



# Consumer Behavior Sentiment Analysis

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and  
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# Introduction

The brand that was selected to conduct a behavior sentiment analysis on is Rare Beauty, a makeup and beauty company created by Selena Gomez. This brand was chosen to see what the sentiment of the brand is after the public and dramatic feud Selena Gomez had with Hailey Bieber last year. There are enough comments and reviews to conduct this analysis on the brand. Reviews can be found on Sephora.com as well as Rare Beauty's own website, Rarebeauty.com. On Sephora's website, each product has a range from 200-2,000 reviews. On Rarebeauty.com, each product has 50-500 reviews. On Instagram, each post has about anywhere from 300-8,000 comments depending on the content of the posts. Finally, on TikTok, each post has about 90-500 comments, again depending on the content of the posts. Comments can be found on Rare Beauty's social media accounts including Instagram and TikTok. Maddi will be doing the comments and Avery will be doing the reviews. The reviews will be taken from Rare Beauty's best-selling and most well-known product, the Soft Pinch Liquid Blush.

This sentiment analysis will help make marketing recommendations to better connect with this brand's consumers by helping to better understand the consumer's thoughts and opinions about the brand and its creator. When a brand has a public figure as its founder, especially one as famous as Selena Gomez, it can be difficult to understand the constantly changing opinions of the consumer, so this will hopefully help clear some of that up. With this information in mind, we should be able to make better marketing recommendations to the brand in order to help facilitate better connections with their consumers.

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# What is Rare Beauty?

Established in 2020 by singer and actress, Selena Gomez, Rare Beauty has swiftly become a dynamic player in the cosmetics industry, embodying a fusion of innovation, inclusivity, and social consciousness. With a diverse range of makeup products meticulously designed to cater to various skin tones and preferences, Rare Beauty distinguishes itself as a brand committed to authenticity and individuality. Beyond product offerings, Rare Beauty strategically engages in marketing campaigns and community initiatives that resonate with themes of self-acceptance and empowerment. Through its corporate social responsibility endeavors, particularly in supporting mental health awareness, the company aligns with Gomez's personal advocacy efforts. Rare Beauty's success lies not only in its commercial achievements with a socially responsible ethos, resonating deeply with consumers seeking brands that prioritize authenticity and impact.

(About Rare Beauty | Rare Beauty by Selena Gomez, n.d.)



# Why Is It Relevant?



In early 2023, Hailey Bieber and Selena Gomez had a very public feud that sparked a lot of controversy online. Gomez had previously dated Bieber's now-husband, Justin Bieber. The feud was mostly through social media and about Bieber and her close friends posting things that were thought to be subtly making fun of Gomez (Paul, 2023).



# Why Sentiment Analysis?



Brands can use sentiment analysis to track their online mentions and the feelings attached to them, and also track competitor mentions. Tracking a brand's own and their competitor's sentiment can help them identify areas to improve their marketing campaigns. This analysis has become a crucial tool for businesses in shaping their marketing strategies and enhancing brand perception. By analyzing the emotions and opinions expressed in online mentions, companies gain valuable insights into how customers perceive their brand. This process enables businesses to monitor their brand reputation in real-time, identifying both positive sentiment that signifies satisfaction and loyalty, as well as negative sentiment that may indicate areas for improvement. Sentiment analysis allows businesses to track trends and patterns in consumer behavior, benchmark their brand sentiment against competitors, and personalize marketing campaigns to better resonate with their target audience. By leveraging sentiment analysis, companies can not only improve their marketing efforts but also enhance the overall customer experience by addressing concerns and making strategic improvements based on customer feedback (Qualtrics, 2023)

# Hypothesis

The hypothesis before conducting the analysis is that public sentiment towards Rare Beauty experienced an increase in positive sentiment following the highly publicized feud between Selena Gomez and Hailey Bieber. This hypothesis is based on the observation that during the feud, the public generally sided with Selena Gomez. This indicates that there was an increase in support for her and her brand, Rare Beauty, as people may have been moving away from Bieber's brand, Rhode.



# Methodology

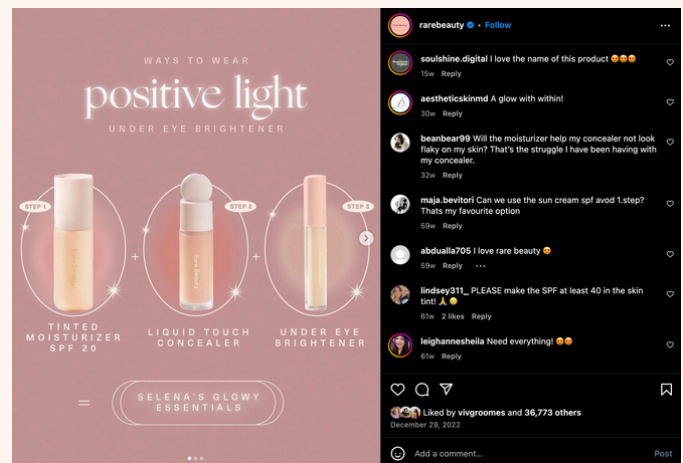
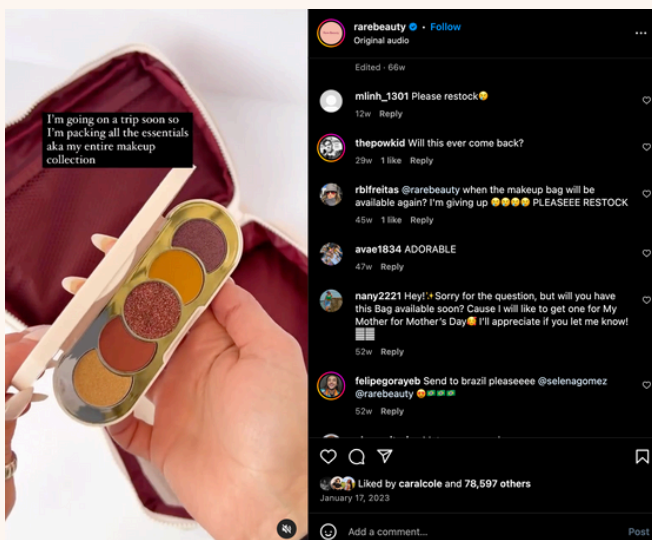
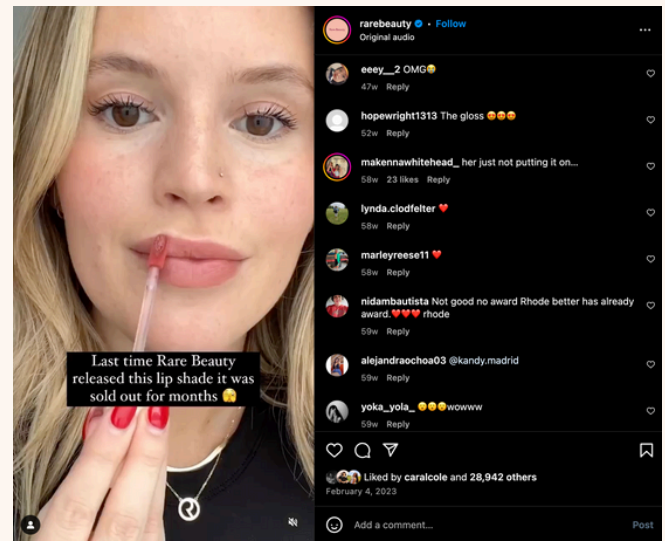
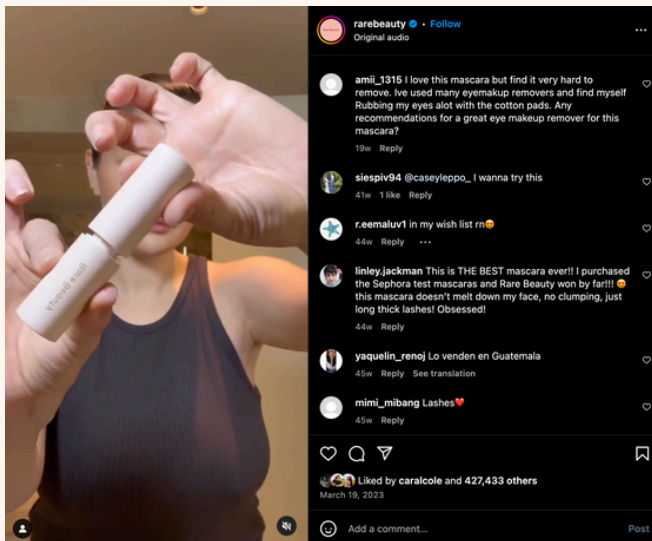
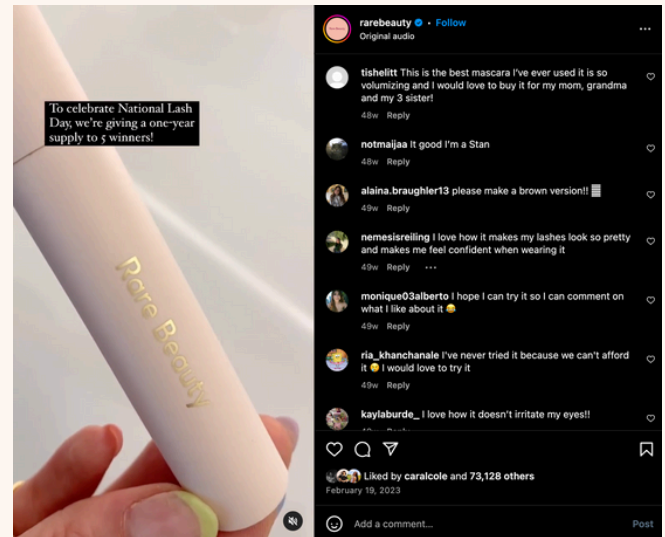
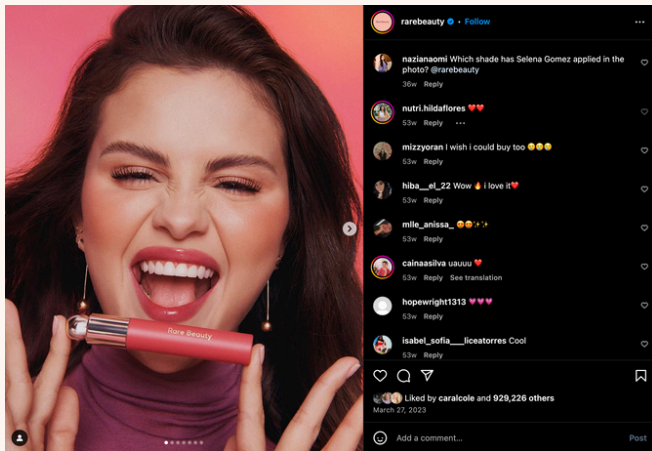
To conduct the sentiment analysis, data was collected across two social media platforms and two review websites. The chosen social media platforms were Instagram and Tik Tok, because the brand has a large gen z and millennial fan base. 215 comments were analyzed across these platforms throughout Januray-March 2023. The chosen review site platforms were Sephora.com and Rarebeauty.com, because these two sites provided recent and relevant data. 100 reviews were analyzed across these sites through Januray-March 2023.

## Data Collection Process

The data collection process used in this analysis was to randomly select comments over the months selected. For social media comments, the methodology was to select six posts from each month and review the top comments on each post, and also scroll past the top comments to analyze comments that were not as popular. An average of seven comments were collected per post. For the reviews, the method was to go back to the months of January, February, and March, and randomly select reviews from those months. 17 were chosen from January and March for each site, and 16 from February from each site.

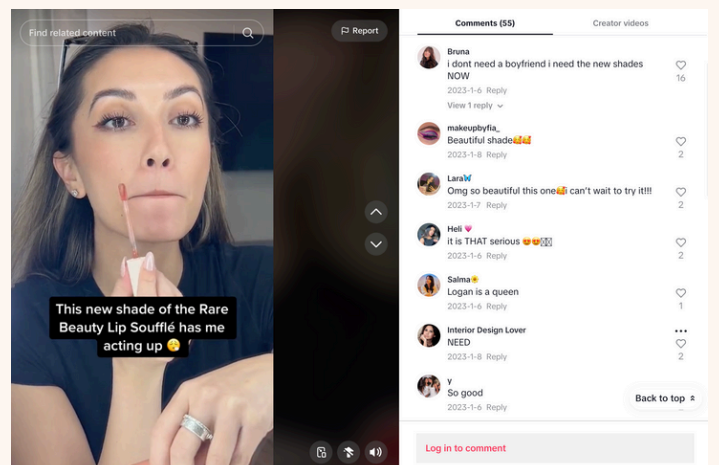
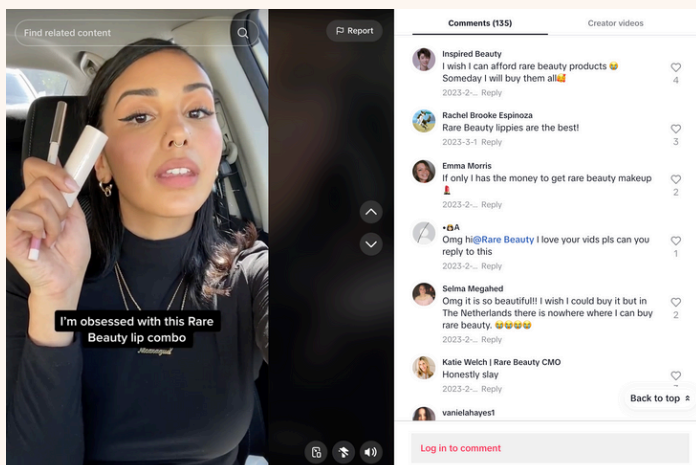
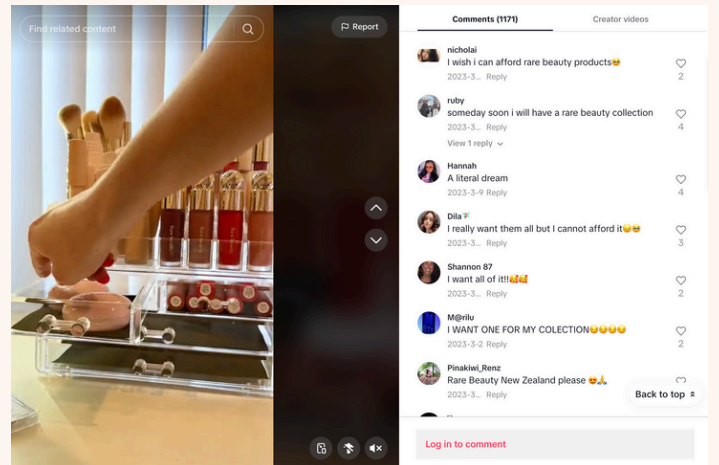
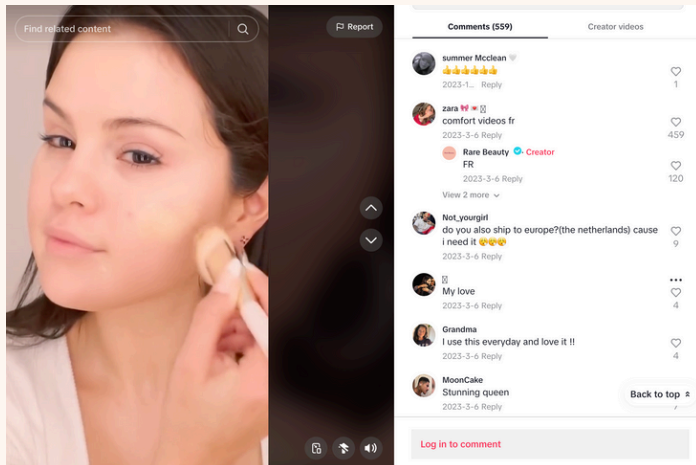
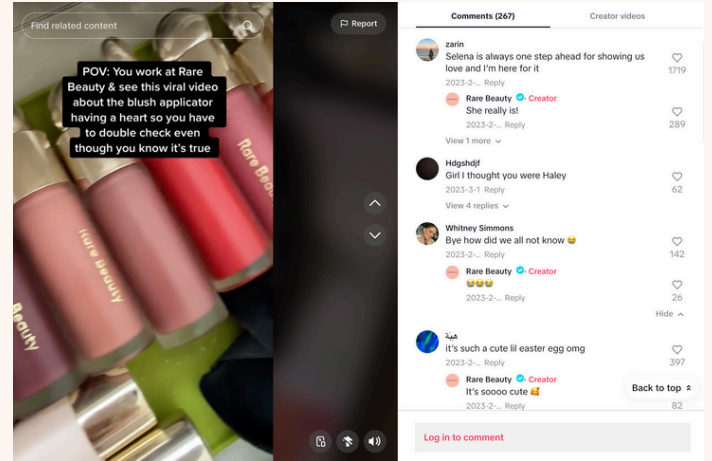
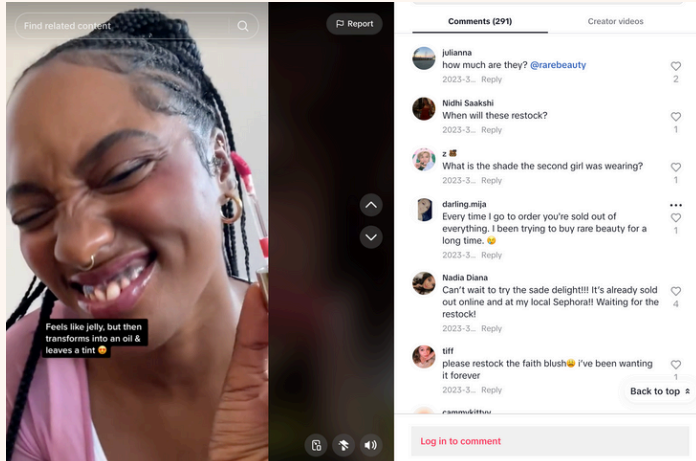


# Raw Data: Instagram





# Raw Data: Tik Tok



# Raw Data: Rarebeauty.com

★★★★☆

## THE SHADE OF THIS WAS

Stephanie C. verified buyer

01/29/23

**Skin Type:** Normal

**Shade Group:** Light

**Age Range:** 25-34

The shade of this was very pretty, the pigment was delightful and had a very natural blend-able look. Could definitely use this on a no makeup day or build it heavier if necessary. The only reason I didn't give it 5 stars ⭐ is because it felt very dry and matted

0 👍 0 👎

★★★★☆

## GREAT PIGMENTATION!!

Daniela C. verified buyer

01/24/23

**Skin Type:** Normal

**Shade Group:** Medium

**Age Range:** 25-34

I really like the color and the bliss of this product. I would give it a 5 star but since I got this product, the 4 in 1 mist and the liquid luminizer, my cheeks started to get acne. Not normal, I never had a problem with acne before. I stop using the mist and I haven't get new acne signs. So far I think the acne was cause buy the oily mist, I'm still trying to figure out if this product was part of it or not. The quality of the bottle it's great so it's the design and size. The shade is very pigment and unlike the luminizer this blush is not oily, you don't need to use too much, with a drop or two you would have enough. I got the shade Joy which matched my olive/light/cafeconleche skin colored. It looks just like a sunburn and I like it. I was hoping to get the shade Love but was out of stock, so I'll get that next.

0 👍 0 👎

★★★★★

## I LOVE IT

Talia B. verified buyer

02/02/23

**Skin Type:** Combination

**Shade Group:** Light

**Age Range:** 25-34

It's a great blush, INCREDIBLY pigmented, more orange than I thought but I'm not mad.

1 👍 0 👎

★★☆☆☆

## TOO PINKY

Nellie R. verified buyer

02/06/23

**Skin Type:** Combination

**Shade Group:** Medium

**Age Range:** 55+

Unfortunately this blush was too pink for my skin color. The one I wanted, which was softer, was sold out. Too bad. I will donate this item.

0 👍 0 👎

★★★☆☆

## ALLERGIC UNFORTUNATELY

Shyllien R. verified buyer

03/27/23

**Skin Type:** Combination

**Shade Group:** Light Medium

**Age Range:** 18-24

I love Rare beauty I grew up on Selena Gomez unfortunately the product caused me to break out Dr said he thinks I could be allergic to one of the ingredients used to make the Blush completely fine but super bummed out

0 👍 0 👎

★★★★★

## BEAUTIFUL BLUSH

Heydi O. verified buyer

03/09/23

**Skin Type:** Combination

**Shade Group:** Medium

**Age Range:** 25-34

Beautiful blush

4 👍 1 👎

★★★★★

## IT'S SO PIGMENTED AND THE

Elizabeth M. verified buyer

03/10/23

**Skin Type:** Dry

**Shade Group:** Light

**Age Range:** 18-24

It's so pigmented and the formula is good.

3 👍 0 👎

(Soft Pinch Liquid Blush, n.d.)

# Raw Data: Sephora.com

★★★★☆

18 Jan 2023

## Matte is okay, Dewy is Better

 Grace - matte bright rose mauve

I love the colour of this blush and it will truly last a lifetime since you only need a little dot. I have a dewy shade (happy) and I find it much easier to blend compared to the matte shades. Blending this shade out is kind of a hassle so I don't really reach for this blush that often.

Helpful?  (3) |  (0)



itonn

Blue eyes, Light skin tone,  
Combination skin

★★★★☆

26 Jan 2023

✓ Recommended

## Nice shade. Nice texture.

Great shade and undertone. Good application texture. Okay staying power...not a marathoner, a sprinter.

Helpful?  (0) |  (0)



bbrunnincanada

Green eyes, blonde hair,  
fairLight skin tone,  
Combination skin

★★★★★

7 Feb 2023

✓ Recommended

## Beautiful Bright Pink

 Lucky - dewy hot pink

Just got my package and immediately tried the blush! Love how pigmented Lucky is and how easily it blends. If you like doing cosplay I would highly suggest this color since you only need a little dot on each side of cheek 😊



Helpful?  (2) |  (0)



JanitzzyK20

Brown eyes, brown hair,  
Medium skin tone, Oily skin

★★★★★

Verified Purchase

23 Feb 2023

✓ Recommended

## stunning on the skin

 Happy - dewy cool pink

beautiful!! very pigmented and bright, love so much

Helpful?  (3) |  (0)



alexm379

Green eyes, blonde hair,  
Porcelain skin tone, Dry skin

★★★★★

25 Feb 2023

✓ Recommended

it's really good but you have blend it so it won't dry

Helpful?  (0) |  (0)



Shinebrighttona

Brown eyes, brown hair, Fair  
skin tone, Combination skin

★★☆☆☆

14 Mar 2023

## Not pigmented and drying

Great blush but isn't as pigmented as the other colors AT ALL and since it's matte it's very drying. I personally didn't like it mainly because of the matte feeling. If u have darker skin definitely don't get this shade because even on my pale skin it barely showed up

Helpful?  (6) |  (14)



NooraAlqz

Brown eyes, black hair,  
Medium skin tone,  
Combination skin

★★★★☆

6 Mar 2023

✓ Recommended

 Bliss - matte nude pink

I love this product so much about it cause I love Selena Gomez and I hate Hailey Bieber and you should buy it



Helpful?  (7) |  (15)



claireb1463

Blue eyes, blonde hair, Fair  
skin tone, Dry skin

Incentivized 



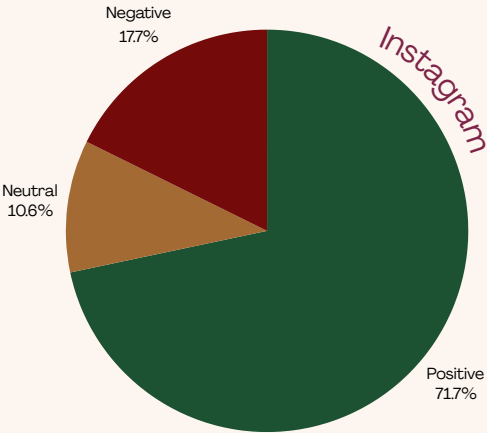
# Results

The results of the analysis confirmed the hypothesis of public sentiment being positive, following the Selena Gomez and Hailey Bieber feud. As seen in the raw data and charts, the comments and reviews analyzed were very positive overall, with limited negativity. Overall brand sentiment was very good before and came out to be even better after.

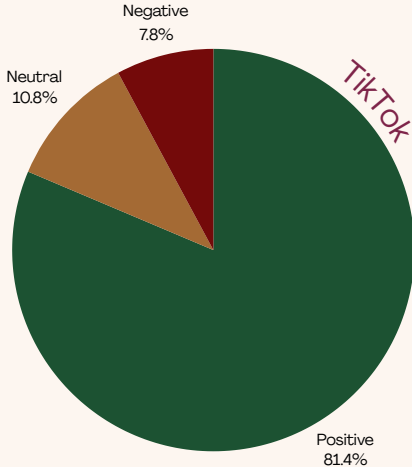




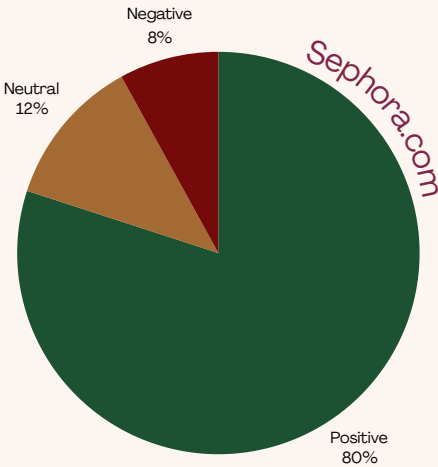
Instagram	January	February	March	Total
Total Comments	37	36	40	113
Positive	28	27	26	81
Neutral	4	3	5	12
Negative	5	6	9	20



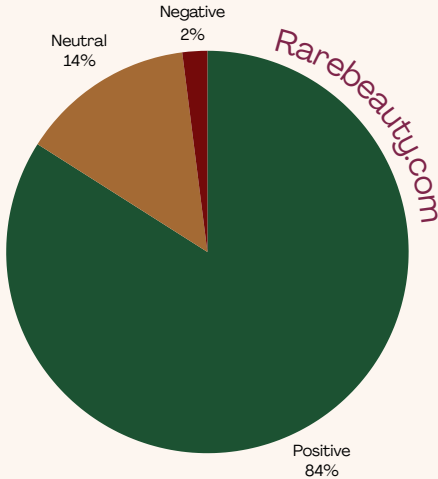
Tiktok	January	February	March	Total
Total Comments	34	31	37	102
Positive	28	26	29	83
Neutral	3	3	5	11
Negative	3	2	3	8



Sephora.com	January	February	March	Total
Total Brand Reviews	17	16	17	50
Positive	13	13	14	40
Neutral	2	2	2	6
Negative	2	1	1	4



Rarebeauty.com	January	February	March	Total
Total Brand Reviews	17	16	17	50
Positive	15	13	14	42
Neutral	2	2	3	7
Negative	0	1	0	1



# How can the brand use this to better connect with consumers?



Rare Beauty can use this analysis to connect with consumers through personalized marketing, competitive analysis, and understanding consumer feedback.

- **Personalized Marketing:** Being aware of the sentiment of your brand can help better understand the target market, and create specific marketing campaigns to reach this group. Rare Beauty can personalize their messaging to continue their positive sentiment.
- **Competitive Analysis:** Knowing your brand's sentiment can help understand how consumers perceive you against competitors. This can help the brand differentiate itself among competition. Rare Beauty can utilize this when competing against other popular beauty brands.
- **Understanding Consumer Feedback:** Sentiment analysis allows the brand to analyze consumer feedback from various sources such as social media and reviews. By understanding whether the sentiment is positive, negative, or neutral, Rare Beauty can locate areas for improvement or capitalize on strengths.

Sentiment analysis is good for many reasons but especially of monitoring opinions and attitudes to make changes within the brand (Weaver, 2021).

# Recommendations for the brand

- **Increasing Innovativeness:** Positive reviews can also provide insights into which products or features customers appreciate the most. This information can guide future innovative product development efforts and help Rare Beauty prioritize resources effectively.
- **Leverage Positive Sentiments: (OpenAI, 2023)**
  - Showcase Positive Reviews: Highlighting positive customer experiences in marketing campaigns and on social platforms can reinforce brand strengths. Consider featuring testimonials prominently on the website and in advertising materials.
  - Customer Advocacy Program: Develop a program to incentivize word-of-mouth marketing from satisfied customers. Rewards could include discounts, exclusive access, or other perks.
- **Reward Power:** Encouraging satisfied customers to leave reviews can further bolster Rare Beauty's positive reputation and attract new customers. This could be done through targeted marketing campaigns, creating a seamless and user-friendly review process, or incentives for reward power such as discounts or rewards for reviews.
- **Positive Outcome Appraisal:** Across all three months, the majority of reviews are positive, indicating a strong satisfaction level among customers. This is a positive indicator of the brand's popularity and customer loyalty. This means that Rare Beauty has a positive outcome appraisal in the context of the cognitive appraisal theory. Rare beauty should continue to highlight these reviews on their website.
- **Transparency and Trust Building: (OpenAI, 2024)**
  - Open Communication: Address the public about steps being taken to improve based on feedback. Transparency in actions taken to resolve common complaints can build trust.
  - Brand personality: the collection of human characteristics that can be associated with the brand. Through transparent communication with their consumers, Rare Beauty can portray themselves as an honest and trustworthy brand.

# Limitations

- **Context:** We relied on predefined sentiment categories (positive, negative, neutral), which may not fully capture the full context of nuanced opinions expressed in social media comments and reviews. This can lead to misinterpretation of sentiment, especially when dealing with complex topics like celebrity feuds and brand sentiment.
- **Biased Data Collection:** The comments and reviews collected from Instagram, TikTok, Sephora.com, and RareBeauty.com may not represent a diverse and representative sample of the brand's customers. For example, there could be a bias towards younger demographics on Instagram and TikTok, while Sephora.com reviews might be skewed towards more frequent or loyal customers.
- **Timing Factors:** The timing of data collection before and after the feud may influence sentiment. Other events or marketing campaigns happening around the same time could have confounded the results. Additionally, sentiment may fluctuate naturally over time due to various factors unrelated to the feud.
- **Volume of Data:** The volume of comments and reviews collected varied between platforms, potentially skewing the overall sentiment analysis results. Higher volumes of data from one platform could disproportionately influence the findings compared to others. For example, we had more data from social media comments than from brand reviews.

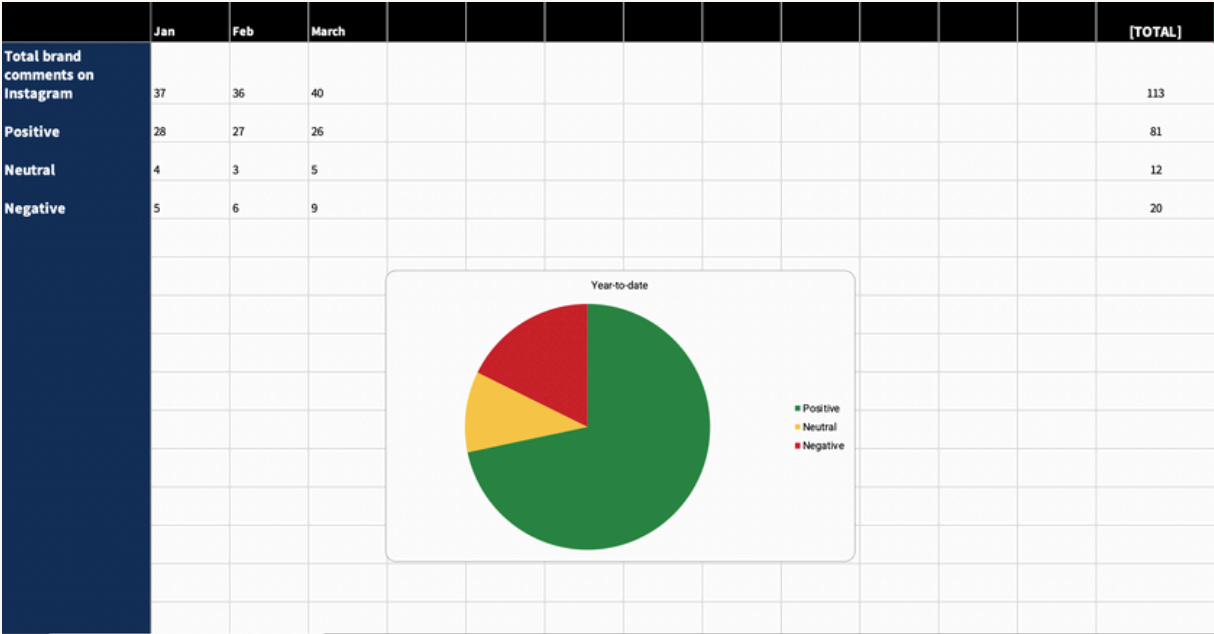


# Conclusion

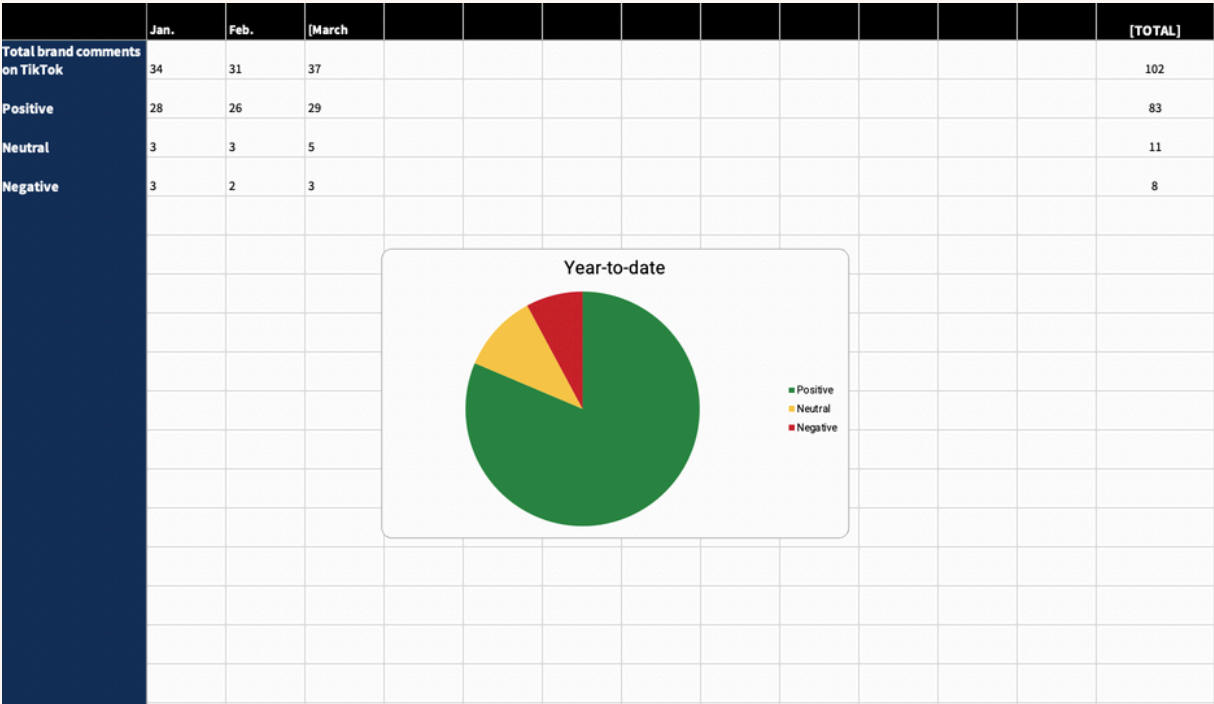
In conclusion, our sentiment analysis of Rare Beauty spanning January to March 2023 provided valuable insights into the brand's perception amidst the public feud involving Selena Gomez and Hailey Bieber. Through meticulous examination of social media comments and brand reviews, we observed a noteworthy trend: despite the turbulence of the feud, Rare Beauty maintained a positive sentiment overall. Not surprisingly, our findings revealed a slight improvement in brand sentiment post-feud compared to the period preceding it. This outcome proves our hypothesis that the brand's sentiment would indeed improve following the public feud, highlighting Rare Beauty's resilience and the enduring loyalty of its customer base and Selena's fan base. As Rare Beauty continues to navigate the dynamic landscape of public perception, these insights serve as a testament to the brand's enduring appeal and its ability to weather challenges while maintaining a positive image. Based on the data collected, some recommendations for the brand are to increase innovativeness, leverage positive sentiments, use reward power, use the positive outcome appraisal to their advantage, and finally to continue to build trust through transparency,

# Appendix

## Instagram



## Tik Tok



# Appendix

Sephora.com

	Jan.	Feb.	March									[TOTAL]
Total Brand Reviews on Sephora.com	17	16	17									50
Positive	13	13	14									40
Neutral	2	2	2									6
Negative	2	1	1									4

Year-to-date

A pie chart titled "Year-to-date" illustrating the distribution of customer sentiment. The chart is divided into three segments: a large green segment representing "Positive" reviews at 80%, a smaller yellow segment representing "Neutral" reviews at 16%, and a small red segment representing "Negative" reviews at 4%. A legend to the right of the chart identifies the colors: green for Positive, yellow for Neutral, and red for Negative.

Sentiment	Count	Percentage
Positive	40	80%
Neutral	6	16%
Negative	4	4%

Rarebeauty.com

	Jan.	Feb.	March										[TOTAL]
Total Brand Reviews on Rarebeauty.com	17	16	17										50
Positive	15	13	14										42
Neutral	2	2	3										7
Negative	0	1	0										1

Year-to-date

A pie chart titled "Year-to-date" illustrating the overall sentiment distribution from all brand reviews. The chart is divided into three segments: a large green segment representing Positive reviews (42 out of 50), a smaller yellow segment representing Neutral reviews (7 out of 50), and a very thin red segment representing Negative reviews (1 out of 50). A legend to the right of the chart identifies the colors: green for Positive, yellow for Neutral, and red for Negative.

Sentiment	Count
Positive	42
Neutral	7
Negative	1

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