was absent
- Jax and Maxime worked on the creation of the Qualtrics survey
 - All members provided edits to the survey's and avenues of improvement except Nameera
 - Nameera worked on the survey's debrief

Presentation

- Slides created by all group members except Jax
- Presented by all members except Maxime

Final Paper

- Maxime in charge of all statistical analysis and running those tests in SPSS
- Maxime wrote up the results section
- Meilee and Elisabeth collaboratively wrote the introduction and found all references
- Elisabeth formatted the paper in APA, except the appendix as that was completed by Jax, Maxime and Meilee
- Elisabeth did participant section with inputted information by Maxime
- Elisabeth did research questions and hypothesis section
- Max D and Jax did the conditions, measures and procedure
- Max D and Jax collaboratively wrote up the discussion section
- Elisabeth came up with title
- Meilee and Elisabeth collaboratively wrote recommendations section
- Executive summary written by Meilee and Nameera
- Elisabeth provided massive edits to and contributed on every single portion of the paper
- Maxime and Nameera wrote limitations section
- All members provided final edits to cut down and improve readability, grammar, etc.