



THE EFFECTS OF CLEAN BEAUTY LABELS ON CUSTOMER PURCHASE BEHAVIOR AT SEPHORA

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INTRODUCTION

- Significant shift towards "clean beauty"
- Effective Labeling: non-toxic ingredients, environmental safety, cruelty-free testing, & business-to-consumer transparency
- An oversaturated market, challenge for 'Merit'
- Communicating Brand Values through Product labeling
- Examine the impact of clean beauty labels on sales behavior for Merit products at Sephora



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RESEARCH GOAL

This study addresses research gaps by analyzing actual consumer behavior across different age groups using a large sample size, quantitative methods, and specific clean beauty market

The primary research goal is to analyze the impact of clean beauty labels ("non-toxic" and "sustainable packaging") on the average sales rates of Merit beauty products among different age groups of Sephora users and to explore the relationship between click-through rates and sales behavior for these labeled products

RESEARCH PROBLEM

Do clean beauty labels ("non-toxic" and "sustainable packaging") increase the average rate of sales for Merit beauty products among Sephora users compared to non-labeled products?

Which age group of Sephora users is more likely to purchase clean beauty products labeled as "non-toxic" or "sustainable packaging" compared to non-labeled products?

Is there a relationship between click-through rates and sales behavior for beauty products with clean beauty labels ("non-toxic" or "sustainable packaging") compared to non-labeled products?

METHODOLOGY

Population: Sephora email newsletter subscribers aged 16-60, divided into Gen Z (16-24), Millennials (25-40), and Gen X (41-60)

Sample Selection: Random selection from Sephora rewards customer databases, with equal numbers from each age group

Email Labels: Three distinct email types - "no label", "non-toxic", and "sustainable packaging" - sent to each age group

Inclusion Criteria: Sephora rewards program membership and qualifying age group, without spending tier restrictions to avoid bias

Calculated Sample Size: 450 customers total, equally divided among age groups and email treatments, exceeding the minimum required for all research questions (324 for RQ1, 108 for RQ2, 32 for RQ3)

OPERATIONAL PROCEDURE

Randomly select 450 Sephora rewards program subscribers, ensuring equal representation across Gen Z, Millennials, and Gen X (150 each)

Assign participants to three advertisement groups using a randomized protocol

Develop three distinct email advertisements - control (no label), "Non-Toxic Ingredients" label, and "Sustainable Packaging" label. Distribute these via targeted emails using the Sephora Beauty Insider database

Monitor, Record and Analyse:

- Weeks 1-2: Participant selection, email campaign launch, and behavior tracking
- Week 3: Data cleaning, categorization, and statistical analysis (T-tests, Chi-square tests, Regression models)

STATISTICAL ANALYSIS PLAN

Sample size of 450 customers, with 80% power. Effect sizes: 15% sales increase for RQ1, 25% increase in purchase likelihood for RQ3. RQ1 requires 324 customers (162 per group), RQ2 requires 108 customers (chi-square test with 2 degrees of freedom), and RQ3 requires 32 customers (pwr.f2.test with 1 predictor)

- Two-sample t-test for comparing mean sales rates between clean-labeled and unlabeled products (RQ1), with $H_0: \mu_{\text{clean labels}} = \mu_{\text{non-labeled}}$ and $H_a: \mu_{\text{clean labels}} > \mu_{\text{non-labeled}}$
- Chi-square test of independence to assess the association between age groups and purchase behavior for clean-labeled versus unlabeled products (RQ2), with $H_0: \mu_{\text{Age Group 1}} = \mu_{\text{Age Group 2}} = \mu_{\text{Age Group 3}}$ and $H_a: \text{At least one } \mu_{\text{Age Group}} \text{ differs}$
- Regression analysis to examine the linear relationship between click-through rates and sales for clean-labeled products (RQ3)

KEY FINDINGS

Research Question 1:

- Clean labeled products - Increased average rate of sales
- Incorporate clean beauty labels into more Merit products and marketing campaigns

Research Question 2:

- Gen Z & Millennials - more likely to purchase clean beauty products with "non-toxic" or "sustainable packaging" labels compared to Gen X
- Tailor marketing strategies to target Gen Z and Millennial consumers

Research Question 3:

- Clean Beauty Labels: Positive relationship between click-through rates and sales behavior
- Invest more in email marketing campaigns to achieve higher click-through rates

CTR as a *Key Metric* for marketing campaigns assessments and use of CTR

REAL-LIFE IMPLEMENTATION

- This strategy represents a low-cost, relatively easy strategy to implement that potentially has large positive effects on CTR and sales.
- Data-driven decision making allows us to allocate our resources in the most efficient way and discover potential opportunities.
- It also allows us to create tailored marketing strategies by studying customer behavior, for example in this case through the significant differences we found between age groups.
- This labeling strategy can strengthen Merit's brand positioning and present a competitive advantage, which in turn can increase customer engagement and sales.
- These findings also represent scalable insights for the rest of the industry.
- Increased motivation towards clean beauty can create a positive environmental impact and also a positive human health impact.



THANK YOU