



SUSTAINABLE PACKAGING & *Brand Identity*

PART 2: CONSUMER
EDUCATION

 Package InSight



PACKAGING



Consumer Packaged Goods (CPG) and Private Label Retail Packaging are challenged to balance brand messaging with required and or regulated sustainability logos and labels. In the past few years there has been a growing proliferation of sustainability and corporate social responsibility messaging which makes it more difficult for consumers to factor sustainability into their decisions.

Sustainable Packaging and Brand Identity: Part 2 continues to explore the benefits of consumer education and it's influence on the purchase decision.

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The Question

- 1. Are consumer purchase decisions influenced based on sustainability logos and labels?*
- 2. Does educating the consumer about sustainability logos and labels prior to the study increase consumer attention and sales when compared to the same package with no sustainability rating?*

Background

In 2018, Quad packaging and Package InSight conducted a study based on a theoretical rating system logo that was applied to various paperboard packages in multiple product categories that can be found in grocery stores. There were 60 participants in total that had no prior knowledge about the sustainability badge.

According to the eye-tracking technology, **92 percent of the participants did not notice the sustainability logos (Figure 1).**

Our post-study survey found that while sustainability is important to consumers they did not make purchase decisions based on the visual rating system.

With these study results, we concluded that sustainability logos do not make an impact on consumer purchase decisions.

» **Figure 1**
Sustainability Rating Logo Recognition



This led to two firm recommendations:

From this, we developed our second round of the study by focusing on educating the participants before shopping and also introducing the effects national vs faux brands would have on the consumer.

1. Educate consumers on your brand's commitment to sustainability through integrated marketing and reinforce that message by implementing more sustainable packaging methods.
2. Include sustainability messaging in a secondary location on your packaging to unify your overall brand message.



Our Method

Research was conducted by Package InSight LLC, a Member of Clemson University's Sonoco Institute of Packaging Design and Graphics, that studies package performance, consumer attention and shelf impact. Package InSight adheres to a strict methodology that has been published in multiple academic journals, reviewed by blind peer-review processes, and trusted by numerous consumer packaged goods companies. They also incorporate the latest in biometric technology, such as mobile eye-tracking.

Sustainability Rating Logo

In the first study, Quad packaging and Package InSight created a logo with an accompanying grade (Figure 2) that implied how sustainable the packaging was. This logo was applied to multiple product categories found in the grocery store. This stamp is intended to replicate an inspection or grading concept (e.g. local public health department's A-B-C grading of restaurants) and the idea of validation of that grade by a larger objective entity (e.g. Brewers Association Independent Craft Brewer Seal).



» Figure 2
Sustainability Rating Logo

Educational Flyer

Once all participants were divided into groups, one group was given an educational flyer (Figure 3) that contained information about the sustainability logos. The flyer mentions how the Council for Sustainable Packaging has launched a new grading system that is to assist consumers in making

informed decisions when shopping for retail goods. From this, we developed our second round of the study by focusing on educating the participants before shopping and also introducing the effects national vs faux brands would have on the consumer.



Council for Sustainable Packaging

The Council for Sustainable Packaging has recently launched a new grading system to assist consumers in making informed choices when shopping for retail goods. Sustainable Packaging meets the following criteria:

- ◆ Is beneficial, safe, and healthy for individuals and communities throughout its life cycle
- ◆ Meets market criteria for both performance and cost
- ◆ Is sourced, manufactured, transported, and recycled using renewable energy
- ◆ Optimizes the use of renewable or recycled source materials
- ◆ Is manufactured using clean production technologies and best practices
- ◆ Is made from materials that are healthy throughout the life cycle
- ◆ Is physically designed to optimize materials and energy
- ◆ Is effectively recovered and utilized in biological and/or industrial closed loop cycles

Starting in late 2018, the CSP will begin issuing the following grades for consumer goods



As an independent, objective entity, We hope this simple grading system will better inform shoppers who want to mitigate their impact on the environment when buying retail products.

Thank you! Council for Sustainable Packaging

» Figure 3
Educational Flyer



Statistical Relevance

Package InSight conducted in-context, primary research using their state-of-the-art Main St. Retail Laboratory. Researchers created five generic brands and five physical paperboard prototypes of each. They also used five real, national brands

with claims added to their packaging. Each product was inserted into a competitive planogram where participants shopped naturally.

At least 30 participants are needed for an analysis based upon the

normal distribution to be valid (t-test, ANOVA) – it represents a threshold above which the sample size is no longer considered “small.” A total of 99 participants, organized into two groups were used.

ITERATION	PARTICIPANTS	PRODUCT CATEGORY	VARIABLE ON SHELF
Initial Set-Up			
1	1-53	Frozen Food	Real Brand w/ Claim
	1-53	Dry Pasta	Real Brand w/ Claim
	1-53	Snack Food	Real Brand w/ Claim
	1-53	Multi-Pack Bev	Real Brand w/ Claim
	1-53	Health / Beauty	Real Brand w/ Claim
2	54-99	Frozen Food	Faux Brand / Educated
	54-99	Dry Pasta	Faux Brand / Educated
	54-99	Snack Food	Faux Brand / Educated
	54-99	Multi-Pack Bev	Faux Brand / Educated
	54-99	Health/Beauty	Faux Brand / Educated

Package Design

» Figure 4
Sustainability Bell Curve



The categories chosen for this study were selected from the middle of the sustainability bell curve (Figure 4). We intentionally stayed away from markets that are typically believed to be more sustainable – such as organics or cleaning supplies – and those on the far end of the spectrum – like tobacco. The market categories chosen include frozen food, pasta, beverage, snack, and medical supplies.(Figure 5)



Project Set-Up

» Figure 5
Frozen Food, Pasta, Beverage,
Snack and Medical Supplies

The study included a total of 99 participants who were separated into two groups – group C and group D. For both groups, the retail shop contained 5 products with a sustainability logo. Group C was not presented the flyer beforehand and therefore was the uneducated group. Group C only saw real brands with the sustainability logo. Group D was the educated group since they were given the flyer prior to shopping. They only saw faux brands with the logo. A salt and pepper approach to variable testing on the shelf allowed us to efficiently test each claim against a baseline with 99 participants.

Eye-Tracking Technology



Eye-tracking is a term describing the techniques used to measure a person's point of gaze, providing insight into what draws in an observer's attention and cognitive processes. The technology follows the eye of the subject, tracking their exact eye movements while looking at an object or area, and identifying precisely where a person looks. The data is recorded at 50 times per second; this study generated over 800,000 data points from 99 participants shopping

four minutes each, that was then aggregated in our analyzer software to draw relevant conclusions.

Eye-tracking is so important because 90 percent of consumers will make their purchase decision after only looking at the front of the package, and 85 percent of these consumers will purchase an item without having picked up any alternative products. People buy with their eyes, indicating that the visual stimuli present

at the point of sale will influence the consumer's decision to purchase. Even though the subject may not be aware of how their gaze moves about and focuses on different areas, a researcher can collect eye-tracking information and form opinions about different areas of interest on an object – specifically, a package. Packaging designers may aggregate data to show which areas of the package attract the most attention and, equally as important, where attention is void.

In order to differentiate and maintain relevancy with market demands, designers and product developers leverage eye-tracking to observe and analyze how consumers shop within the grocery store.

The metrics below will be referenced in these research findings:

Purchase Decision (PD)

- Measures how many participants chose to buy the item. **The higher the number, the better the package performed.**

Total Fixation Duration (TFD)

- The time, in seconds, spent on average by participants fixating on this item. **The higher the number, the better the package performed.**

Time To First Fixation (TTFF)

- The time, in seconds, from when a product first enters a participant's field of view until they fixate on it. **The lower the number, the better the package performed.**

Fixation Count (FC)

- The total number of times a participant's scan of the planogram crossed into a particular area of interest.

Variables Tested

“ To rule out lack of brand recognition as having a negative effect on badge recognition in part one of the study, we applied the thinking to national brand packaged goods. ”



The inclusion of a visual element that appears to be a package sustainability rating will increase consumer attention and sales when compared to the same package with no sustainability rating. This thinking was applied to national brands, compared to only faux brands in part one of the study (Figure 6).

» Figure 6
National Brands vs. Faux Brands



» Single serve frozen dinner



» Dry Pasta



» Sparkling Water (12oz can)



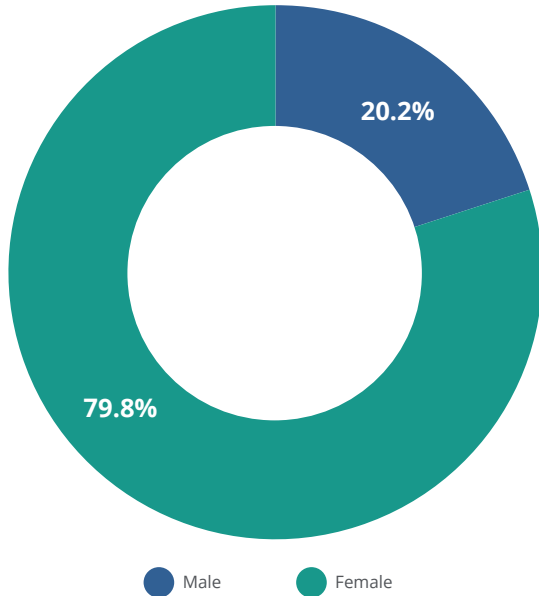
» Snack Crackers



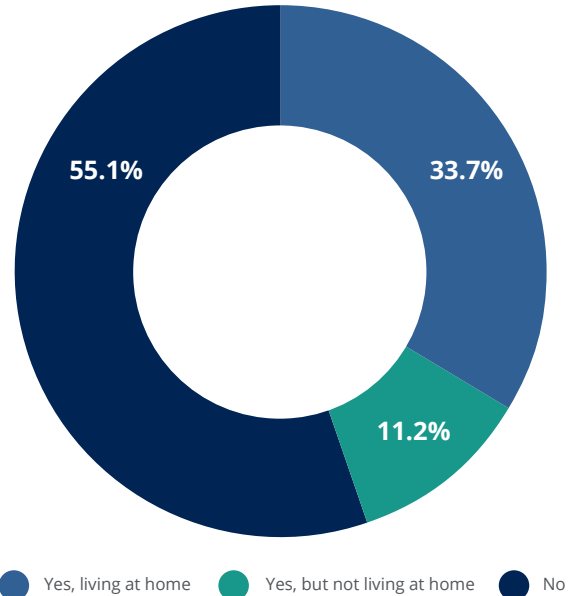
» Medical

» Figure 7

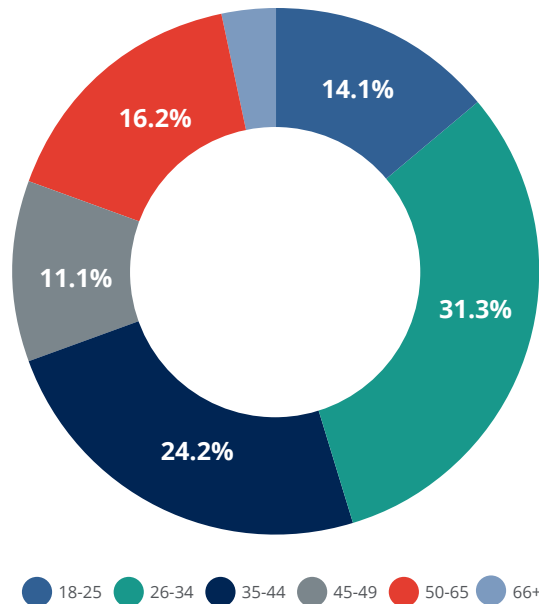
» GENDER



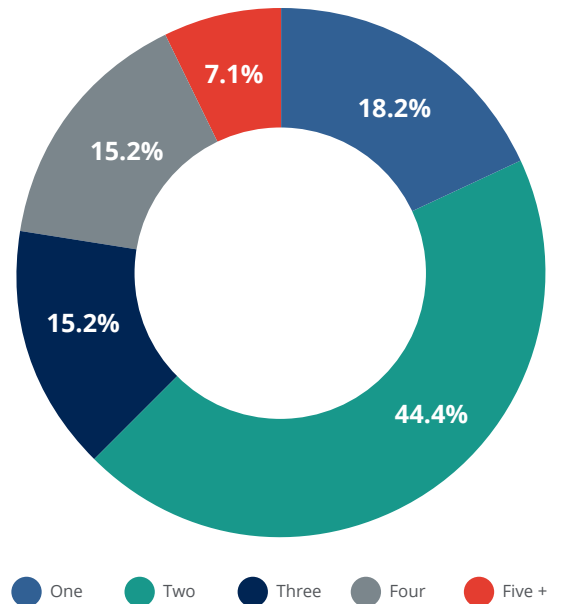
» CHILDREN



» AGE



» HOUSEHOLD SIZE

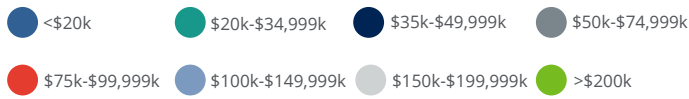
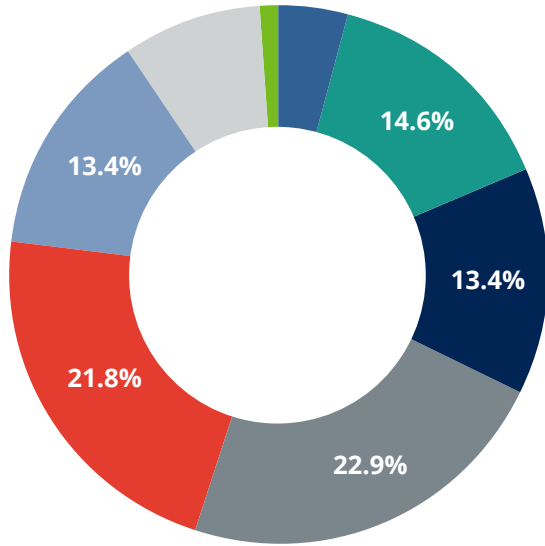


Demographics

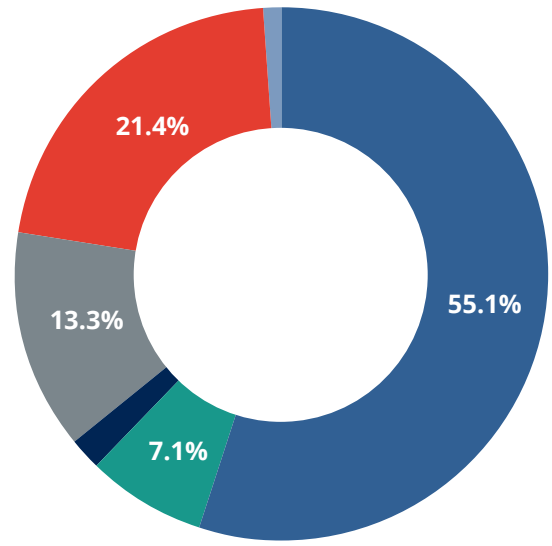
Participants were screened based on age and shopping habits. The profiles meet an accepted shopper profile for this biometric research for primary or shared shopping responsibility for a U.S. household (70/30 : female/male and broad income, education, employment, age, and other household influences). (Figure 7, 8)

» Figure 8

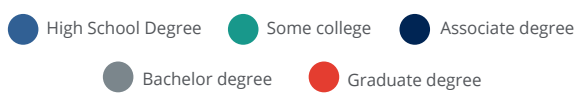
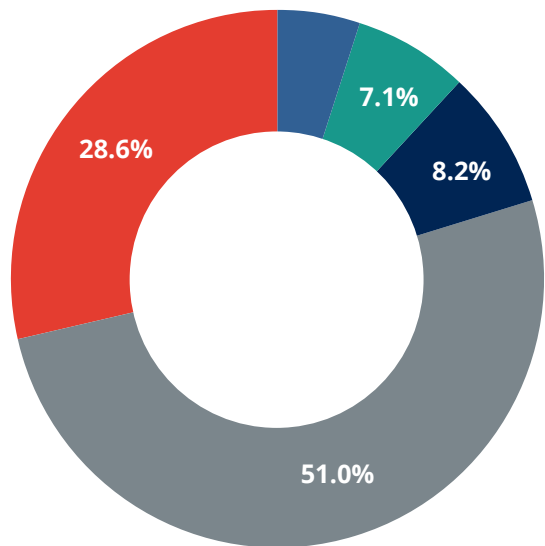
» INCOME



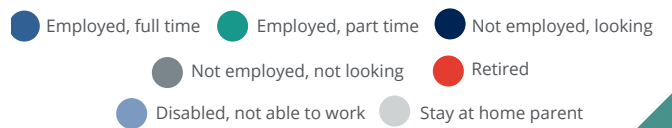
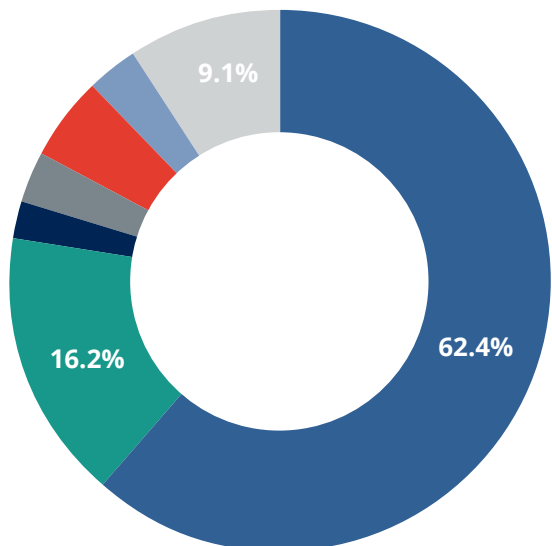
» RELATIONSHIP



» EDUCATION

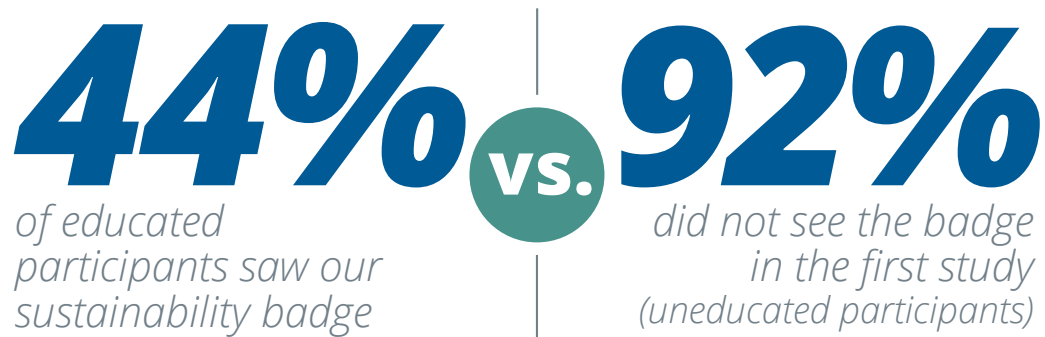


» EMPLOYMENT




Findings

Our study found that educating the consumer about the rating system does have an influence on their buying decision. This resulted in a 50 percent increase in purchases and a **44 percent increase in the badge being seen by the educated group.** Compared to 92 percent of the participants not seeing the badge in the first study, this represents a significant jump in awareness due to education.



The majority of the participants from group C claimed that a simple rating system that helps identify more sustainable packaging would affect their purchasing decision. However, group D had the highest percentage of participants who responded that it might influence their purchasing decision.

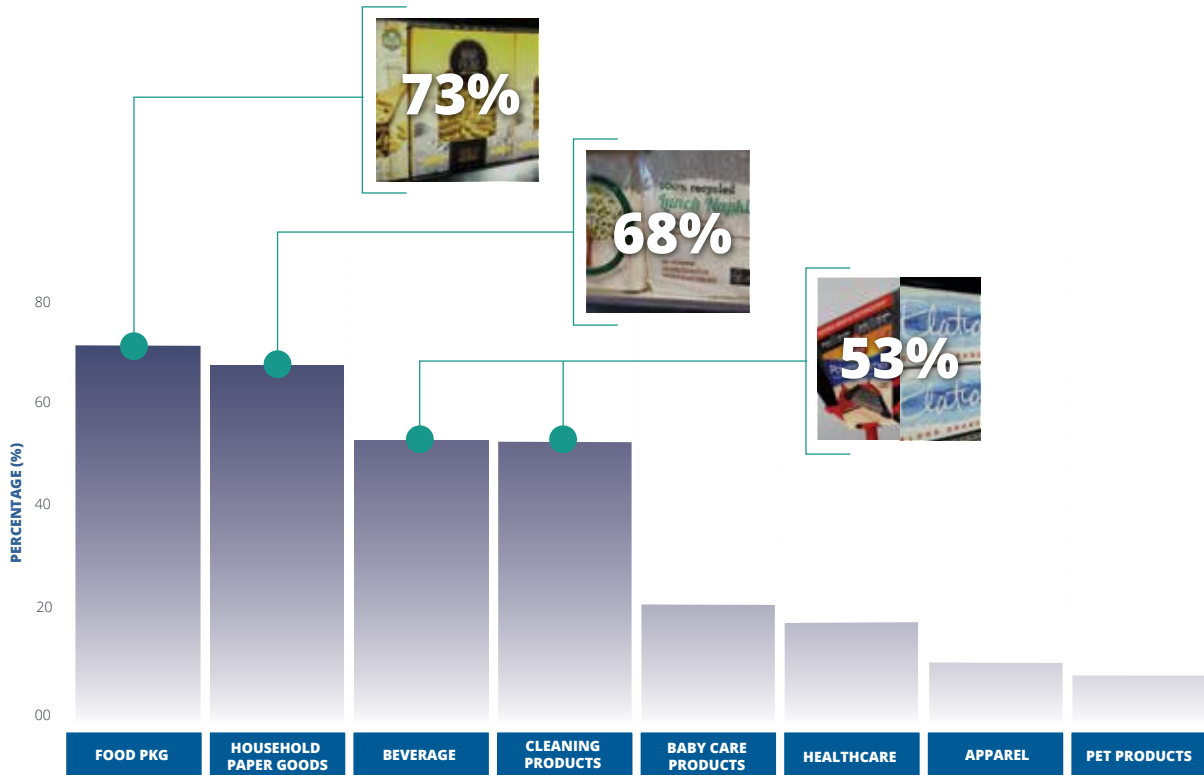
The result of the purchase decisions shows food and beverage categories did have more logo SKUs purchased, however according to eye-tracking technology, there was little correlation with the logos. (Figure 9)



“ It would depend if all companies were in or not, only a few packages rated poorly may not influence me but a good rating may encourage me, if all products were rated then it would definitely influence my purchasing. ”

» **Figure 9**
 Are there certain markets that make you think more about sustainable packaging?

“ Sometimes you’re more apt to think about the environmental impact a product has if the rating is not high. ”



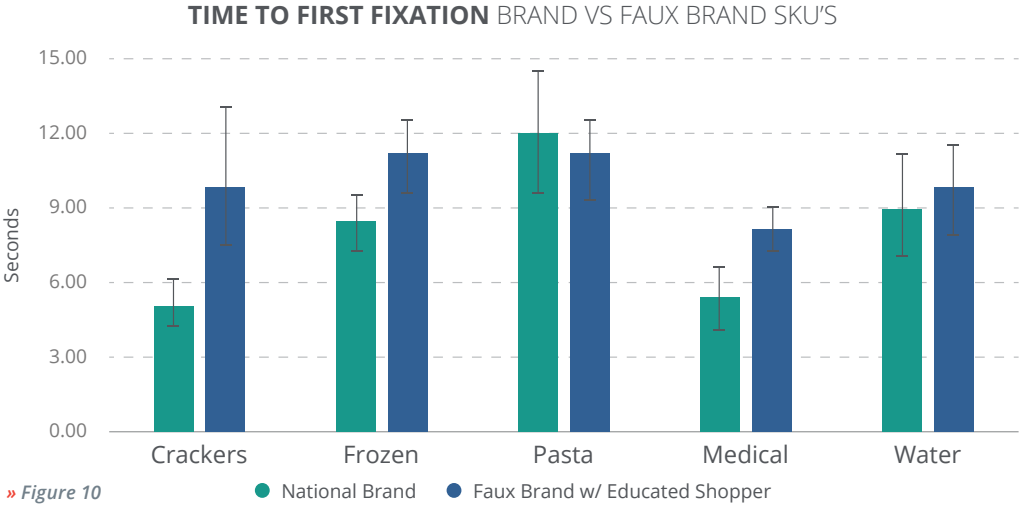
The two G-rated products were purchased least often by the educated groups.

Compared to the first study, there was a slight change in which categories the participants thought more about sustainability.

- **Food Packaging – 73%**
- **Household Paper Goods – 68%**
- **Cleaning Products and Beverages – 53%**

Time to First Fixation

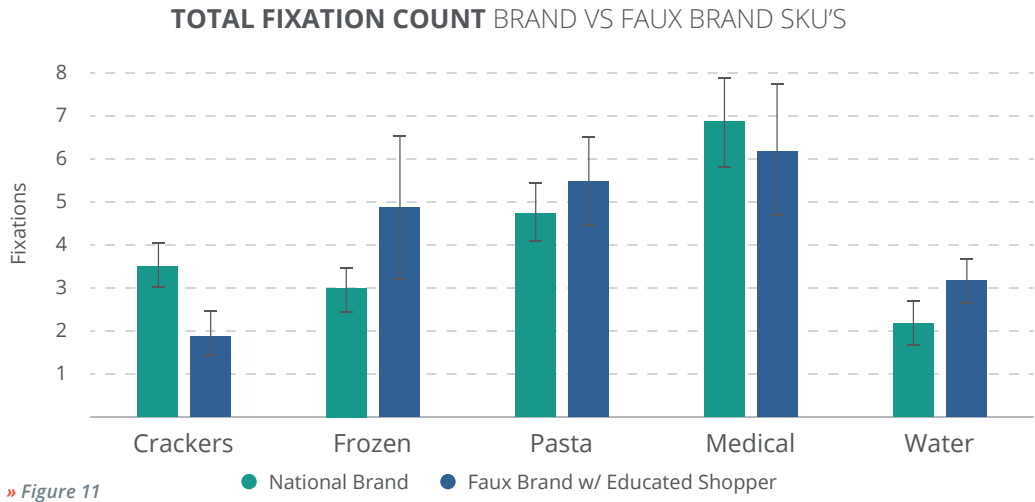
NATIONAL BRAND VS. FAUX BRAND W / EDUCATED SHOPPER SKU'S



None of the faux brand items were noticed significantly quicker than the national brands for any of the groups.

Fixation Count

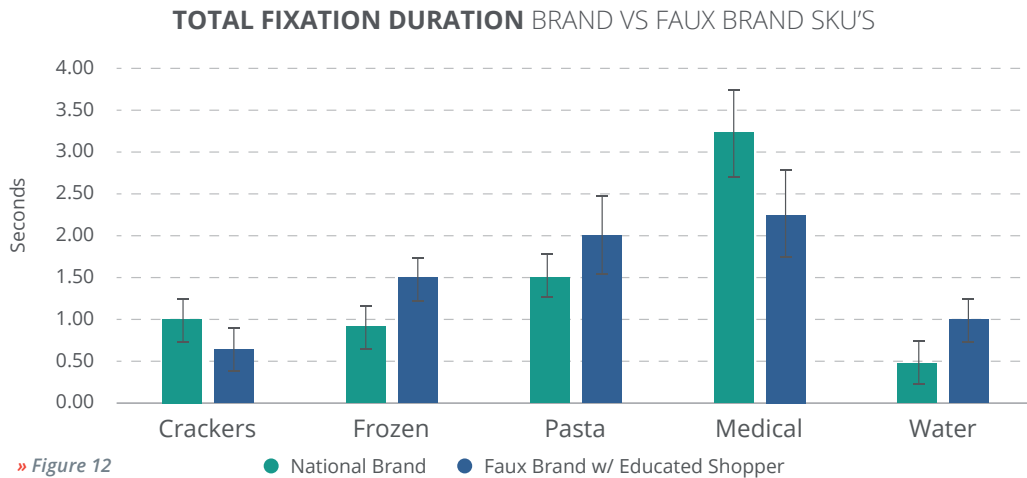
NATIONAL BRAND VS. FAUX BRAND W / EDUCATED SHOPPER SKU'S



The frozen faux brand had a significant higher fixation count compared to its national brand counterpart.

Total Fixation Duration

NATIONAL BRAND VS. FAUX BRAND W / EDUCATED SHOPPER SKU'S



The Frozen, Water, and Pasta Faux brands outperformed the National brands for Total Fixation Duration, with the Frozen package and Water performing significantly higher.

These two SKUs were also purchased more often than their counterparts in any of the other iterations.

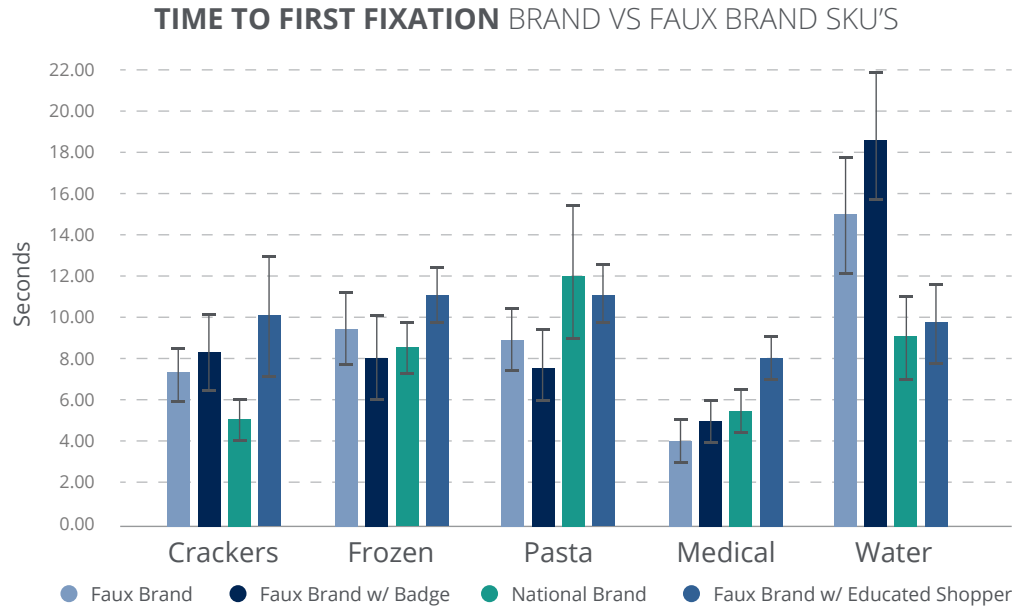


Take a look at the
4 - ITERATION COMPARISONS



Time to First Fixation

NATIONAL BRAND VS. FAUX BRAND W / EDUCATED SHOPPER SKU'S

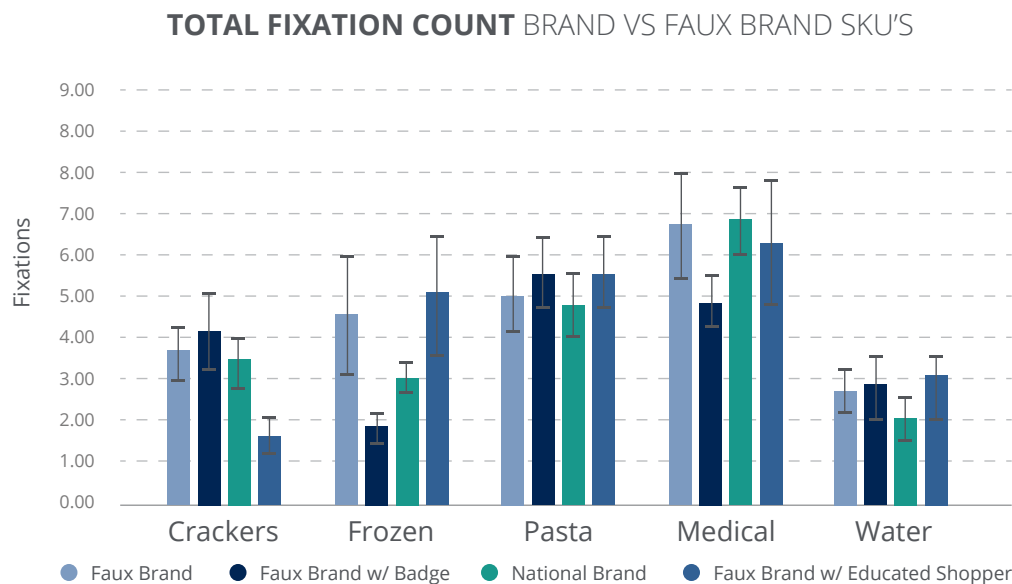


» Figure 13

The educated shoppers looked at the faux water brand significantly quicker than the uneducated shoppers.

Fixation Count

NATIONAL BRAND VS. FAUX BRAND W / EDUCATED SHOPPER SKU'S

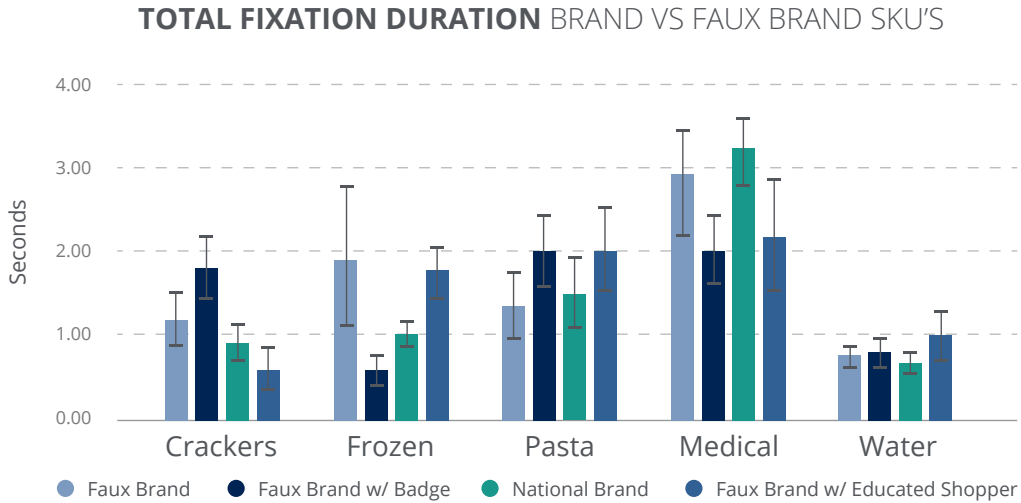


» Figure 14

While the medical and pasta faux brands performed significantly higher, the water brands underperformed.

Total Fixation Duration

NATIONAL BRAND VS. FAUX BRAND W / EDUCATED SHOPPER SKU'S



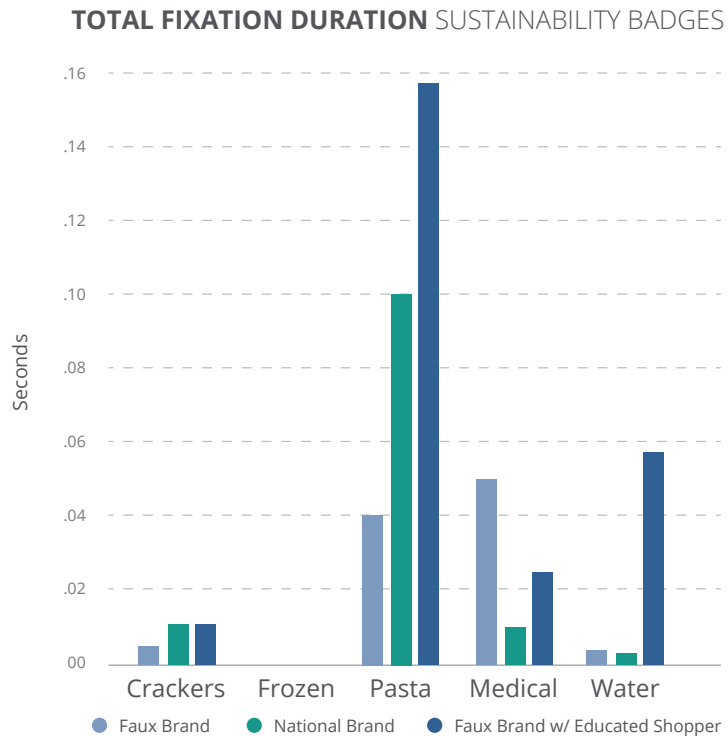
» Figure 15

No significant differences between the national and faux brands were detected between the educated and uneducated shoppers.

Total Fixation Duration

SUSTAINABILITY BADGES

The pasta and water faux brands were noticed more by the educated shoppers. Interestingly, the pasta and water faux brands were C-rated and had the lowest purchases by the educated shoppers.



» Figure 16



Post-Study Survey

RESPONSES FROM
STUDY PARTICIPANTS

Can you think of a more
effective way to promote
and educate the public
about ***sustainability and***
packaging?

“ For me to notice something different about packaging, I would need to be educated beforehand. Possibly through video, Facebook, mass mailings, etc. ”

“ Most people don't know what the definition of sustainability and packaging means. They need you to tell them what that means on the package. Most people will not take the time to look it up. ”



If there was a clear, simple rating system to identify more sustainable packaging, do you think it would affect your purchase decisions?

“ I think a rating system could help, but it may be difficult to get companies to put it on their packaging, especially companies which do not practice sustainable packaging. It would also be important to clearly define what each rating means to consumers and how a product can earn each rating. ”



Recommendation

Based on our study results, we recommend...

- 1. Continue to educate consumers via social media and other channels about sustainability, while focusing on the package messaging.*
- 2. Implement benefits for consumers to recycle their products I.e. brand loyalty programs, coupons, social media recognition, etc.*

Continuing the Conversation

Many of the study's participants also noted standardization of the rating system should be marketed – a consistency that goes across an entire company, and someday, possibly across all industries. Consumers

are aware that marketing and packaging can be misleading; they're jaded and suspect of claims found on packaging and how unregulated and inconsistent it can be. One student said that they don't believe everything, especially

marketing material. A poll from the University of Texas, Austin that found 36 percent of those surveyed do not believe claims from companies that state they are trying to "save energy" or "be energy efficient."



Questions

1. *Do consumers assume all packaging is an A rating?*
2. *How would an educated consumer perception change of a brand if a product went from an A-rating to a C-rating?*
3. *Would consumers notice the badges more if an entire product category were to have badges?*

Report produced by



PACKAGING

in conjunction with


Package InSight

The logo features a stylized eye icon above the text. The eye is composed of a thin orange outline and a solid black pupil. The text 'Package InSight' is in a clean, sans-serif font, with 'Package' in black, 'In' in orange, and 'Sight' in black.