Does Round Pricing Lead to More Favorable Product Perception?

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Research Question

Does Round Pricing Lead to More Favorable Product Perception?

Price may not only only affect perceived quality but also affect the actual satisfaction of owning and using the product

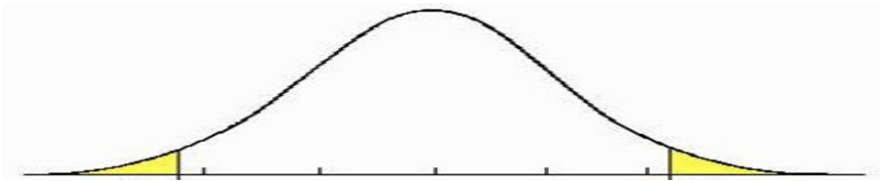
Hypothesis and Direction of Outcomes

$H_0 = 0$

Price rounding, in a hedonic context, has **no effect** on perception of product quality

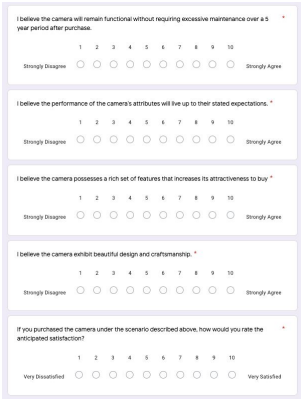
$H_a \neq 0$

Price rounding, in a hedonic context, **has an effect** on perception of product quality



Treatment

Pre-Treatment

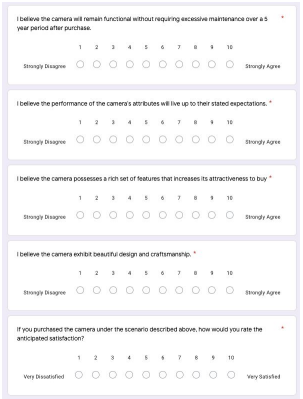


5 Questions, 10 pt. Scale

Treatment

Checkout Prompt + Pricing

Post-Treatment



Same Survey as Pre-Treatment

Randomization

March	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
March/April	28	29	30	31	1	2	3
April	4	5	6	7	8	9	10

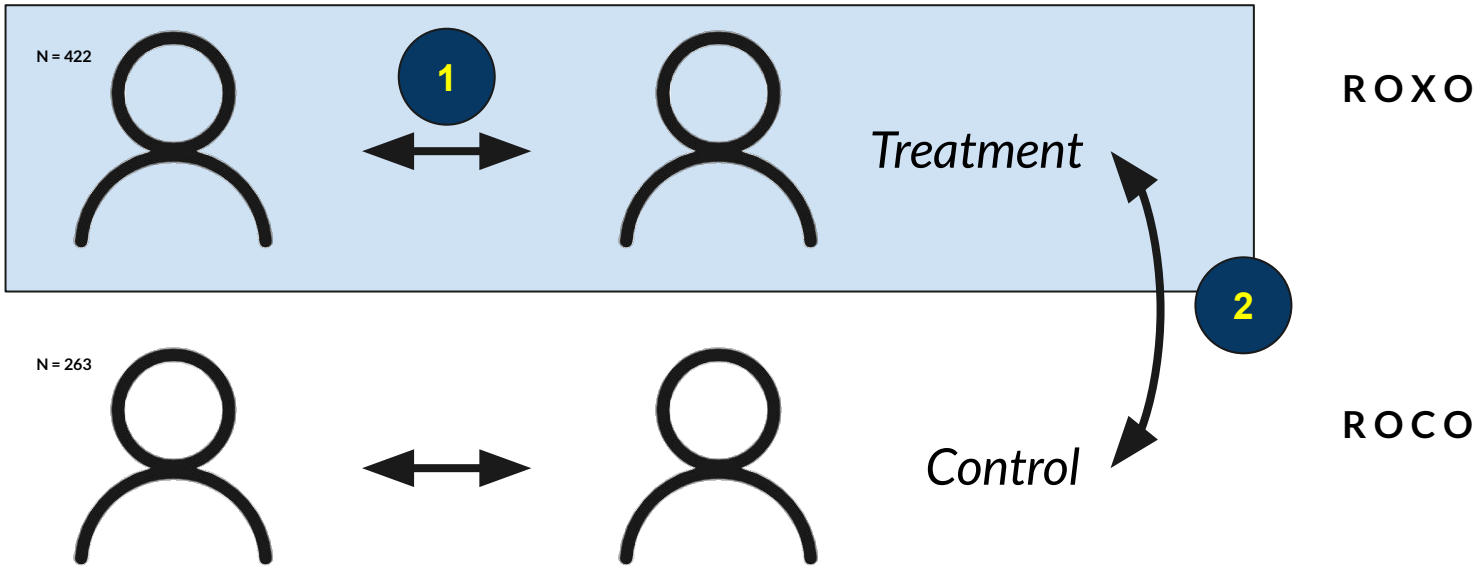
We used this strategy to try to minimize excludability issues on mTurk

Measurement Units

People , specifically 1,437 mTurk respondents:

- **Control:** High Non-Round = 348 **(119)**
- **Control:** Low Non-Round = 413 **(144)**
    - **De-duplicated Control = 263**
- **Treatment:** Round = 677 **(422)**

Before & After Placebo Design

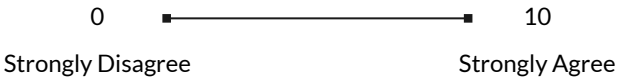


Outcome Measures

Difference in responses to the question-topics below for each person and between test and control

- Will Not Require Maintenance
- Will Live Up to Stated Expectations
- Possess a Rich Set of Features
- Exhibits Beautiful Design and Craftsmanship
- Anticipated Satisfaction

Each question was answered on a scale from 0 to 10



Analysis and Results

Bin_group	C		T		
Variable	N	Percent	N	Percent	Test
gender	263		422		X2=2.362
... Female	125	47.5%	213	50.5%	
... Male	130	49.4%	201	47.6%	
... Non-binary	5	1.9%	3	0.7%	
... Prefer not to say	3	1.1%	5	1.2%	
education	261		422		X2=5.475
... Bachelors	125	47.9%	220	52.1%	
... Doctorate	9	3.4%	6	1.4%	
... High school/GED	65	24.9%	112	26.5%	
... Masters	60	23%	79	18.7%	
... Prefer not to say	2	0.8%	5	1.2%	
age_group	261		420		X2=2.958
... 18-25	31	11.9%	40	9.5%	
... 26-35	89	34.1%	161	38.3%	
... 36-45	62	23.8%	94	22.4%	
... 46-55	43	16.5%	61	14.5%	
... 56+	36	13.8%	63	15%	
... Prefer not to say	0	0%	1	0.2%	
income_group	263		421		X2=6.371
... $1,000,000+	3	1.1%	8	1.9%	
... $100,001 - $200,000	45	17.1%	72	17.1%	
... $200,001 - $300,000	18	6.8%	26	6.2%	
... $300,001 - $500,000	20	7.6%	15	3.6%	
... $500,001 - $1,000,000	12	4.6%	23	5.5%	
... 0 - $100,000	158	60.1%	266	63.2%	
... Prefer not to say	7	2.7%	11	2.6%	

Statistical significance markers: * p<0.1; ** p<0.05; *** p<0.01

	Dependent variable:		
	Camera - Post treatment	Headphone - Post treatment	Laptop - Post treatment
Treatment	0.093	0.599	0.433
	(0.347)	(0.389)	(0.414)
Previous Score - Camera	0.841***		
	(0.040)		
Previous Score - Headphone		0.907***	
		(0.028)	
Previous Score - Laptop			0.885***
			(0.033)
Constant	5.462***	3.767***	1.802
	(1.848)	(1.429)	(2.473)
Age buckets	Yes	Yes	Yes
Gender buckets	Yes	Yes	Yes
Education buckets	Yes	Yes	Yes
Income buckets	Yes	Yes	Yes
Observations	679	679	679
R2	0.624	0.684	0.610
Adjusted R2	0.613	0.675	0.598
Residual Std. Error (df = 658)	4.474	4.864	5.303
F Statistic (df = 20; 658)	54.615***	71.265***	51.471***
Note:			*p<0.1; **p<0.05; ***p<0.01

Analysis and Results - HTE (Cont..)

	Camera	Headphone	Laptop	Bonferroni corrected threshold
Age	0.423	0.546	0.978	0.01
Income	NA	0.263	0.024	0.0083
Gender	0.578	0.132	0.128	0.0167
Education	0.036	**0.0118**	0.035	0.0125

Questions and Concerns

- How can we improve our randomization given the time, platform, and monetary constraints?
- Can you think of a way to perform the utilitarian arm of the experiment given the above constraints?
- How can we improve the generalizability of our findings to other product and purchase contexts?
- How can the findings be used to price products in an economic and ethically sound manner?