



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

International Journal of Current Research
Vol. 15, Issue, 05, pp.24747-24761, May, 2023
DOI: <https://doi.org/10.24941/ijcr.45379.05.2023>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

RESEARCH ARTICLE

SHOOTING FOR THE STARS: COMPETITIVE BENCHMARKING OF HAIR OIL BRANDS, USING KEYWORD ANALYSIS OF ONLINE CONSUMER REVIEWS

*Dr. Aditi Acharya

Assistant Professor, Commerce Department, St. Thomas College, Bhilai

ARTICLE INFO

Article History:

Received 05th February, 2023
Received in revised form
14th March, 2023
Accepted 29th April, 2023
Published online 30th May, 2023

Key words:

Amazon, Ratings, Reviews,
Word Clouds, Hair Oils.

*Corresponding Author:
Dr. Aditi Acharya

Copyright©2023, Aditi Acharya. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Dr. Aditi Acharya. 2023. "Shooting for the stars: competitive benchmarking of hair oil brands, using keyword analysis of online consumer reviews". *International Journal of Current Research*, 15, (05), 24747-24761.

ABSTRACT

Background: The research underlying this paper intended to identify the drivers of product satisfaction of Indian customers towards six hair oil brands that they purchased from the Amazon website. The study was based on customer feedback posted on the site in the form of product ratings and reviews. **Methods:** A comparison of customer reviews was done using the word cloud approach to identify key themes of feedback and drivers behind the high or low ratings. The analysis was augmented by comparing the distribution and trends of star ratings across products. **Results:** On the whole, customer feedback on the purchase, usage and experience of the product was found to have received positive traction for every brand. Perception towards the product's composition and customer experience emerged to be the two crucial factors that influenced the nature of reviews-pure/natural ingredients and good usage experience were emphasized in positive reviews, while adulteration and hair fall problem featured more in the negative ones. **Conclusion:** Insights drawn from specific themes highlighted in product reviews (of their own product and those of their competitors) can help each brand to make necessary modifications in their marketing strategies.

INTRODUCTION

To understand customers, marketers need to understand their needs and opinions. Free-form product review fields in form of comments, recommendations and feedback give more scope to customers to express their opinion, as compared to survey questions. Potential customers consider these reviews as a reliable source of information and use them to confirm that the purchase is worth their spend. There are specific sites that collect customer reviews like Google reviews, Facebook and Yelp, along with e-commerce portals for goods and services like Amazon, eBay, TripAdvisor (travel), Zomato (restaurants and food), G2 crowd (software) etc. High star ratings and greater number of positive reviews build credibility for a company, as they indicate customers' trust in their products/services. They not only help identify the problem areas but also give an accurate idea of what matters the most to the customers. Organizations can then capitalize on the available opportunities by customising and improving their offerings to suit customers' needs. Insights from consumer reviews can be turned into product-related strategies, thereby converting customers into buyers and later loyal customers. Through review analysis, a company can formulate its growth strategy, decide the direction of the product roadmap, enable product differentiation, find if the product is the right fit for the market, drive higher customer acquisition and retention, and chalk out marketing campaigns. Methods used for review analysis include sentiment analysis (detect the positive/negative sentiment in the text), keyword analysis (check for occurrences of specific words in the text) and topic analysis (extract meaning from text by finding repeating themes/topics). The June 2022 report of IBEF (India Brand Equity Foundation) listed online shopping to be the most likely channel for 72% of Indian consumers. The contributing factors were found to be easy accessibility of online retail stores, changing lifestyles, and growing penetration, literacy and usage of the internet. FMCG (Fast Moving Consumer Goods) was ranked as the fourth largest industry in India with a strong projected growth rate. The household and personal care segment took up half of the market share in this sector. The paper focuses on product reviews of customers in the hair care subsegment under the segment of household and personal care and especially hair oils. The reason behind the choice of the product type was that it is used by people throughout the year irrespective of their ages, gender, income level etc. The routine usage won't restrict the purchase to some particular time of the year, and also being a convenience good it is more likely to be used by more than one member of a family. This ensures a sufficiently broad set of opinions getting captured through consumer reviews, helping identify all key drivers of satisfaction with the purchase and the product.

LITERATURE REVIEW

Previous studies analysing online customer reviews can be grouped into two major categories- review factors and reviewer factors. The most common review factor was that of valence. Star ratings of a product were found to have a direct relationship with the attitudes of the customers towards it and their purchase intention (Kim *et al.* 2017; Naidoo and Hollebeck 2016). Although positive reviews were more common, they were not perceived as more reliable by customers (Chevalier and Mayzlin 2006; Bosman *et al.* 2013). The likelihood of the reviewer recommending the product to a friend had a positive relationship with the probability of purchase, but the review length had an inverted U relationship with it (Kim *et al.* 2017). The helpfulness of the review was also more prominent in the case of negative reviews (Kim *et al.* 2017). Reviews having pictures with them were found to be a significant predictor of sales (Hou *et al.* 2017). Factors related to reviewers had a close relationship with source credibility and the perception of readers regarding products and reviews (O'Keefe 2016; Liu and Park 2015). The probability of purchase by the readers was positively affected when the terms "verified purchase" was displayed along with the review (Kim *et al.*, 2017). The readers perceived the use of a mobile device for posting reviews as more accurate and conveyed higher purchase intentions (Grewal and Stephen, 2016).

Aggregated information given on the review page has also been studied by the researchers. Such information generally includes average star ratings, the number of reviews, benefits and shortcomings mentioned by the reviewers, reviewers recommending a product to a friend etc. A product's higher average star rating had a favourable impact on the purchase intention and actual purchases (Chen 2008; Kim and Salehan 2015). However extreme reviews were found to be less useful than moderate ones and the highest purchase probability was seen around the rating of 4.2 stars (Mudambi and Schuff 2010; Maslowska *et al.* 2017a). The number of customer reviews had a positive effect on sales of products and services (Bazaarvoice 2015; Askalidis and Malthouse 2016; Duan *et al.* 2008a; Liu 2006). One-sided reviews were found to be more helpful and persuasive (Schlosser 2011).

The effect of average star rating on purchase probability is the strongest when the number of reviews is more, they are read by customers and the product is expensive. Webcare was also explored in some studies wherein the companies responded online to the customers' complaints with/without request. The type of strategy used by the companies to deal with the complaints and the platform used did impact the customers' evaluations. The public apology made by the company positively affected the readers of negative comments but not the ones who wrote them (Kim *et al.* 2016). Figurative writing if used in reviews was found to be influential only for hedonic products (Kronrod and Danziger 2013). The quality of the argument in the review text in terms of informativeness and persuasiveness did have a significant impact on purchase intention (Zhang, Zhao, Cheung and Lee, 2014). The impact of online customer reviews on channel dynamics was studied using the game theory model and it was observed that positive online reviews of customers can reduce margins of manufacturers' and retailers' profits. (Dou and Chen, 2015).

Text analytics using algorithmic tools has been used by researchers to find the weakness of products (Zhang, Xu, and Wan, 2012), detect sarcasm (Tsour, Rappoport, and Davidov, 2010), detect abuse and develop a ranking system (Ghose and Ipeirotis, 2007). Text clustering of reviews was also undertaken and their relationship with user ratings was determined and their impact on sales was estimated (Moon, Park, and Kim, 2014). Extraction of nouns and adjectives was done to predict business ratings on Yelp using linear regression (Fan and Khademi, 2014) and assess the video gaming experience of players (Zhu and Fang, 2014). Opinion mining has also been undertaken on online customer reviews to find attitude orientation towards product features (Hu and Liu, 2004b; Popescu and Etzioni, 2005; Turney, 2002). Automatic text summarizations have also been conducted using statistical (focussing on the frequency of words, sentence position, sentence length etc.) or linguistic (discourse structure and lexical chains) methods. For multiple related documents, approaches of clustering summarization and topical structure summarization have been used. Automatic text summarization has been done to identify and collect important topic information from multiple online customer reviews, give rankings to the topics and finally generate summaries from them. This method was found to be better than other approaches when factors of responsiveness of users and ability to find important topics were considered (Zhan, J. *et al.* 2008).

Text analytics itself is getting more and more refined to get richer insights from customer reviews. Topic models have been used to find latent ideas/sentiments from co-occurring words used in customer reviews. Latent Dirichlet *et al* location models have been used to analyze multiple documents to gauge the importance of topics across different industries, and insights drawn have proved useful for brand positioning and market segmentation. These models are also being tweaked in many ways, for instance instead of looking at the most frequent words and clubbing them into themes, refined techniques look at sentences within which these words occur, to add context to top keywords. To understand the sentence structure in the customer reviews, a model for text analysis was created to make accurate predictions of customer ratings from 2 sites - Expedia and we 8there. Topics based on sentences were found to be more distinctive and logical as compared to the ones determined through analysis based on words (Büschken, J., and Allenby, G.M. 2016). Brand loyalty and factors affecting brand satisfaction of 600 women of Chennai city for six hair oil brands were studied using a random sampling technique. Data analysis was done through factor analysis, multiple regression and ANOVA test. Dabur Amla hair oil was found to be the most preferred brand. The factors that affected the brand loyalty of the respondents were value, easiness of use, quality, suitability, and familiarity (Ram and Ganapathi, 2013). Customer satisfaction for Parachute hair oil was studied among 70 college students of Salem city by conducting a structured questionnaire survey. t-test, F-test, chi-square test and factors analysis were used for analysing the collected data. Customer demographics did not have any effect on their satisfaction with the brand. However, value, quality, money, dryness relief, suitability for hair, better shine and attractive packaging proved to be crucial factors for determining their level of satisfaction and drivers for their purchase (Jagadeesan.S and Vani, 2017).

METHODS

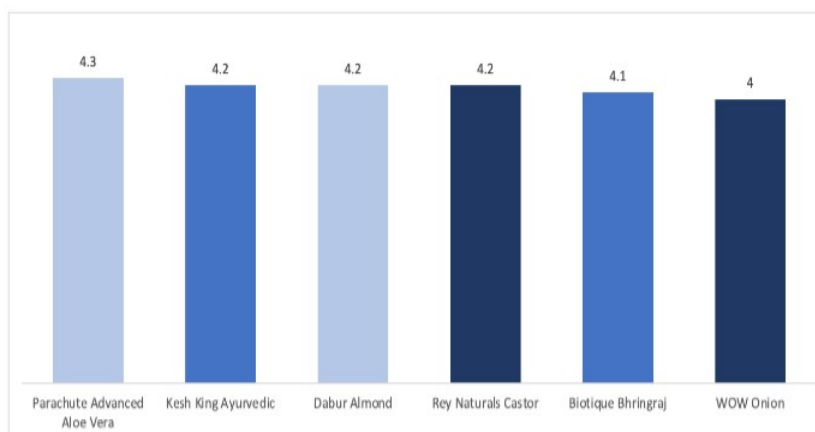
The paper looks at the top keywords and uses the word cloud approach to understand drivers of customer satisfaction. Word clouds were made using both the title and the body of consumer reviews on Amazon. This approach was selected because Amazon reviews are short in length and there is not sufficient text for algorithms like LDA to be meaningful. Six hair oil brands that are renowned for combatting hair fall problems and are used by different sections of society (spread across price levels) in India were chosen for the study. The 50 most recent (till December 31st, 2022) one-star and five-star Amazon reviews for each of the six brands were considered. Reviews written in the Hindi alphabet or having Hindi words in the English alphabet were ignored. The brands were compared in terms of overall ratings and distribution, and top keywords were identified in the case of one-star and five-star ratings. Drivers of good/bad product experience were found for each brand keeping in mind parameters like brand image, product quality/experience, price, seller and delivery experience.

RESULTS

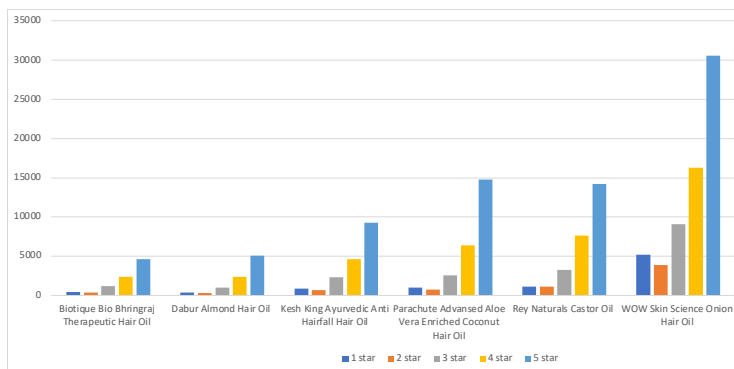
- **The six products included in the analysis were**
 - **Lowest priced**
 - Parachute Advansed Aloe Vera Enriched Coconut Hair Oil (referred to as “Parachute” in the rest of the section)
 - Kesh King Ayurvedic Hair Oil (“Kesh King”)
 - **Medium priced**
 - Dabur Almond Hair Oil (“Dabur”)
 - Biotique Bhringraj Therapeutic Hair Oil (“Biotique”)
 - **Highest priced**
 - Rey Naturals Castor Oil (“Rey Naturals”)
 - WOW Skin Science Onion Hair Oil (“WOW”)
- Across all products, negative reviews (accompanying 1-star ratings) highlight the following themes or types of concerns
 - Harmful side effects – highlighted by keywords like hair fall, dandruff etc.
 - Concerns about ingredients – highlighted by keywords like mineral, vegetable, petroleum, paraffin or artificial
 - Poor delivery experience – highlighted by keywords like broken, leakage, packaging, damaged etc., mentioned along with cap, seal or bottle
 - Poor product experience – highlighted by keywords like scent or smell
- Higher priced products also have negative reviews mentioning “waste of money”, which indicates that expectations may be higher due to their price
- Overall, positive reviews (accompanying 5-star ratings) highlight the following themes:
 - Product’s differentiating ingredients – like aloe vera, coconut, castor or onion
 - Value or quality – highlighted most commonly by the phrase “value for money”
 - Positive experiences – like reduction in hair fall or dandruff, or lack of strong smell or scent
- Most positive reviews had expressive keywords like good, best, nice, wow, amazing, awesome or effective, with specific reasons not highlighted to the same extent as with negative reviews
- Over half of the total reviews for each product were written for 5-star ratings. This meant that more people take out time to share their positive experiences as compared to negative ones
 - Rey Naturals had the highest percentage of 5-star reviews to that of its total reviews (64.5%), followed by Parachute (63.33%) and Dabur (56%)
- WOW Skin Science Onion Hair Oil had the highest number of reviews as well as ratings, indicating largest purchase volumes among the 6 products
 - But in terms of proportion of ratings with reviews, it wasn’t in the top three products. Those were Rey Naturals, Dabur and Parachute
- Percentage of reviews marked helpful (to total reviews) was quite low, with Biotique Bio Bhringraj Therapeutic Hair Oil topping the list with 11.68%
 - This indicates that reviews and ratings may be influencing purchase decisions as a whole, but individual reviews are rarely helping consumers make up their mind
 - This also shows that ecommerce websites showing the overall distribution of ratings, with the option to filter positive or negative reviews, is the right format for consumers to research about the product holistically
- Percentage of reviews with photos and /or videos was also low for all six products with Dabur Almond Hair Oil having the highest percentage (3.74%)
 - This is expected, as only one of the key reasons (poor delivery experience) would be better explained using photo or video evidence, e.g. showing damaged products received
- Rey Naturals Castor Oil (Reviews 2,990 and ratings 27,337) had the highest reviews to ratings percentage followed by Dabur Almond Hair Oil (Reviews 972 and ratings 9,160) and Parachute Advansed Aloe Vera Enriched Coconut Hair Oil (Reviews 2,250 and ratings 25,461)
 - The three products belong to different price ranges and this shows that the price of the product doesn't determine the (number of customer reviews or) concerns of customers to write a review.

SUMMARY OF KEY NUMBERS

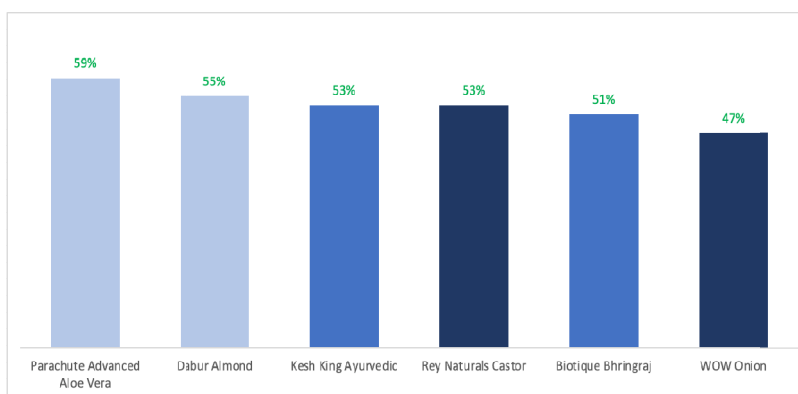
AVERAGE RATINGS OF THE PRODUCTS



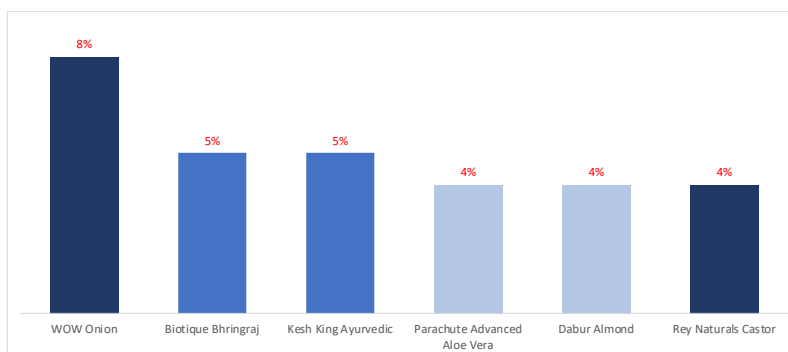
DISTRIBUTION OF RATINGS OF THE PRODUCTS



PROPORTION OF 5-STAR RATINGS - BY PRODUCT



PROPORTION OF 1-STAR RATINGS - BY PRODUCT



- Parachute had the highest average rating while WOW had the lowest. WOW is therefore the highest-priced, but lowest-rated among the product set considered for this analysis
- When 5-star ratings were considered, Parachute had the highest percentage among the six products and WOW was at the bottom of the list
- Among the six products, WOW had the highest percentage of one-star ratings i.e., it's ranked last in terms of favourability. The best performers in this aspect were Dabur, Parachute and Rey Naturals, all with only 4% of ratings as 1-star
- Considering the three metrics of average rating, 5-star ratings and 1-star ratings, Parachute was the best performer followed by Dabur
- WOW was the worst performer in all three metrics despite having the highest number of ratings and reviews, and the most recent reviews too, among all 6 products
- The two most expensive products (WOW and Rey Naturals) had the highest number of ratings and the most recent reviews. Yet their average ratings, 5-star ratings and 1-star ratings were in the bottom half of the 6 products compared
- On the other hand, Parachute and Dabur proved to be the top 2 performers, though both are on the lowest end of the price band among the products studied
- This highlighted the fact that a higher price is not correlated with better ratings or reviews
- This indicates higher price doesn't guarantee better product quality
- But this could also be due to the fact that a higher price leads to higher customer expectations and stricter reviews

DRIVERS OF CONSUMER SATISFACTION/ DISSATISFACTION – BY PRODUCT

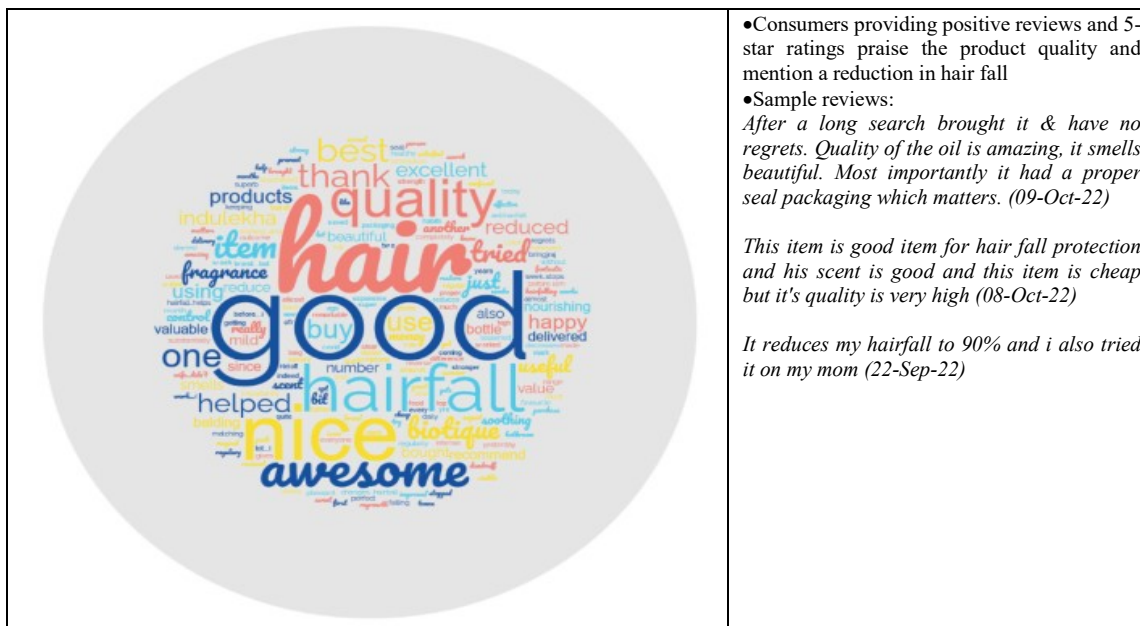
Product 1 - Biotique Bio Bhringraj Therapeutic Hair Oil

Reviews Summary:

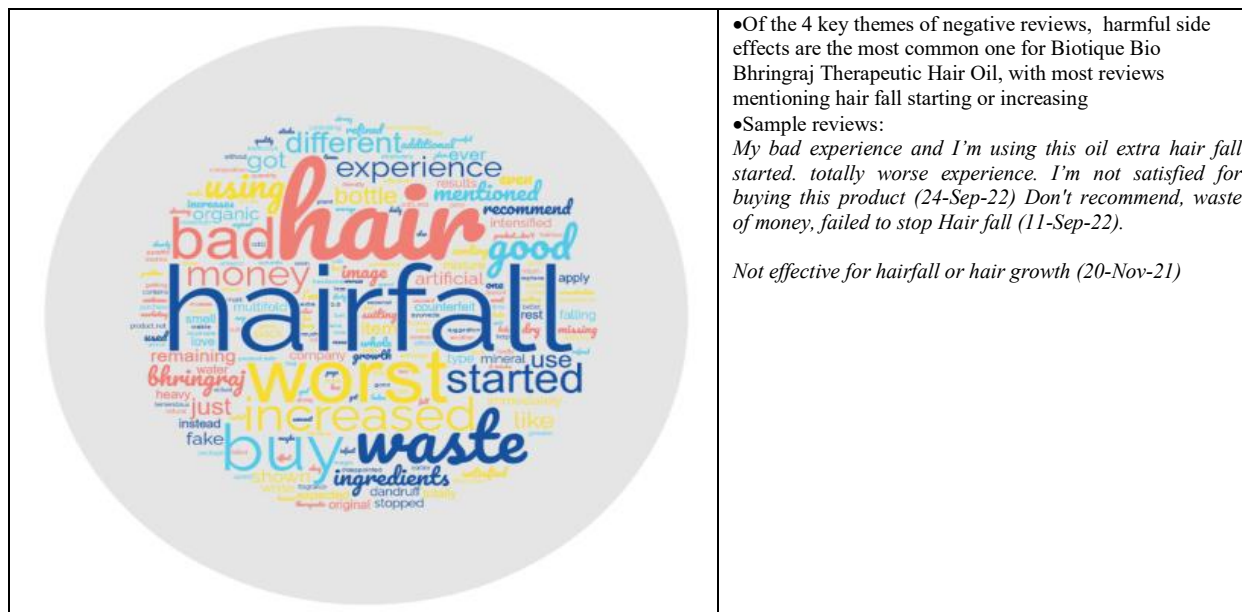
- Average rating for this product is 4.1 stars out of 5, which places it 5th out of the 6 products included in the research

- Of the 9,092 ratings it has, 51% are 5-star ratings, which also puts it in 5th place in this dimension
- 5% of its ratings are 1-star ratings, joint 2nd highest out of the 6 products, i.e. joint 4th rank out of 6 in terms of favourability
- It's 50 most recent 5-star reviews span 18 months, while 50 most recent 1-star reviews span 36 months. So, 5-star ratings are more frequent and recent, which indicates consumer opinion has improved over time.
- Compared to the other product in the same pricing category (Kesh King Ayurvedic Hair Oil), it has a lower rating (4.1 compared to 4.2), lower 5-star ratings (51% vs 52%) and similar 1-star ratings (5%)
- Given Kesh King has over 17,000 ratings on the site, this places it much stronger in terms of consumer reviews compared to Biotique
- Kesh King is also positioned as an anti-hairfall oil, while hairfall is the most commonly cited reason for 1-star reviews for Biotique

Keywords from 5-star subject + reviews:



Keywords from 1-star subject + reviews:



Product 2 - Dabur Almond Hair Oil

Reviews Summary:

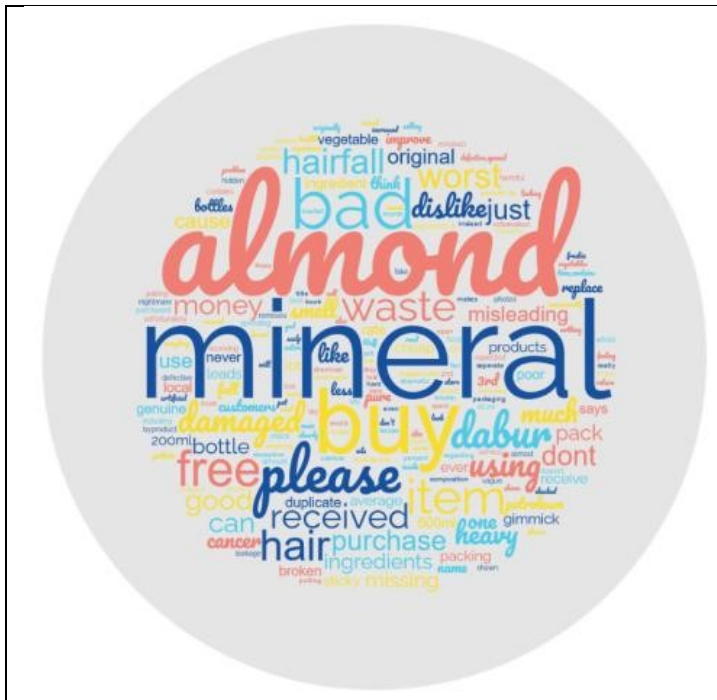
- Average rating for this product is 4.2 and it's placed joint 3rd out of 6 products included in the research
- Of its total 9,160 ratings, 55% are 5-star ratings, which puts it in 2nd place in this aspect.
- 4% of its ratings are 1-star ratings, which is the lowest among the 6 products, i.e. joint 1st rank out of 6 in terms of favourability
- It's 50 most recent 5-star reviews span 13 months, while 50 most recent 1-star reviews span 30 months. So, 5-star ratings are more frequent and recent, which indicates consumer opinion has improved over time.
- Compared to the other product in the same pricing category (Parachute Advanced Aloe Vera Enriched Coconut Hair Oil), it has a lower rating (4.2 compared to 4.3), lower 5-star ratings (55% vs 58%) and similar 1-star ratings (4%)
- Although Dabur has over 9,000 ratings, they are lesser than those for its competitor Parachute

Keywords from 1-star subject + reviews:



- Positive reviews and 5-star ratings praised it for its good quality & value for money
- Sample reviews:
good for damaged hair, good product, smell was good, good quality, worth money (16-Dec-22)
original product, value of money, good to buy (19-Oct-22)
Can you purchase the same item in the market in this price? Please utilise this opportunity and go for it. Apart from cost, the oil is just awesome. I have been using it from past 2 years. Thank you ! (30-Sep-22)

Keywords from 1-star subject + reviews:



- Of the 4 key themes of negative reviews, concerns about ingredients are the most common one for Dabur Almond Hair Oil, with most reviews mentioning having a greater quantity of mineral oil in it & lesser almond oil.
- Sample reviews:
Please read ingredients before purchase. They are using Very less amount of almond oil , and brand Call it almond oil. I think it's a "mineral oil" (77%) (15-Dec-21)
Worst. Don't buy at all . Its full of mineral oil (25-May-21)
Selling Mineral oil in the name of Almond oil. Please don't buy. They are using 74% Mineral oil. Please do check the ingredients before spending for fake oil. (28-Sep-20)

Product 3 – Kesh King Ayurvedic Oil

Reviews Summary:

- Average rating for this product is 4.2 and it’s placed joint 3rd out of 6 products included in the research.
- Of its total 17,801 ratings, 52% are 5-star ratings, which puts it in joint 3rd place in this aspect.
- 5% of its ratings are 1-star ratings, which is joint 2nd highest among the 6 products,i.e. joint 4th rank out of 6 in terms of favourability
- It’s 50 most recent 5-star reviews span 11 months, while 50 most recent 1-star reviews span 23 months. So, 5-star ratings are more frequent and recent, which indicates consumer opinion has improved over time.
- Compared to the other product in the same pricing category (Biotique Bio Bhringraj Therapeutic Hair Oil), it has a higher rating (4.2 compared to 4.1), higher 5-star ratings (52% vs 51%) and similar 1-star ratings (5%)
- The ratings of Kesh King are over 17,000 on the site, this places it much stronger in terms of consumer reviews compared to Biotique

Keywords from 5-star subject + reviews:

| | |
|--|---|
| | <ul style="list-style-type: none"> •Positive reviews and 5-star ratings praised it for its positive experience •Sample reviews: <p><i>This kesh King hair oil is the best oil for your hair and it's result can be seen in a week. Everyone should try this hair oil.(17-Sep -22)</i></p> <p><i>Bought this for my spouse. Good scent. Hair is in good condition after using this.(15-Aug -22)</i></p> <p><i>I am really very happy by buying such a great product...it's almost after 2 months I am reviewing it...my hair now much healthier then before I am so happy by kesh king oil...thank you so much for this oil.(11-May-22)</i></p> |
|--|---|

Keywords from 1-star subject + reviews:


| | |
|--|---|
| | <ul style="list-style-type: none"> •Of the 4 key themes of negative reviews, harmful side effects are the most common one for Keshking Ayurvedic Oil, with most reviews mentioning increased hair fall. •Sample reviews: <p><i>Purchased the item by reading the reviews but when applied the oil, my hair fall increased even more I can't take risk of applying it anymore, bad product(9-Oct-22)</i></p> <p><i>LOSING MORE HAIR AFTER USING IT.(16-Aug-21)</i></p> <p><i>Fraud in the name of ayurvedic oil, after this usage of oil I noticed heavy hairfall (28-Apr-21)</i></p> |
|--|---|

Product 4 - Parachute Advansed Aloe Vera Enriched Coconut Hair Oil


Reviews Summary

- Average rating for this product is 4.3 and it's placed 1st out of 6 products included in the research
- Of its total 25,461 ratings, 58% are 5-star ratings, which puts it in 1st place in this aspect.
- 4% of its ratings are 1-star ratings, which is the lowest among the 6 products, i.e., joint 1st rank out of 6 in terms of favourability
- It's 50 most recent 5-star reviews span 11 months, while 50 most recent 1-star reviews span 20 months. So, 5-star ratings are more frequent and recent, which indicates consumer opinion has improved over time.
- Compared to the other product in the same pricing category (Dabur Almond Hair Oil), it has a higher rating (4.3 compared to 4.2), higher 5-star ratings (58% vs 55%) and similar 1-star ratings (4%)
- Given Parachute has over 25,000 ratings on the site, this places it much stronger in terms of consumer reviews compared to Dabur

Keywords from 5-star subject + reviews:

| | |
|---|--|
|  | <ul style="list-style-type: none"> •Positive reviews and 5-star ratings considered it a nice product and praised its value for money •Sample reviews: <ul style="list-style-type: none"> <i>Good product for hair fall and hair regrowth. Worth it. (03-Sep-22)</i> <i>This oil is so so good, i have been using this from last year and it's results are so good, it's good for hair and skin too. (30-Apr-22)</i> <i>Original product received with a good offer (29-Jan-22)</i> |
|---|--|

Keywords from 1-star subject + reviews:

| | |
|---|---|
|  | <ul style="list-style-type: none"> •Of the 4 key themes of negative reviews, concerns about ingredients is the most common one for Parachute •Sample reviews: <ul style="list-style-type: none"> <i>This item contains 50% paraffin which is not good at all for any kind of skin. (12-Dec-22)</i> <i>Its mineral oil with little natural extracts (19-Apr-22)</i> <i>It doesn't have any resemblance to coconut oil at all (05-Jan-22)</i> |
|---|---|

Product 5 - Rey Naturals Castor Oil

Reviews Summary:


- Average rating for this product is 4.2 and it's placed joint 3rd out of 6 products included in the research.
- Of its total 27,337 ratings, 52% are 5-star ratings, which puts it in joint 3rd place in this aspect.
- 4% of its ratings are 1-star ratings, which is the lowest among the 6 products, i.e., joint 1st rank out of 6 in terms of favourability
- It's 50 most recent 5-star reviews span 7 months, while 50 most recent 1-star reviews span 20 months. So, 5-star ratings are more frequent and recent, which indicates consumer opinion has improved over time.
- Compared to the other product in the same pricing category (WOW Skin Science Onion Hair Oil), it has a higher rating (4.2 compared to 4), higher 5-star ratings (52% vs 47%) and lower 1-star ratings (4% vs 8%)

- The ratings of Rey Naturals are over 27,000, which is less compared to its competitor WOW. But it has received more favourable reviews from the customers.

Keywords from 5-starsubject + reviews:

| | |
|---|---|
|  | <ul style="list-style-type: none"> •Positive reviews and 5-star ratings praised it for its quality & its differentiating ingredients •Sample reviews: <i>altogether good and nourishing. (10-Oct -22)</i> <i>excellent quality, lovely, number one (1-Oct-22)</i> <i>best castor oil in market.(14-June-22)</i> |
|---|---|

Keywords from 1-star subject + reviews:

| | |
|---|---|
|  | <ul style="list-style-type: none"> •Of the 4 key themes of negative reviews, harmful side effects are the most common one for Rey Naturals Castor Oil, with most reviews mentioning increased hair fall & poor delivery experience •Sample reviews: <i>very bad..my hairfall increased a lot after this..makes hair very dry (23-Aug-22)</i> <i>In product page , they are displaying comb along with the oil, but in delivery we just received the oil bottle no comb, disappointed (23-May-22)</i> <i>duplicate..gives irritation on head and hairfall started (6-Mar-22)</i> |
|---|---|

Product 6 - WOW Onion Hair Oil

Reviews Summary

- Average rating for this product is 4 and it's placed last out of 6 products included in the research.
- Of its total 65,024 ratings, 47% are 5-star ratings, which puts it in 6th place in this aspect.
- 8% of its ratings are 1-star ratings, which is the highest among the 6 products, i.e., ranked last in terms of favourability
- It's 50 most recent 5-star reviews span 1 month, while 50 most recent 1-star reviews span 7 months. Out of the six oils, this oil has got the most recent reviews for both 1 star & 5 star ratings
- Compared to the other product in the same pricing category (Rey Naturals Castor Oil), it has a lower rating (4 compared to 4.2), lower 5-star ratings (47% vs 52%) and higher 1-star ratings (8% vs 4%)

- The ratings of WOW Skin Science Onion Hair Oil are over 65,000 which is more compared to its competitor Rey Naturals Castor Oil. But the latter has received comparatively more favourable reviews than the former.

Keywords from 5-star subject + reviews

| | |
|--|---|
| | <ul style="list-style-type: none"> Positive reviews and 5-star ratings praised it for positive experience Sample reviews: <ul style="list-style-type: none"> <i>Resorted to this after trying out many others!(15-Oct-22)</i> <i>Best oil for hair in this segment. (28-Sep -22)</i> <i>It's very good and effective especially for hairfall reduction.(9-Sep-22)</i> |
|--|---|

Keywords from 1-star subject + reviews:

| | |
|--|--|
| | <ul style="list-style-type: none"> Of the 4 key themes of negative reviews, poor product experience is the most common one for WOW Skin Science Onion Hair Oil, with most reviews mentioning it as bad. Sample reviews: <ul style="list-style-type: none"> <i>Waste of money, very bad product (16-Jul-22)</i> <i>Worst product ever i have seen.dont buy please(21-Aug-22)</i> <i>Sticky oil feels so heavy on head (30-Aug-22)</i> |
|--|--|

DISCUSSION

Drivers Of Customer Satisfaction – Comparison With Marketing Messaging By Product: Marketing images on Amazon across these products focus on one or more of 3 key themes:

- Ingredients – like castor or onion, which is often the differentiating factor for the products
- Benefits – like reduced hair fall, to capture audience attention quickly
- Natural process of manufacturing – e.g. cold pressed, chemical free etc.

All the brands have highlighted benefits, which is to be expected. All the brands, except Kesh King have mentioned their key ingredients clearly in marketing materials. Kesh King has just mentioned “21 ayurvedic herbs” as ingredients. Only 3 brands have highlighted the natural manufacturing process, as this has become important for customers only recently. Other aspects are present in 1-2 brands’ marketing images – before/after comparison and comparison of effectiveness with other oils. There is no mention of price or value, with the focus being more on quality. Kesh King has included even a certificate of efficacy from a hair technology institute. Customers have praised ingredients and benefits in their positive reviews. But negative reviews have mentioned that expected benefits didn’t get realized. It is interesting that for brands which have marketed natural manufacturing processes prominently, the presence of mineral oil or similar quality concerns is not a big factor driving negative reviews. Value for money is a key component of reviews, both positive and negative, as this is the factor impacting customers most directly. The below tables summarize the presence of these aspects in marketing efforts by the brands, and the marketing materials themselves.

| BRAND | INGREDIENTS | BENEFITS | NATURAL MANUFACTURING | BEFORE/ AFTER COMPARISON | COMPARISON WITH OTHER BRANDS |
|--------------|-------------|----------|-----------------------|--------------------------------|---------------------------------|
| Biotique | ✓ | ✓* | ✓ | | |
| Dabur | ✓ | ✓ | | | |
| Kesh King | ✓ | ✓ | | ✓ | ✓ |
| Parachute | ✓ | ✓ | | ✓ | |
| Rey Naturals | ✓ | ✓ | ✓ | | |
| WOW | ✓ | ✓ | ✓ | | |

*Benefits not listed prominently for Biotique

Biotique Bio Bhringraj Therapeutic Hair Oil

Dabur Almond Hair Oil

Kesh King Ayurvedic Oil

Advanced emami **Kesh King**

CERTIFICATE OF EFFICACY

A. Pearce Trichology
Hair Experts

Emami Kesh King Scalp and Hair Medicine Ayurvedic Oil,
has shown to be very effective in decreasing hairfall, encouraging hair
re-growth and aiding in alleviating dandruff. Being 100% Ayurvedic,
there are absolutely no side effects with this wonderful oil.

A.W. PEARCE
M.D. (M.Sc.)
NCHM, International Institute
Nepesin, Texas

Certified by eminent hair institute
for superior product efficacy

Advanced emami **Kesh King**

21 AYURVEDIC HERBS

BEFORE AFTER BEFORE AFTER

**CLINICALLY PROVEN TO REDUCE HAIRFALL*
GROWS NEW HAIR**

*Based on clinical study results conducted in 2017 - 18.

emami **Kesh King**

21 Herbs & its benefits

| | | | |
|--|--|--|--|
| Yashmadhu Boosts hair growth | Japa Helps promote hair growth | Manjishtha Helps cure scalp diseases | Lodhra Helpful in scalp infections |
| Goakura Helps in curing dandruff and headache | Karanj Cures rashes and boils on the scalp | Tulsi Helps remove dandruff & reduces tension | Shudala Nourishes hair follicles and enhances hairlength |
| Methi Helps make hair strong & prevents hairfall | Kari patta Removes dandruff and aids in reducing hair loss | Mehendi Helpful in preventing premature greying | Bhringaraja Helps maintaining natural hair colour |
| Bibhitaka Helps cure dandruff and dryness | Nagkesara Helps cure skin rashes & headache | Mandukaparni Helps stimulate hair follicles, preventing hairfall | Brahmi Aids hair growth, reduces hairfall |
| Til Tel Promotes hair growth | Jatamansi Helps relieve insomnia | Musta Beneficial for scalp | Amla Helps in hair growth |
| Neem Helps enhancing hair growth | Kola Helps reduce tension | Haritaki Helps reduce hair thinning | |

Other Ayurvedic Oils* emami **Kesh King**

*other oils refer to the test product used in a clinical study

Parachute Advanced Aloe Vera Enriched Coconut Hair Oil

Key Ingredients

Aloe Vera
Deeply conditions the hair making it soft.



Coconut
Nourishes the hair from within, making it strong.



Benefits



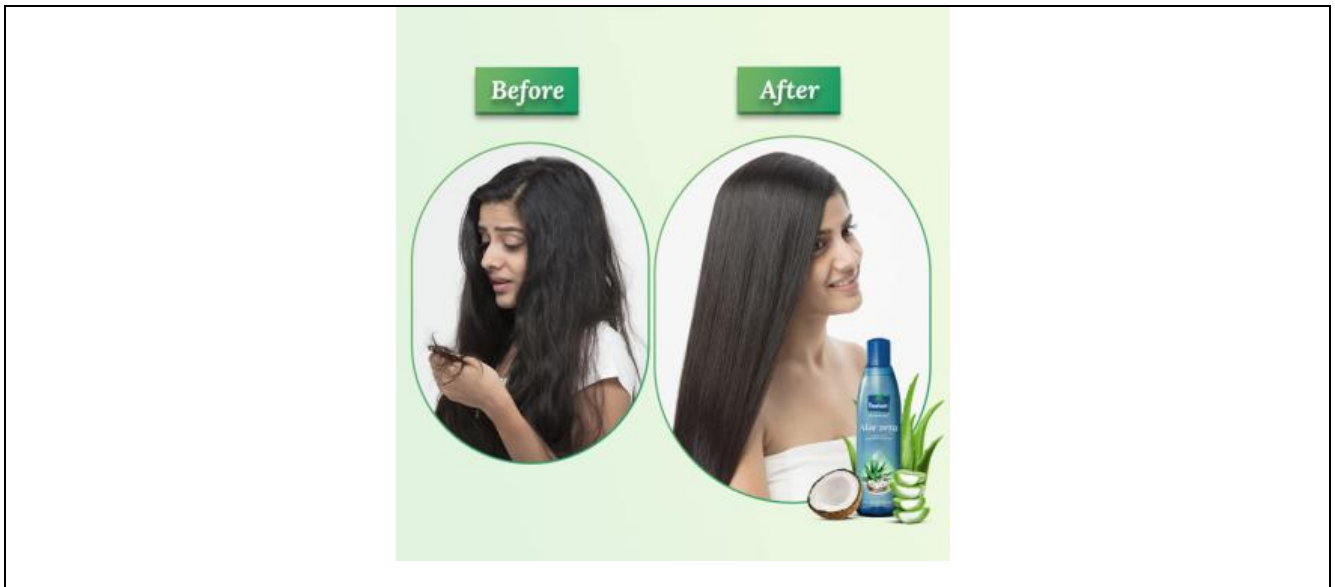
Makes hair **soft**.

Strengthens hair from core.



Provides deep **nourishment** and **conditioning**.





Rey Naturals Castor Oil

WHY REY NATURALS COLDPRESSED CASTOR OIL ?

- Hydrates and moisturizes dry scalp
- Helps controlling hair fall
- Thicker eyebrows
- Voluminous and strong hair
- Thick and long eyelashes

KNOW ABOUT REY NATURALS COLDPRESSED CASTOR OIL

- PURE 100% NATURAL
- COLDPRESSED
- CHEMICAL FREE
- THICK CONSISTENCY
- RAW UNREFINED

WOW Skin Science Onion Hair Oil

THIS POWERFUL BLEND helps reduce hair fall

1 Hand picked ingredients that are known to reduce hair fall.

ONION SEED OIL
Rich in sulfur and potassium, it helps to strengthen hair, prevent breakage and hair thinning.

BLACK SEED OIL
The antioxidant properties soothes the scalp and reduces hair fall.

2 99.9% Natural Ingredients

3 Cold-pressed process helps preserve the goodness

THE PURE & NATURAL WAY To reduce hairfall

- SUSTAINABLY SOURCED
- NO MINERAL OIL NO SILICONES
- 100% VEGAN
- CRUELTY FREE
- PURE COLD-PRESSED OIL BLEND

Be WOW, Naturally

CONCLUSION

Customer reviews are a double-edged sword from a marketing perspective. Positive reviews can boost product sales, but negative reviews can drive away potential customers. It was found that reviews did not involve a case of adverse selection wherein people with negative opinions are more likely to give feedback. Reviews having photos/videos as proof of their claims/complaints were fewer, and so were those marked helpful by other customers/potential customers. In every brand, the five-star reviews were more recent than the one-star ones across all the products studied, which shows that these products are getting positive traction in terms of purchase, usage and experience. In the case of positive reviews, the quality of the product & good experience of product usage were highlighted. Value for money came out to be another factor that was emphasized by the customers. There are largely two groups in negative reviews- one where customers voiced about adulteration of mineral/vegetable oil in the product's main ingredient and others about causing hair fall. Less important factors were the scent of oil & delivery issues. Some of the negative reviews about the hair oils studied were about the sellers or Amazon (delivery &/or packaging issues), though consumers were satisfied with the product's quality. This can affect the reputation of the brands with no fault of the manufacturers. This is a potential shortcoming of online retail channels for brands. While few people are marking reviews as helpful, ratings and reviews are critical drivers of product sales growth/decline, given how easily they are accessible on e-commerce platforms and how they capture the most critical pieces of information from a new customer's perspective. Brands need to incorporate insights from reviews in their manufacturing, marketing, pricing and product development decisions, so as to stay relevant in a competing marketplace. A good example of this is some brands starting to drive messaging around natural and sustainable manufacturing processes, as we saw with 3 of the 6 brands analyzed in this study.

REFERENCES

- Askalidis, Georgios and Edward C. Malthouse (2016), "The Value of Online Customer Reviews," in Proceedings of the 10th ACM Conference on Recommender Systems. Boston, Massachusetts, USA: ACM.
- Bazaarvoice (2015), "The Conversation Index."
- Bosman, Dirk J, Christo Boschhoff, and Gert-Jan van Rooyen (2013), "The Review Credibility of Electronic Word-of-Mouth Communication on E-commerce Platforms.," *Management Dynamics*, 22 (3), 29-44.
- Büschken, J., & Allenby, G.M. (2016), "Sentence-Based Text Analysis for Customer Reviews", *Mark. Sci.*, 35, 953-975.
- Chen, Yi-Fen (2008), "Herd Behavior in Purchasing Books Online," *Computers in Human Behavior*, 24 (5), 1977-92.
- Chevalier, Judith A. and Dina Mayzlin (2006), "The Effect of Word of Mouth on Sales: Online Book Reviews," *Journal of Marketing Research*, 43 (3), 345-54.
- Chou, C. H., Sinha, A. P., & Zhao, H. (2008), "A text mining approach to Internet abuse detection", *Information Systems and E-Business Management*, 6(4), pp. 419–439. <http://doi.org/10.1007/s10257-007-0070-0>.
- Dou, Y., & Chen, J. (2015), "Understanding the Value of Online Customer Reviews: The Channel Perspective," In *PACIS* (p. 182).
- Duan, Wenjing, Bin Gu, and Andrew B. Whinston (2008a), "Do Online Reviews Matter? An Empirical Investigation of Panel Data," *Decision Support Systems*, 45 (4), 1007-16.
- Fan, M., & Khademi, M. (2014), "Predicting a Business Star in Yelp from Its Reviews Text Alone", *arXiv Preprint* Retrieved from <http://arxiv.org/abs/1401.0864v5> <http://arxiv.org/ftp/arxiv/papers/1401/1401.0864.pdf>.
- Ghose, A., & Ipeirotis, P. G. (2007), "Designing novel review ranking systems: predicting the usefulness and impact of reviews", *ICEC07 Proceedings of the Ninth International Conference on Electronic Commerce*, pp. 303–310. <http://doi.org/10.1145/1282100.1282158>.
- Grewal, Lauren and Andrew T Stephen (2016), "In Mobile We Trust: How Mobile Reviews Can Overcome Consumer Distrust of User-Generated Reviews," *Saïd Business School WP2016-22*.
- Hou, Fangfang, Boying Li, Alain Yee-Loong Chong, Natalia Yannopoulou, and Martin J. Liu (2017), "Understanding and Predicting What Influence Online Product Sales? A Neural Network Approach," *Production Planning & Control*, 28 (11-12), 964-75.
- Hu, M., & Liu, B. (2004b), "Mining opinion features in customer reviews", In Proceedings of the nineteenth national conference on artificial intelligence, sixteenth conference on innovative applications of artificial intelligence AAAI 2004 (pp. 755–760). San Jose.
- Jagadeesan, S., and Vani, G., (2017), "Consumer Satisfaction Towards Parachute Hair Oil Usage Among College Student's in Salem City," *International Journal of Advanced Scientific Research & Development*, vol.04, pp.1-11.
- Kim, Dan and Mohammad Salehan (2015), "The Effect of Sentiment on Information diffusion in Social Media," *AMCIS 2015 Proceedings*. 2. <https://aisel.aisnet.org/amcis2015/IntelSys/GeneralPresentations/2>
- Kim, Su Jung, Rebecca Jen-Hui Wang, Ewa Maslowska, and Edward C. Malthouse (2016), "Understanding a Fury in Your Words": The Effects of Posting and Viewing Electronic Negative Word-of-Mouth on Purchase Behaviors," *Computers in Human Behavior*, 54(January), 511-21.
- Kim, Su Jung & Maslowska, Ewa & Malthouse, Edward. (2017), "Understanding the effects of different review features on purchase probability", *International Journal of Advertising*. 37. 1-25. 10.1080/02650487.2017.1340928.
- Kronrod, A., & Danziger, S. (2013), "Wii will rock you!" The use and effect of figurative language in consumer reviews of hedonic and utilitarian consumption", *Journal of Consumer Research*, 40(4), 726–739. <http://doi.org/10.1086/671998>.
- Liu, Yong (2006), "Word of Mouth for Movies: Its Dynamics and Impact on Box Office Revenue," *Journal of Marketing*, 70 (3), 74-89.
- Liu, Zhiwei and Sangwon Park (2015), "What Makes a Useful Online Review? Implication for Travel Product Websites," *Tourism Management*, 47, 140-51.
- Maslowska, Ewa, Edward C. Malthouse, and Stefan F. Bernritter (2017a), "Too Good to Be True: The Role of Online Reviews' Features in Probability to Buy," *International Journal of Advertising*, 36 (1), 142-63.
- Moon, S., Park, Y., & Kim, Y. S. (2014), "The impact of text product reviews on sales", *European Journal of Marketing*, 48(11/12), 2176–2197. <http://doi.org/10.1108/EJM-06-2013-0291>.
- Mudambi, Susan M and David Schuff (2010), "What Makes a Helpful Review? A Study of Customer Reviews on Amazon.com," *MIS quarterly*, 34 (1), 185-200.
- Naidoo, Vik and Linda Hollebeck (2016), "Higher Education Brand Alliances: Investigating Consumers' Dual-Degree Purchase Intent," *Journal of Business Research*, 69(8), 3113-3121.
- O'Keefe, Daniel J. (2016), "Persuasion: Theory and Practice", Thousand Oaks: CA: Sage.
- Popescu, A. M., & Etzioni, O. (2005), "Extracting product features and opinions from reviews", In Proceedings of human language technology conference and conference on empirical methods in natural language processing, HLT/EMNLP (pp. 339–346). Vancouver, BC, Canada.

- Ram, S.K.V, Ganapathi, R.(2013), "Brand Preference and Loyalty of Women Customers Towards Hair Oil Brands", *Global Journal for Research Analysis*, 2(12), pp. 60 – 63.
- Schlosser, Ann E. (2011), "Can Including Pros and Cons Increase the Helpfulness and Persuasiveness of Online Reviews? The Interactive Effects of Ratings and Arguments," *Journal of Consumer Psychology*, 21 (3), 226-39.
- Tsur, O., Rappoport, A., & Davidov, D. (2010), "ICWSM - A Great Catchy Name: Semi-Supervised Recognition of Sarcastic Sentences in Online Product Reviews", *International AAAI Conference on Weblogs and Social Media*, (9), 162–169.
- Turney, P. D. (2002), "Thumbs up or thumbs down? Semantic orientation applied to unsupervised classification of reviews", In *Proceedings of the 40th annual meeting of the association for computational linguistics (ACL'02)* (pp. 417–424). Philadelphia, PA, USA.
- Zhan, J. *et al.* (2008), "Gather customer concerns from online product reviews – A text summarization approach", *Expert Systems with Applications*, doi:10.1016/j.eswa.2007.12.039
- Zhang, W., Xu, H., & Wan, W. (2012), "Weakness Finder: Find product weakness from Chinese reviews by using aspects based sentiment analysis", *Expert Systems with Applications*, 39(11), 10283–10291. <http://doi.org/10.1016/j.eswa.2012.02.166>.
- Zhang, K. Z. K., Zhao, S. J., Cheung, C. M. K., & Lee, M. K. O. (2014), "Examining the influence of online reviews on consumers' decision-making: A heuristic-systematic model", *Decision Support Systems*, 67, 78–89. <http://doi.org/10.1016/j.dss.2014.08.005>.
- Zhu, M., & Fang, X. (2014, April), "What nouns and adjectives in online game reviews can tell us about player experience?", In *Proceedings of the extended abstracts of the 32nd annual ACM conference on Human factors in computing systems*(pp. 1471-1476). ACM. <http://doi.org/10.1145/2559206.2589648>.
- https://www.amazon.in/Biotique-Bhringraj-Fresh-Growth-Therapeutic-Falling/dp/B00U8TQIY0/ref=sr_1_5?crid=1WVYZKO6YYQCG&keywords=Biotique+Bio+Bhringraj+Therapeutic+Hair+Oil&qid=1672510816&srefix=biotique+bio+bhringraj+therapeutic+hair+oil+%2Caps%2C256&sr=8-5
- https://www.amazon.in/Dabur-Almond-Hair-Damage-500ml/dp/B013UQ11JE/ref=sr_1_5?crid=JJKJ5LY71ODE&keywords=Dabur%2BAlmond%2BHair%2BOil&qid=1672510838&srefix=dabur%2BAlmond%2Bhair%2Boil%2B%2Caps%2C329&sr=8-5&th=1
- <https://www.amazon.in/dp/B07K2JHVRY?th=1>
- https://www.amazon.in/Parachute-Advansed-Enriched-Coconut-250ml/dp/B07DD2RZS4/ref=sr_1_5?crid=2AMW91F2CRGPF&keywords=Parachute+Advansed+Aloe+Vera+Enriched+Coconut+Hair+Oil&qid=1672510857&srefix=parachute+advansed+aloe+vera+enriched+coconut+hair+oil+%2Caps%2C256&sr=8-5
- https://www.amazon.in/Rey-Naturals-Pressed-Castor-200ml/dp/B07BZN59BS/ref=sr_1_5?crid=136GHEL2UDS1T&keywords=Rey%2BNaturals%2BCastor%2BOil&qid=1672510882&srefix=re%2Bnaturals%2Bcastor%2Boil%2B%2Caps%2C244&sr=8-5&th=1
- https://www.amazon.in/WOW-Onion-Black-Seed-Hair/dp/B07NDR2J4K/ref=sr_1_5?crid=2FJHPRNE6FO84&keywords=wow%2Bskin%2Bscience%2Bonion%2Bhair%2Boil&qid=1672510793&srefix=WOW%2BSkin%2BScience%2Bonion%2BHair%2B%2Caps%2C1069&sr=8-5&th=1
- https://www.ibef.org/download/1664177639_FMCG-June-2022.pdf