

The Effects of Price Variation in Luxury vs. Non-Luxury Products on Consumer Decisions

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Received: October 10, 2024

Accepted: November 15, 2024

Online Published: November 21, 2024

doi:10.5430/jms.v15n2p1

URL: <https://doi.org/10.5430/jms.v15n2p1>

Abstract

Companies rely on their knowledge of how their clients and customers will react in response to actions taken to run their businesses. What drives consumers to make their choices is a question that revolves around knowing the behavior of consumers and how their behaviors can be utilized to work best with the goals of the company. Price is one of the many factors that play a key role in the purchase decision. This study is designed to determine price sensitivity regarding luxury vs non-luxury products. For this study, shoes and water were used as product lines and subtle vs obvious price increases as the variable. Fielding two questionnaires to obtain both non-comparative and relative data, the objective was to perform research to see what causes consumers to buy the more expensive brand for identical or similar versions of the same product. This study provides insights into consumer behavior and price sensitivity in the presence and absence of a luxury/non-luxury competitor and across high and low involvement categories. It demonstrated that luxury brands can retain consumer willingness to buy with price increases. Price sensitivity and the threshold at which consumers will switch from a non-luxury product to a luxury product could be affected by the price point of the product category. This study strives to understand the effects of price variation in luxury versus non-luxury products on consumer decision making. It is important to know the threshold of price that drives consumers to make the purchase decisions that they do.

Keywords: price sensitivity, price variation, relative price, premium pricing, willingness to pay, luxury brands, brand loyalty, price threshold

1. Introduction

This study seeks to understand the absolute price and relative price gap threshold phenomenon based on perceived quality of the brands within a product category, as well as variation in price threshold tolerance based on the price point of a product category.

There is a plethora of literature regarding consumer willingness to pay as price and quality varies, with prior studies examining the relationship between consumer willingness to pay/price sensitivity and consumer product assessment or product status/weight (e.g., luxury or non-luxury) or product attributes (tangible and intangible). Prior studies have also shown that a price premium is acceptable to most consumers based on their trust in and/or perceived quality of the product and based on cues associated with product attributes that suggest a fit with their self-image. Studies have also examined how price can serve as a cue where brands are not known (Simonson and Drolet, 2003; Kagan 2023; Yu 2023; Schnek 1975).

Despite the wealth of literature on the relationship between consumer willingness to pay and price, nothing has been found on the relationship between relative pricing, product quality/status and consumer willingness to pay. Additionally, with so many factors impacting the consumer's decision-making process, the question is at what point does the consumer start making trade-offs when choosing between luxury and non-luxury brands and how does it vary across different types of product categories? Price is a cue for positive or negative product quality, which is line with Cue Utilization Theory (Chankarachan 2013). It can be an indicator of product prestige or quality and lead to a higher likelihood of purchase for a consumer desiring a luxury product, or lead to a lower likelihood of purchase for a

consumer looking to save. Given that consumers usually don't make a choice in a vacuum, the relative price between products within a product category should also be considered, but it cannot be assumed that the level of price sensitivity to relative prices is the same across product categories. People's thoughts on and responses to price cues may differ for a product category with a high price point (e.g., price range starting at \$100.00) versus another product category that has a much lower price point (e.g., price range starting at \$1.00). Additionally, consumer preference for a luxury brand over a non-luxury brand within the same product category might be influenced by the relative price gap between the two.

As a result of these gaps in the literature, this study seeks to understand the absolute price and relative price gap threshold phenomenon between luxury and non-luxury brands across two product categories: one that has a high price point (shoes/sneakers), and the other with a low price point (bottled water). Bottled water was chosen as a category because it offers functional benefits, while sneakers offer a combination of functional and emotional benefits (Caliguriu 2023; Khalid 2023). It's assumed that price differences between the luxury and non-luxury brands are better tolerated in a product category that offers a combination of functional and emotional benefits than in a category that is more functional.

2. Literature Review & Hypotheses

The literature establishes that consumers are willing to pay if the asking price is in line with the perceived product benefits, and they enjoy getting a deal and will do what is necessary for a better perceived benefit, based on their need-satisfying-based-buying tendency (Gonzalez, 2021; Sadiq M.W et al. 2020). However, there is perceived risk when making luxury purchases that the consumer must assess. What is considered luxury varies depending on the lens that the consumer is looking through: philosophical theories (i.e., aesthetic possession and exclusivity), cultural-historical theories (i.e., items regarding status and the evolution of luxury), and social anthropology theories (i.e., consumer motivation for purchasing goods) (Batat 2023). Regardless of the lens used, luxury products allow consumers to feel unique and exclusive in their purchase because they can buy something that is not out of necessity and driven by their own desire (Kang and Ma, 2020). However, each purchase comes with a level of risk, so most consumers find it best to determine exactly how much risk they will tolerate and look at the overall purchase, not just price (Dogbe, Courage Simon Kofi, et al, 2019). The price and utility benefits (i.e., what is received from what is bought) must align as no consumer wants a losing deal, where they spend their own resources to buy a product that does not match their expectations (Zeithaml 1988; Gonzalez 2021; Monroe and Petroschius, 1981; Ajzen 1991).

Although the relationship between consumer willingness to pay, the brand status and price has been established, at what point does consumer willingness to pay change as price changes in the absolute or relative to another brand? At what point does the consumer think the risk associated with buying a luxury brand is no longer a factor? Luxury and non-luxury brands can exist within a product category, based on consumer's perception of the combination of product tangible and intangible attributes including the price associated with each brand within a category. But given the consumer's willingness to pay, the question of what is considered "too high" of a price and what is the price threshold within a product category at which a luxury brand is considered over a non-luxury brand, leads us to the first hypothesis.

Hypothesis 1: Within a product category, consumers will pick the luxury item over the non-luxury item when priced the same.



Quality plays a part when identifying a luxury product. Luxury products are a mix of brand status, recognition, and quality (Stanciu and Condrea, 2018). This means that while they are not synonymous, quality and luxury work together in the market to elevate or de-elevate the image of products. Perceptions of product quality or the associated luxury level are affected by tangible (color, size, taste, packaging etc) and intangible (durability, production, strength, design, etc) product attributes. Brand image perceptions should play a role when consumers are choosing what brands to buy

and sway purchase decisions, given that they are a function of product variety, product quality and price (Collins-Dodd and Lindley 2002). Customers may be more open to paying steeper prices for the status that the brand holds. Analogously, one would expect consumers to be less price-sensitive in a product category where brand associations play a larger role in perceived quality than in a product category that has more tangible aspects to its quality. This leads us to the second hypothesis.

Hypothesis 2: Consumers will show a greater price sensitivity toward price increases for low price point product categories vs. high price point product categories.



The interplay of relative pricing between luxury and non-luxury products and consumer price sensitivity for each is the focus of the third hypothesis. The literature is clear that as price changes, consumers will remain with a product if the product quality satisfies their needs and their perceptions of the brand but will switch at the point where there is discontent (Maslakci et al, 2020; Jakpar, 2012). Additionally, a consumer may be more willing to pay a higher price for the desired product and repurchase if s/he is content with the price of the preferred brand relative to competitors and the benefits offered to make the consumer satisfied (Baker and Crompton, 2000; Maslakci et al, 2020).

Despite this foundational knowledge, the relative price sensitivity between luxury and non-luxury brands is not clearly understood. Price differential strategy of competitors within the same product category is used to offer variations in price in accordance with a product’s performance characteristics and quality rank (Inoua and Smith, 2020; Reactev, 2022; Schnek 1975). Consumers accept paying more for a product when they know and like the set of product attributes and show a preference for premium brands due to the standard of quality and capabilities as compared to lesser brands. The higher price point products within a product category are expected to have better quality and benefits than one might expect from items priced for less within the same product category (Zhao and Yao and Liu and Yang, 2021; Kotler et al, 2012). As a result, consumer price sensitivity could differ depending on the relative price of one brand versus another and the perceived quality of each. Understanding the relationship between the two within the context of relative pricing is of interest. This leads us to the third hypothesis.

Hypothesis 3: Within a product category, the non-luxury brand has a high threshold for purchase intent as price increases (H3a), while the luxury brand has a lower purchase intent threshold (H3b).

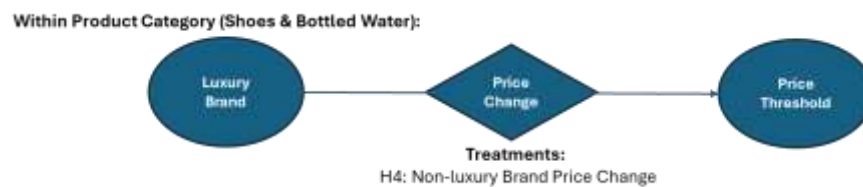


Consumer reaction to relative price changes may differ between commodity and aspirational product categories. A commodity is a basic good that is fundamental to where people usually don’t pay much attention to the producer of the product. In contrast, an aspirational good is an item that causes the owner to feel pride over it, which will lead to the specific brand within that product category holding more weight (Fernando 2024; Fiveable Inc. 2024). Brand image is important for aspirational products and product categories that are more image-conscious. It is a function of product

variety, product quality, price and other factors (Collins-Dodd and Lindley, 2002). When consumers are choosing what brands to buy, the public image of the brand holds sway over their decisions. If the image of the brand is well established, customers may be more open to paying steeper prices for the status that the brand holds. Price can affect product choice by causing the consumer to make a more rational purchase decision to buy what they know is logical over what their emotional desires are saying (Levrini and Jeffman, 2021). However, consumer sensitivity to price could differ between product categories that are more image-conscious and those that are not. Therefore, it would prove wise to test the extent to which prices affect the concept of image versus commodity-like product categories. This leads us to the fourth hypothesis.

Brand Image is a mediator between individual factors and buying behaviors. This means that when consumers are choosing what brands to buy, the public image of the brand holds sway in their decisions. Therefore, if the image of the brand is well established, customers may be more open to paying steeper prices for the status that the brand holds. In the methods of (Collins-Dodd and Lindley, 2002) they say that the prominent attributes of image include the following: product variety, customer service, store atmosphere, price, and product quality.

Hypotheses 4: The relative price threshold at which consumers switch from the non-luxury brand to the luxury brand is lower for low price point product categories than high price point product categories.



3. Methodology

A quantitative survey-based study design using direct and in-direct measurement methodology to understand consumer willingness to buy luxury and non-luxury brands within commodity and image product categories was fielded to a convenience sample of high school students in the northeast of the United States. Two surveys (a non-comparative pricing survey and relative pricing survey) were fielded, with each respondent completing only one. The non-comparative pricing survey followed a monadic design and used a direct measurement methodology, while the relative pricing survey utilized a choice-based indirect measurement methodology. The different approaches to pricing measurement were used in this study to offset the drawbacks of each. The direct approach is thought to overstate price sensitivity, while a choice-based indirect approach is more precise and represents real market choices (Khandker and Pandurang Joshi 2022).

Respondents in the non-comparative survey were asked to indicate their willingness to buy each of the four brands in this study on a 5-point scale. They answered questions relating to the price increases of one product first, before answering questions on the second product, with each brand within a product category having a similar set of questions. (Note that a true single-cell monadic design was not used in the non-comparative survey due to a concern about sample size and the survey length deemed reasonable based on a pre-test.) The direct measurement approach was based on the Gabor-Granger methodology (Gabor and Granger, 1966) using a presentation of six price points in 10% increments. The Gabor-Granger methodology was used over the Van-Westendorp approach (van Westendorp 1976) since this study is not focused on setting the right price but rather on understanding consumer response to price and how that might affect product choice. Given the purpose of the study is to understand how price and quality affect price sensitivity, both non-comparatively and relatively, it is necessary to understand consumer reaction to price increases, but not price decreases.

In contrast, the indirect methodology (relative pricing survey) required respondents to trade off between the luxury and non-luxury products as the price of the non-luxury product increased while the luxury product price remained unchanged. Respondents were asked a series of nine questions requiring them to choose between two brands at choice at given price points. Unlike the non-comparative survey, the relative survey respondents saw the price of both brands within a product category and were asked to make a brand choice. The price of the luxury brand remained constant as the non-luxury brand increased in 10% increments. Nine price point questions were used in the relative pricing survey

instead of six (as used in the non-comparative pricing survey) so that the highest price of the non-luxury brand nears the price of the luxury brand.

Both surveys were developed and fielded through Qualtrics^{XM} to students in a high school in a Northeast state of the United States. High school students were selected as they are members of Generation Z (Gen Z), and Gen Z has been shown to be more eager to buy a dupe version of an item than pay full price than any other generation (Dimock, 2019; Dawkins, 2023). This demonstrates their price and value consciousness, and possible interest in saving money. Links for each survey were randomly assigned to students over 18 years of age, and to students under 18 years of age after they turned in a signed parental permission slip. Parental permission was obtained for students under 18, with permission slips distributed and collected before administration of the survey. Where parental permission was needed, teachers distributed the link for the Parental Permission Google Form in one class. In their next class, teachers distributed the link for the survey to students whose parents completed the Parental Permission Google Form in the affirmative. Where parental permission is not needed, study participants provided their informed consent in Qualtrics^{XM}. Eligible respondents in the final sample were those who were high school students, whose age was in an appropriate age range, and completed the price-sensitive portion of the survey.

Each survey included basic demographic questions as well as general questions regarding product attributes and brand love. After collecting demographic information, respondents ranked different brand attributes for each product category based on importance to purchasing decision and rated each brand on those product attributes using a 3-point (1- Disagree, 2- Neutral, 3- Agree) Likert scale. After providing their brand perceptions within a product category, respondents were shown pictures of the luxury and non-luxury brands with a description of each. Respondents were then asked to indicate which brand they would choose if they were priced the same. Afterward, respondents then completed either a willingness to buy exercise (direct or indirect, depending on which survey link they received). Respondents also used a 5-point (1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree) Likert scale for questions about their current behavior and diagnostic in nature.

Bottled water and shoes/sneakers were the product categories chosen for this study because it is important to understand the differences in price sensitivity regarding low and high involvement product categories, as well as product categories that represent different ends of the price spectrum. When compared to a pair of shoes (sneakers), which usually cost \$75 on average, the price of a bottle of water is much lower, with an average price point of \$1.79 (based on retail prices in the Northeast), which could lead to consumers having different degrees of price sensitivity between the product categories. In addition, water is a known necessity in the daily lives of consumers, which requires it to be purchased more frequently. Shoes can be categorized as a nonessential item which means that they are bought more out of want rather than need. The chosen product categories demonstrate the same concept but with the difference of frequency in relevance in consumers' lives.

Brands from the bottled water and shoe product categories used are Fiji and Poland Spring bottled water and Nike and Adidas shoe brands. These brands were chosen because they differ in premium value. Fiji is considered a more premium or luxurious brand, while Poland Spring can be considered a non-premium brand based on its price. Similarly, while Nike and Adidas are both esteemed brands, the price of Nike is marked well above that of Adidas causing it to be the more premium brand in this study. These brands have been shown to be relevant to study respondents as Nike and Adidas are Gen Z's #1 and #7 favorite brands, respectively (Khalid 2023), Fiji and Poland Spring are ranked #1 and #24 water brands (Caliguriu 2023).

Data analysis and visualization were done using Qualtrics^{XM}, IBM SPSS Statistics and Microsoft Excel. All survey respondents are anonymous, and data are analyzed in the aggregate.

4. Results & Discussion

4.1 Sample Profile

Across both surveys, the total sample size is 151 students, of which 68 high school students responded to the non-comparative study and 83 high school students responded to the relative study. The difference in the final sample size between the two surveys is attributed to non-respondents, since the survey links were randomly assigned to ensure that the distribution was similar between the two. Similarity of the sample composition between the two surveys was examined by conducting independent sample t-tests of the mean and proportion in SPSS to identify any significant statistical differences between the two at the 95% significance level (note the following tables show statistically significant differences highlighted at p-values less than or equal to 0.05). This insight will help inform conclusions and caveats that are made regarding the study findings that compare the two samples.

Differences between the two samples exist regarding gender and ethnicity, with the non-comparative survey skewing more female (59%; Table 1) and having more respondents who identify as Asian (22%; Table 2), compared to the relative survey skewing male (65%) and having more respondents who identify as Hispanic (19%). Despite the gender differences between the two samples, the overall study sample is in line with the US Census (Fabina, et al. 2023). The gender mix differences were surprising given that the survey link for each survey type was randomly distributed to respondents. The difference could be a function of the gender composition of the classes in which the survey was fielded, as well as non-respondents.

Table 1. Gender Sample Comparison

	Non-Comparative Survey	Relative Survey	p-value for Samples
Fiji	1.31	1.52	0.06 (ns)
Poland Springs	2.08	2.12	0.78 (ns)
Nike	2.17	2.29	0.38 (ns)
Adidas	1.66	1.72	0.56 (ns)

As mentioned, the non-comparative survey had statistically significantly more respondents who identified as Asian than the relative survey (22% vs 6%), while the relative survey had statistically significantly more respondents who identified as Hispanics than the non-comparative survey (19% vs 5%) (Table 2). (Note, the proportion of the overall study respondents who identify as Hispanic/Latino might be underrepresented if respondents did not indicate ethnicity in the open-ended response.)

Table 2. Ethnicity Sample Comparison

	US Census Percent	Non-Comparative Study	Relative Study	p-value for Samples
White	49%	47%	37%	0.07 (ns)
Black/African American	13%	9%	9%	0.6 (ns)
Asian	5%	22%	6%	0.005 (sig)
Hispanic	26%	5%	19%	0.003 (sig)
Non-Hispanic	8%	-	-	
Other/Not Say	0%	10%	22%	
Missing		6%	7%	
Total	100%	99%	100%	

The non-comparative survey had statistically significantly more respondents with a family income of \$100K+ than the relative survey respondents, but both samples are deemed to be similar based on the median income of \$100K+ (Table 3) for each.

Table 3. Income Survey Comparison

	US Census	Non-Comparative Study	Relative Study	p-value for Samples
Low (<\$40K)		3%	7%	0.24 (ns)
Medium (\$41-\$99K)		28%	42%	0.09 (ns)
High (\$100K+)		49%	26%	0.00 (sig)
Not comfortable saying		21%	26%	0.47 (ns)
Median Income	\$89.46K (US)	High (\$100K+)	High (\$100K+)	

Samples were similar with more than one-half of respondents in each survey not using their own money to pay for either shoes or bottled water (Table 4) and more than three-quarters of each sample having a job (Table 5).

Table 4. Pay with Own Money Survey Comparison

	Non-Comparative Survey Sample	Relative Survey Sample	p-value for Samples
Yes - Shoes	12%	13%	0.76 (ns)
Yes - Bottled Water	22%	10%	0.04 (sig)
Yes - Both	9%	22%	0.03 (sig)
No	57%	55%	0.76 (ns)
Total	100%	100%	

Table 5. Have a Job Survey Comparison

	Non-Comparative Survey Sample	Relative Survey Sample	p-value for Samples
Yes	82%	79%	0.63 (ns)
No	18%	21%	0.63 (ns)
Total	100%	100%	

Brand loyalty did not differ between the two surveys, with respondents in each survey holding similar views (Figure 1). Of the brands used in this study, Poland Spring and Nike showed the highest brand loyalty, followed by Adidas and then Fiji.



Figure 1. Brand Loyalty Survey Comparison

Despite the gender and ethnicity differences between the two samples, respondents from each sample held similar attribute perceptions of the bottled water (Table 6) and shoes/sneakers categories (Table 7).

Table 6. Attribute Perceptions - Bottled Water (Means Significance Test)

	Non-Comparative Study	Relative Study	p-value for Samples
Is Good Value	0.66 (ns)	0.73 (ns)	0.47 (ns)
Is High Quality	0.85 (ns)	0.60 (ns)	0.51 (ns)
Is Affordable	0.76 (ns)	0.05 (sig)	0.77 (ns)
Tastes Good	0.20 (ns)	0.10 (ns)	0,81 (ns)
Is Safe to Drink	0.72 (ns)	0.44 (ns)	0.73 (ns)
Fits My Image	0.28 (ns)	0.40 (ns)	0.42 (ns)
Is Luxury Brand	0.92 (ns)	0.78 (ns)	0.07 (ns)

Table 7. Attribute Perceptions - Shoes (Means Significance Test)

	Non-Comparative Study	Relative Study	p-value for Samples
Is Good Value	0.92 (ns)	0.37 (ns)	0.02 (sig)
Is High Quality	0.76 (ns)	0.48 (ns)	0.06 (ns)
Is Affordable	0.99 (ns)	0.38 (ns)	0.27 (ns)
Longevity	0.44 (ns)	0.38 (ns)	0.39 (ns)
Comfortable to Wear	0.47 (ns)	0.38 (ns)	0.18 (ns)
Fashionable/Trendy	0.22 (ns)	0.20 (ns)	0.08 (ns)
Fits My Image	0.13 (ns)	0.79 (ns)	0.17 (ns)
Is Luxury Brand	0.23 (ns)	0.77 (ns)	0.82 (ns)

However, there were four attributes where gender differences were seen with respect to the brands. Specifically, females held statistically significant more favorable mean perceptions than males of Fiji being of good value (2.77 vs. 1.17 on a 3-point scale, respectively) (Table 8), and Nike being of good value (2.69 vs. 2.47), comfortable to wear (2.81 vs. 2.63) and fashionable/trendy (2.90 vs. 2.66) (Table 9). These gender differences in perceptions will need to be factored in when looking at price sensitivity findings for Fiji and Nike across the two surveys.

Table 8. Gender Differences in Attribute Perceptions - Bottled Water (Means Significance Test)

	Attribute Mean Ranking	Attribute Mean Ranking	p-value for Samples
Is Good Value	0.77 (ns)	<0.001 (sig)	0.36 (ns)
Is High Quality	0.24 (ns)	0.75 (ns)	0.59 (ns)
Is Affordable	0.57 (ns)	0.67 (ns)	0.996 (ns)
Tastes Good	0.09 (ns)	0.37 (ns)	0.22 (ns)
Is Safe to Drink	0.65 (ns)	0.97 (ns)	0.29 (ns)
Fits My Image	0.96 (ns)	0.26 (ns)	0.77 (ns)
Is Luxury Brand	0.19 (ns)	0.46 (ns)	0.87 (ns)

Table 9. Gender Differences in Attribute Perceptions - Shoes (Means Significance Test)

	Attribute Mean Ranking	Attribute Mean Ranking	p-value for Samples
Is Good Value	0.94 (ns)	0.03 (sig)	0.77 (ns)
Is High Quality	0.68 (ns)	0.21 (ns)	0.53 (ns)
Is Affordable	0.22 (ns)	0.72(ns)	0.17 (ns)
Longevity	0.41 (ns)	0.97 (ns)	0.99 (ns)
Comfortable to Wear	0.11 (ns)	0.04 (sig)	0.49 (ns)
Fashionable/Trendy	0.00 (sig)	0.001 (sig)	0.31 (ns)
Fits My Image	0.50 (ns)	0.10 (ns)	0.42 (ns)
Is Luxury Brand	0.08 (ns)	0.10 (ns)	0.94 (ns)

Although not all respondents in both surveys were familiar with all brands in the study (Figure 2), study findings and conclusions were similar when the full sample or a sub-sample of respondents who were familiar with both brands within a category were analyzed.

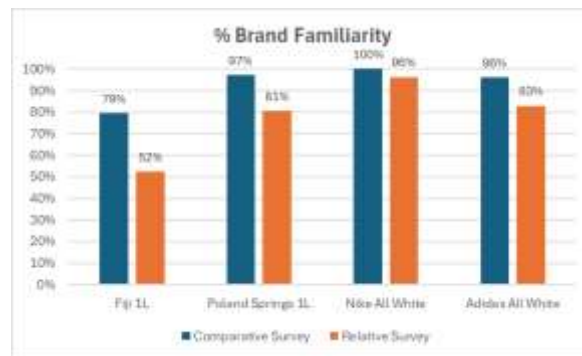


Figure 2. Brand Familiarity Survey Comparison

4.2 Brand Perceptions

Study findings support the classification of brands used in this study. Figure 3 shows that Fiji’s top three attributes are that it’s safe to drink (2.60), luxury (2.48), and has high quality (2.46), while Poland Spring’s top three attributes are that it’s safe to drink (2.77), affordable (2.74), and demonstrates good value (2.67). This supports the notion that Fiji and Poland Spring correlate as the luxury and non-luxury brands, respectively.

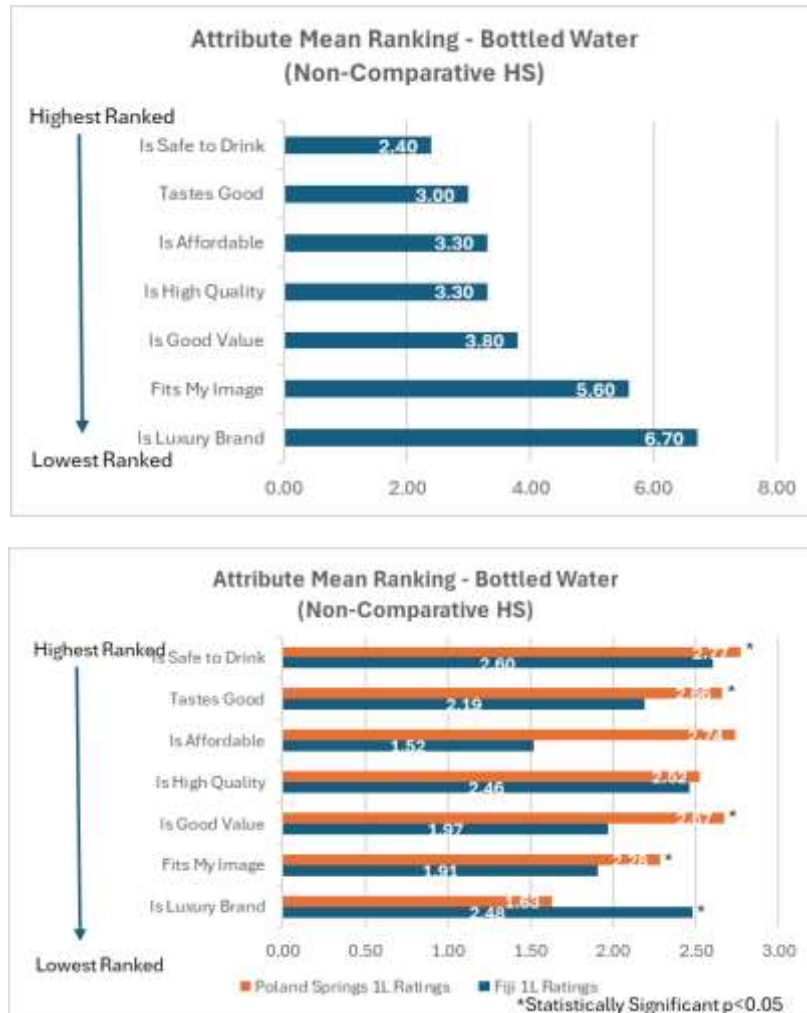


Figure 3. Attribute Perceptions and Ranking - Bottled Water

In the shoe category (Figure 4), Nike’s top three attributes are it’s comfortable to wear (2.80), trendy/fashionable (2.80), and high quality (2.70), while Adidas’ top 3 attributes are that it’s comfortable to wear (2.60), demonstrates good value (2.60), and high quality (2.60). Even though Nike and Adidas share two out of the three attributes, Nike is rated higher than Adidas, which supports the decision to have Nike and Adidas as the luxury and non-luxury brands, respectively.



Figure 4. Attribute Perceptions and Ranking - Shoe

A similar finding of attribute ranking and brand perceptions is seen in the relative survey where the non-luxury product sees price increases, while the luxury product’s price remains unchanged.

4.3 Hypotheses and Related Findings

Hypothesis 1 states that within a product category, consumers will pick the luxury item over the non-luxury item when priced the same. Findings from both surveys partially support this hypothesis, as consumers respond differently between the high and low price point product categories. In the high point product category (shoes), respondents are more likely to select the luxury brand (~90%) if the luxury and non-luxury brands were priced the same. In contrast, for the low price point product category (bottled water), ~50% of respondents are willing to buy the luxury brand if priced the same as the non-luxury brand (Figure 5 and Figure 6). The difference in respondents’ brand choice between bottled water and shoes could be a function of the former being a low involvement category and the latter being a high involvement or image-based category.



Figure 5. Willingness to Buy if Priced the Same (Non-comparative Survey)



Figure 6. Willingness to Buy if Priced the Same (Relative Survey)

In the non-comparative study price sensitivity is measured by the change in willingness to buy as the price increases in 10% increments. Study findings show that willingness to buy for the luxury brand is less than for the non-luxury brand (Figures 7 and 8). When deciding between the two, consumers are most likely to go with the non-luxury item. As shown in Figure 7, the price increase that people are willing to buy Fiji water is just 10% before their willingness to buy continues at a near-constant decline, while the price increase threshold for Poland Spring is a constant decline until the 30% point, in which each price point afterward showed a decline in willingness to buy.



Figure 7. Willingness to Buy - Bottled Water (Non-comparative Survey)

A similar finding is seen within the shoe category (Figure 8). Adidas had a slight decline in consumer willingness throughout while Nike was near constant in decline until the 30% increase in price point. This makes sense seeing as the price ranges for each type of product vary, so consumers would have a higher tolerance to the already high-priced item, shoes. The implications are if brands were to continue to increase price, they could have issues with customer-to-brand turnover, especially in a product category that is at a lower price point.



Figure 8. Willingness to Buy - Shoes (Non-comparative Survey)

Brand loyalty (Figure 9) might also explain why Nike did not have as steep a decline as Fiji as price increased (Figures 7 and 8).

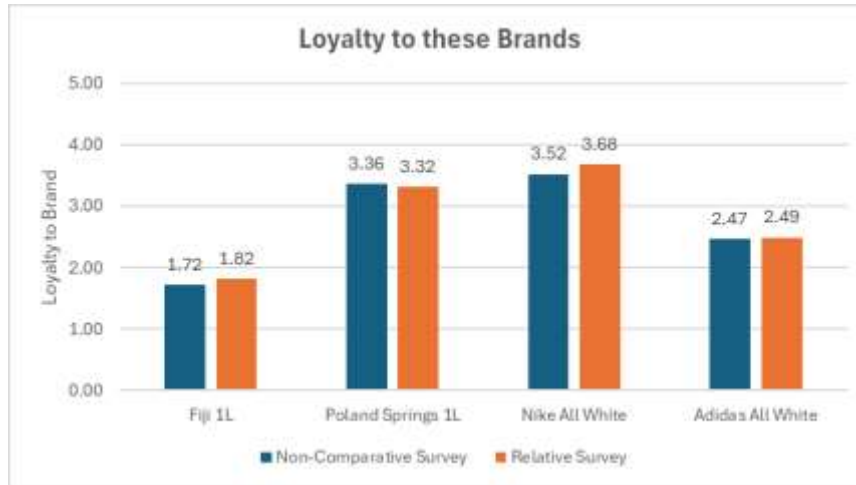


Figure 9. Brand Loyalty

Nike and Poland Spring brands had the highest loyalty rates, which may reduce the rate of decline in consumers’ willingness to buy, especially when consumers are more likely to stay with these brands whether or not their price is raised and the competitor’s price remains unchanged (Table 10) or their remains unchanged in the face of competitor price increase (Table 11).

Table 10. Likelihood to Stay with Brand Choice if Price Raised and Competitor Price Unchanged

	Non-Comparative Survey	Relative Survey	p-value for Samples
Fiji	1.31	1.52	0.06 (ns)
Poland Springs	2.08	2.12	0.78 (ns)
Nike	2.17	2.29	0.38 (ns)
Adidas	1.66	1.72	0.56 (ns)

Table 11. Likelihood to Stay with Brand Choice if Price Unchanged and Competitor Price Raised

	Non-Comparative Survey	Relative Survey	p-value for Samples
Fiji	1.58	1.71	0.29 (ns)
Poland Springs	2.28	2.21	0.62 (ns)
Nike	2.34	2.37	0.87 (ns)
Adidas	1.58	1.71	0.29 (ns)

Brand choice for Nike steadily rises as the price of the non-luxury Adidas brand increases. However, due to the brand loyalty and high familiarity with Poland Spring, brand choice in preference for Fiji does not shift as quickly as the price of Poland Spring increases. These findings are concordant with the non-comparative study, suggesting that shoes being a high price point product category is more salient for consumer purchase decisions than for water.

Based on these findings, *Hypothesis 2* which states that consumers will show a greater price sensitivity toward price increases for low price point product categories vs. high price point product categories is supported. *Hypothesis 3* which states that within a product category, the non-luxury brand has a high threshold for purchase intent as price increases (H3a), while the luxury brand has a lower purchase intent threshold (H3b) is also supported.

Hypothesis 4 states that the relative price threshold at which consumers switch from the non-luxury brand to the luxury brand is lower for low price point product categories than for high price point product categories. Findings from the relative study indicate that consumers are more likely to buy the luxury item when its price remains constant and the price of the non-luxury item increases. Figure 10 depicts the willingness to buy Poland Spring and Fiji as Poland Spring’s price increases closer to Fiji’s set price. The threshold at which respondents choose Fiji over Poland Spring is at the 40% price increase mark where votes for Poland Spring decline.



Figure 10. Willingness to Buy - Bottled Water (Relative Survey)

For consumer willingness to buy Adidas and Nike (Figure 11), the threshold of choosing Nike over Adidas is the 30% mark where Nike sees an increased willingness to buy and Adidas has a decrease. Additionally, Adidas does not seem to get a luxury halo when its price is at or above the Nike price.



Figure 11. Willingness to Buy - Shoes (Relative Survey)

Brand choice in the relative study favors the higher-priced product within each of the high and low price point product categories, due to the higher-priced product being considered a luxury item. It’s a matter of which brand to choose when the possibility of obtaining those high-end features is within reach, thus increasing willingness to buy the luxury brand.

5. Limitations, Caveats, and Future Research

This study provides insights into consumer behavior and price sensitivity in the presence and absence of a luxury/non-luxury competitor and across high and low involvement categories. As with any study, there are limitations with this study design. Findings from this study cannot be generalized as the study was restricted to high school students from one geography. Future research would benefit from venturing outside of that demographic to college students or those past secondary education in addition to a wider geographic pool. Broader geographic representation across different regions of the US or different countries would enable the detection of variations to effects seen in this study.

Caveats pertain to the fact that this study did not test on the reaction to lowering the prices of the luxury product and instead focused on raising the prices of the non-luxury product. Future research would benefit from understanding how price changes affect consumer decisions, where the trade-off would be in regard to raising and lowering prices of luxury and non-luxury items, and how this affects consumers' price sensitivity. Future research should also look within a product category to see if the price threshold for the luxury product is higher when the price increases for both the luxury and non-luxury brand. Additionally, future research should also examine if a high or low price point of the product category has a moderating effect on consumer purchase decisions.

Finally, while literature on consumer buying decisions and price was not limited, there was an apparent lack of literature juxtaposing variations in price on luxury/non-luxury consumer decision-making. This made it difficult to compare the findings to existing literature to a certain degree of confidence. Future research is recommended to continue this route of investigation to build assurance and research reliability.

6. Applications for Findings

Companies can use this research to understand how to position brands in a competitive market based on the price point of the product category and how the brand is perceived while emphasizing the importance of testing any pricing decisions within a competitive context. It allows a company to consider price increases by understanding what aspects of their brand align with consumer needs or perceptions to decrease customer price sensitivity. It is important for companies to recognize how their brand compares to others and use that to best relay information to target customers towards a purchase and how the brand is advertised so as not to make the consumer daunted by price variations. Prices constantly fluctuate and it is important to see the effects of those changes in price on consumer decisions. The benefit of this research is an indication of what it might look like when consumers compare those price variations and the results of purchases when it does happen. It acts as a simulation of how it would work in real-world scenarios which gives companies the ability to adjust to fit the mold of customer trends.

7. Conclusion

This study provides insights into consumer behavior and price sensitivity in the presence and absence of a luxury/non-luxury competitor and across high and low involvement categories. This study demonstrated that luxury brands can retain consumer willingness to buy with price increases. Price sensitivity and the threshold at which consumers will switch from a non-luxury product to a luxury product could be affected by the price point of the product category. As a result, further investigation is needed to understand if the price point of the product category has a moderating effect on consumers' willingness to buy.

Acknowledgements

Special thanks to Ryan Beaudoin, Wendell Hala and Jessica Minick, teachers at Suffern High School, for the guidance, feedback and support that they provided throughout this research.

Authors' contributions

Ms. Mandel was responsible for the study design and data collection. The analytical plan was jointly developed by both authors. Dr. Griffiths guided and conducted the data analysis and data visualization, while Ms. Mandel summarized the output from the data analysis. Ms. Mandel drafted the manuscript and Dr. Griffiths edited. Both authors read and approved the final manuscript.

Funding

This research was not funded.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of Sciedu Press.

The journal and publisher adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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