

**Cotton Chronicles: A Sentiment Analysis of Discover Cotton's Instagram Comments**

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## Introduction

Cotton is an economically important commodity that can be found in many aspects of life, including apparel, home furnishings and medical supplies (Economic Research Service, 2022; National Cotton Council of America, n.d.-a). The cotton industry, like most commodity organizations, uses generic advertising and social media marketing strategies to promote its product (Forker & Ward, 1993). Social media, used by much of the global population, has transformed the way we gather and receive information (Sprout Social, 2023-a; National Science Board, 2022). The agriculture industry faces challenges in using social media, but there are benefits to using it to promote commodity-specific marketing messages. Therefore, we sought to describe the sentiment of comments on the Discover Cotton Instagram account. This is necessary to better understand how agricultural commodities use social media for marketing and communicating messages.

## Theoretical Framework

Our study was guided by the stimulus-organism-response (S-O-R) framework developed by Mehrabian and Russell (1974). S-O-R explores how stimuli affect organisms and subsequently influence their behaviors (Jacoby, 2002). Mehrabian and Russell (1974) suggest that stimuli impact organisms directly, triggering specific responses. Stimuli can include any physical input perceived through the five senses: sight, sound, smell, taste, and touch. According to Craik (1968), stimuli are "units of the everyday physical environment" (p. 30), which can shape internal states and perceptions (Mazursky & Jacoby, 1986; Mollen & Wilson, 2010). The organism represents the internal variables that determine how a stimulus is perceived and how it influences behaviors or responses (Mehrabian & Russell, 1974). In the context of this study, Instagram users were considered the organism. Responses to stimuli are categorized as approach or avoidance behaviors. Approach behaviors are positive actions directed toward the environment, while avoidance behaviors are any other responses to the stimuli (Spangenberg et al., 1996).

## Method

We studied the Discover Cotton Instagram account, which is managed by Cotton Incorporated, a non-profit organization funded by the United States cotton growers and cotton and cotton textile product importers. The purpose of our study was to describe the sentiment of comments on the Discover Cotton Instagram account. In total, we analyzed 434 Instagram posts from March 2, 2021, to March 2, 2023. Our research question was: What is the sentiment of comments on @discovercotton? To answer the research question, we sorted all comments, using emojis, context, and emotive words to indicate posts as positive, negative, or neutral. We used Emojipedia (Emojipedia, n.d.) to decipher the meaning of various emojis in comments. We also took notes throughout the data analysis for reference when analyzing the data. Descriptive statistics were conducted to report the data. We established trustworthiness using methodological triangulation, prolonged engagement with the material, positionality statements, peer debriefing sessions, and reflexive journaling.

## Results

In total, we analyzed 5,799 comments. An overwhelming majority ( $n = 5,593$ ;  $f = 96.44\%$ ) of comments were positive with 150 ( $f = 2.58\%$ ) neutral comments and 57 ( $f = 0.98\%$ ) negative comments. Positive comments featured words such as "LOVE," "beautiful," and "slay." Phrases, "Wow!! Loving this!," "Need that," "So chic!," and "This fit is iconic.," also portrayed

positivity. Emojis such as 😍, 🙌, 🔥, ❤️, and 🙏 were used in positive comments. Many positive comments were derived from the featured individual or from Discover Cotton, thanking followers for commenting and interacting. Comments that showed a desire to own or wear something (e.g., “I had my eyes on this skirt too” or “Where can I find these jeans?? Dying to know”) were categorized as positive, as well.

Neutral comments were mostly spam comments. Often, such comments requested a direct message (e.g., “Hey u wanna see a big proposal? DM me!” or “May the peace of the entire universe be upon you beloved ❤️🦋🌈...There is a Message for you from your guiding angel ... kindly send me a message directly... I’ll be expecting your response soon!!! Love and light to you 🙏🌟”). Other comments classified as neutral were derived from followers who were having difficulty finding clothing items and asking for links (e.g., “Even though the skirt is sold out, WHERE is the skirt from..? I can’t find it...”).

Few negative comments existed. Some pertained to alternative products, in lieu of conventionally produced cotton (e.g., “[@discovercotton](#) hey thank you for replying. Do you have any plans to switch? Non-organic cotton requires crazy amounts of water and chemicals to be produced. It’s lovely but super damaging to the planet 🤔” or “Hemp is better”). Some negative comments were responses to certain creators or influencers featured on the page, while others were regarding the lack of body diversity (e.g., “Revolve only have super skinny models???” and “If the average size of an American women is 14 – 16 why are you always advertising size 0 – 2? It’s ridiculous. Get some more models ♡.”). Some comments were in response to customer service concerns with shopping partners (e.g., “Is this website even legit? I’ve seen A TON of negative reviews saying the website is a scam as well as horrible customer service. Which is probably a given since they are scammers” or “I HAVE HEARD FROM NO ONE SINCE WEDNESDAY REGARDING AN ORDER THAT WAS PURCHASED ON 09/22 THAT HAS STILL NOT SHIPPED. CAN SOMEONE RESPOND TO ME?”)

### Conclusions

An overwhelming majority of the comments found on the Discover Cotton Instagram page were positive. Within the S-O-R framework, when organisms (social media users) were presented with a stimulus (Discover Cotton Instagram posts), there was a high approach response (Spangenberg et al., 1996). Engagement is important to create positive relationships with customers and foster connectivity with followers (Pansari & Kumar, 2017). Although negative comments were present on the Discover Cotton Instagram account, none of them were negative toward the Discover Cotton brand. Discover Cotton enjoys a positive relationship with its followers. Most of the negative comments pertained to other brands and influencers featured on the Discover Cotton Instagram page.

### Implications and Recommendations

Social media are an incredibly powerful tool for commodity-specific marketing. We identified that Discover Cotton fosters positive relationships with its followers, despite occasional criticism. Consistent analysis of consumer sentiment toward Discover Cotton can assist in determining consumer demand and engagement. Agricultural communicators and science communicators should continue to explore comments via social media with an emphasis on social media use to disseminate evidence-based, scientific information to consumers.

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