A Study on the Usage of Hair Styling Products Across Genders

Jani Karishma

Abstract: This study focuses on the Usage of Hair Styling Products across Genders. It takes into consideration how often women and men use hair styling products. The data was collected through the online survey, through google forms and the data is restricted to Mumbai suburban area only. The research was conducted statistically by using the tests of proportionality and Chi Square

Introduction

In today’s world, both men and women give equal preference and importance to grooming. Hair styling products are used when the need arises to change the texture or shape of the hair. Hair Styling makes important statement about how you see yourself internally & externally. The styling of hair can be considered as an aspect of personal grooming, fashion & cosmetics. People have worn their hair in a wide variety of styles, largely determined by the fashions of the culture they live in. Hairstyles are markers and signifiers of social class, age, marital status, racial identification, political beliefs and attitudes about gender. Different types of hairstyling products include hair gel, hair mousse, hair spray, hair volumizer etc. There are various hairstyling tools namely hair irons, hair dryers, hairbrushes, hair rollers, diffusers and various types of scissors. The study was conducted to find the usage of Hair Styling Products across genders.

Literature Review

“Hair styling covers a wide range of product categories, forms, and styles as well as information on its use and application. These products can be used on wet or dry hair. They can be used at almost any point in a hair care regimen: to start a hair style, to refresh or change a hair style, and to hold (fix) a hair style.

Hair styling and styling techniques cover a wide range of applications to varied hair textures, involving styling manipulations/techniques. Hair textures are manifested in degrees of damage, cross-sectional diameters of the hair shaft, and density of hair in number of hairs per square inch. Hair damage is caused by a variety of methods including perms, bleaches, colors, relaxers, chlorine, solar energy, and mechanical action (brushing, pulling, etc.) Damaged hair is usually rough to the touch and difficult to comb, producing tangles.
Therefore, styling products must be delivered in a form that will allow distribution of the product throughout the hair. For instance, the physical form of the formula's ingredients may change based on the level of damage that is present. The rougher the hair, the smoother, creamier, or more detangling the product will need to be. The fineness of the individual fibers may require lighter formulas as well as formulas that offer increased body potential. A high density of the hair on the head may require extra detangling to allow easier combing. The final hair style and styling techniques will determine the type and level of ingredients in the styling products. A flat, smooth, and soft style may use a low amount of resins and a high level of softening. A blow-dry hair style may require higher levels of antistatic ingredients to minimize static buildup during rapid and repeated brushing during blow drying with high-temperature, low-humidity air. In today's changing market, the styling product is sometimes relied on to perform the entire job of maintaining the style. In some soft, flowable, and touchable hair styles that may be shampooed and restyled daily, styling aids are thus used alone without the aid of a spray to hold the hair in place.”(Joseph A.Dallal and Collen M Rocafort)

Research Objective

To Study the Usage of Hair-Styling Product towards across Genders.

Research Methodology

The research was conducted using various variables: demographic variables and independent variables

Demographic variables:
Variables such as age, gender, income, qualifications, occupation, and number of family members were used.

Independent variables:
After the initial secondary data search a primary survey was conducted. It was an online survey and the survey instrument used was questionnaire sent out through Google forms. The questionnaire was sent out to 80 people in all out of which 63 were respondents.
The date collected was statistically analyzed by using proportions and dependency such as P Tests and Chi Squared Tests respectively.

Proposed Hypothesis

1. Less than 25% of women use hair-styling products on a monthly basis
   - H₀: More than /Equal to 25% of women use hair-styling products on a monthly basis
   - Hₐ: Less than 25% of women use hair-styling products on a monthly basis

2. Hair-styling product use is independent of Gender
   - H₀: Hair-styling product use is independent of gender
• Ha: Hair-styling product use is not independent of gender

3. More than 60% of men use hair-styling products on a monthly basis

  • H₀: Less than/Equal to 60% of men use hair-styling products on monthly basis
  • Ha: More than 60% of men use hair-styling products on monthly basis

Descriptive Statistics

In terms of gender the proportion of male is greater than that of females, which means data is biased towards females. Considering the age-group chart, 70% of the respondent lies between the age group of 20-30 whereas 2% of the respondent lies between age-group of 10-20 years

The study shows the Income level and Qualification of the respondents. From the above chart we conclude that major respondents are having degree of graduation so their income level is ranging from 0-2.5 lacs which means they would be spending less on hair styling products as they would have just started working in corporates, whereas for respondents whose income level is ranging from 7.5-10 lacs states that they would be spending more on their hair styling products which may or may not be same which are used by 0-2.5 lacs. They would prefer buying more expensive products as they want to be more confident, presentable at their work place, for grooming purpose.
**Hypothesis 1**: Less than 25% of women use hair-styling products on a monthly basis

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Female</th>
<th>Male</th>
<th>Grand Total</th>
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<tbody>
<tr>
<td>annually</td>
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<td>6</td>
<td>29.00</td>
</tr>
<tr>
<td>monthly</td>
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<td>9</td>
<td>17.00</td>
</tr>
<tr>
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<td>12</td>
<td>5</td>
<td>17.00</td>
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<tr>
<td>Grand Total</td>
<td>43</td>
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<tr>
<th>p'</th>
<th>p</th>
<th>q</th>
<th>n</th>
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<th>p'-p</th>
<th>sqrt((p*q)/n)</th>
<th>p'-p/sqrt((p*q)/n)</th>
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<tr>
<td>0.13</td>
<td>0.25</td>
<td>0.75</td>
<td>43</td>
<td>0.19</td>
<td>(0.12)</td>
<td>0.07</td>
<td>(1.82)</td>
</tr>
</tbody>
</table>

Null Hypothesis: $H_0: p \geq 25\%$

Alternative Hypothesis: $H_a: p < 25\%$

Tail: Left Tail

Type of Test: $P$ Test

Alpha: 0.05

Probability: 0.05

Critical Value: (1.64)

Observed Value: (1.82)

$Z_o = 1.82$, $Z_c = 1.64$

P value: 0.03

Alpha: 0.05

P value is less than Alpha, reject the null hypothesis.

The above hypothesis proves that less than 25% of women use hair-styling products on a monthly basis. The reason could be women may feel that styling might damage their hair, other reason could be, it is time-consuming as some would not prefer going to salon and spending their time, thirdly women may be buying large pack size of the product so would prefer buying one time in 3 months.
Hypothesis 2: Hair-styling product use is independent of Gender

<table>
<thead>
<tr>
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<th>Proportion</th>
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<tr>
<td>Grand Total</td>
<td>43</td>
<td>20</td>
<td>63</td>
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<table>
<thead>
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<th>Male</th>
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<tr>
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<td>11.60</td>
<td>5.40</td>
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<table>
<thead>
<tr>
<th>(Fo-Fe)^2/Fe</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
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<tr>
<td>annually</td>
<td>0.52</td>
<td>1.12</td>
<td>1.64</td>
</tr>
<tr>
<td>monthly</td>
<td>1.12</td>
<td>2.41</td>
<td>3.52</td>
</tr>
<tr>
<td>never</td>
<td>0.01</td>
<td>0.03</td>
<td>0.04</td>
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<tr>
<td>Grand Total</td>
<td>1.65</td>
<td>3.55</td>
<td>5.20</td>
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</table>

Null  
H₀: Hair-Styling product use is independent of Gender  
Ha: Hair-Styling product use is not independent of Gender  
Tail  
Right Test  
Test  
Chi Square Test  
Alpha  
0.05  
Probability  
0.05  
Critical value  
9.49  
Df=(r-1)*(c-1)  
4  
Observed value  
5.20  
P value  
0.07  
Alpha  
0.05  
D-PLATR  
P value is greater than Alpha, fail to reject the null

From the above hypothesis we conclude that the use of Hair Styling Product is independent of gender, as both male and female are becoming conscious towards their grooming habits.
Hypothesis 3: More than 25% of men use hair-styling products on a monthly basis

<table>
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<td>9</td>
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</tr>
<tr>
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<td>12</td>
<td>5</td>
<td>17.00</td>
</tr>
<tr>
<td>Grand Total</td>
<td>43</td>
<td>20</td>
<td>63.00</td>
</tr>
</tbody>
</table>

\[
p' = \frac{p}{q} = \sqrt{\frac{p \cdot q}{n}}
\]

\[
p' - p = \frac{p}{q} - p
\]

\[
0.45 \quad 0.25 \quad 0.75 \quad 20 \quad 0.20 \quad 0.10 \quad 2.07
\]

Null Hypothesis: \( H_0: p \leq 25\% \)
Alternative Hypothesis: \( H_a: p > 25\% \)
Tail: Right Tail

Test: \( P \) Test
Alpha: 0.05
Probability: 0.95

Critical Value: 1.64
Observed Value: 2.07

\( P \) value: 0.02

Alpha: 0.05
D-PLATR: \( P \) value is less than Alpha, Reject the Null

This hypothesis proves that more than 25% of the men use hairstyling products on a monthly basis because men might be using hair gel or other styling products on regular basis as quality of their hair would be rough. Companies should target on such consumers and hence should increase the pack size of the product.
Conclusion:

From this research we conclude that men are spending more on their hair styling products than female, but the reverse may or may not be true as the data was collected mainly from students focusing on the age-group of 20-30 years whose income level lies between 0-2.5 lacs, so their expenditure on these products may be minimal. Further we also proved that use of hair styling product is independent of gender as both women & men are giving equal importance when it comes to grooming themselves, to be more presentable, confident when it comes to their appearance.

Limitations:

- The data is limited to Mumbai Suburban area
- Female biased as there are large number of female respondents who participated in the research
- Majority of the respondents were between the age-group of 20-30 years

References


https://books.google.co.in/books?hl=en&lr=&id=9-ljWuN4PBsC&oi=fnd&pg=PR3&dq=research+paper+on+hair+styling+products+pdf&ots=xQtZlIPKiY&sig=kxPQ_5v12-x5WIQ7iuLQi1D6RCo#v=onepage&q&f=false

https://www.google.co.in/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=research+on+hair+styling+products