

**Content Analysis of Amazon Reviews: Valuable Consumer Information in Joke Reviews**

Sarah K. Tribelhorn

Marshall School of Business, University of Southern California

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Content analysis can be used in research to understand trends in society, in addition to the behavior of organizations, and the perceptions of stakeholders (Terry College of Business, n.d.). Furthermore, content analysis can be used to analyze data, such as product or service reviews, both systematically and quantitatively (Maier, 2017) to provide fundamental information that can enhance the understanding of consumer behavior (Kolbe & Burnett, 1991).

Regarding consumer behavior, many companies, including Amazon, have found that consumers generally research products before committing to purchasing (Shaffer, 2020). As such, reviews have become an important part of the consumer process, where product credibility can be established (Shaffer, 2020). These reviews can include factors, such as product ratings and keywords that consumers provide, and research has found that consumers will form an opinion on products after reviewing relatively few reviews (Shaffer, 2020), indicating the potential importance of these reviews for product sales and development.

In addition to authentic positive and negative product reviews, some products, such as *BIC for Her* pens, have elicited joke reviews, which upon analysis can provide important insight into not only consumer behavior, but also important societal issues, such as gender-based equity issues for example. These pens have been marketed specifically for women, and in addition, are generally more expensive than other similar products. This higher price or “pink tax” indicates an obvious price difference in services and products marketed specifically for women that cost much higher than similar products for men (Fontinelle, 2021, para. 1). Stevens and Shanahan (2017) surveyed women regarding their perception of this “pink tax” and determined that this had a negative impact on them, influencing them to be more thorough with their research regarding products with obvious gender inequity in the future. The content analysis of reviews

can also reveal the opinions of consumers about different products, revealing the effect of factors such as “pink tax”. However, as noted by Willemsen et al. (2011), not all reviews can be considered to hold the same merit, and therefore, should be evaluated differently. In this regard, content analysis can be a useful tool to specifically analyze data, despite the differences.

In addition, content analysis can be used effectively to determine the difference between fake and authentic reviews (Moon, et al., 2021). Consequently, it is necessary to assess the importance of all reviews, authentic, fake, and joke reviews, since they can hold valuable consumer and societal information. In the present study, Amazon *BIC for Her* reviews were analyzed to answer the following research questions: Do joke reviews provide valuable information for consumers and producers alike? Is there a difference in the seriousness of these reviews between different genders, and if there is, why?

## **Method**

### **Sample**

The content analysis sample comprised 25 product reviews recorded in August, 2021. The sample covers a random selection of *BIC for Her* reviews on Amazon from 2012 to 2021.

### **Procedure**

The reviews were rated by the author and three colleagues in the MMLIS program at the University of Southern California. Raters were trained in the operationalization of variables and in the coding procedures. A total of six variables were coded, which also included the gender of the reviewers. These variables were grouped into three subsections including Review Authenticity, Performance, and Appearance. The first section coded for, Review Authenticity, consisted of one variable. This variable was Joke, which defined whether the review was an authentic product review or a joke review. The second section coded for Performance, and

included the variables Performance, Fit, and Writing. The first of these variables, Performance, was defined as whether the *BIC for Her* pens performed well, with limited technical faults. An example of this was how the ink flows. The second variable, Fit, was defined as how well the pen fits in the hand. An example of this was how comfortable the grip of the pen is. The third variable, Writing, was defined as how the pen writes. An example of this was “the lady pen writes beautifully”. The third section, Appearance, included one variable, Appearance, and was defined by what reviewers liked in how the pen looked by how it was described. An example of this was the pen design. The code book for the variables can be found in Appendix A.

## Results

### Review authenticity

Analysis revealed that for 25 reviews analyzed, there was a significant negative relationship between joke reviews and the pen performance ( $r = -.44, p = .028$ ). In addition, an independent-samples  $t$  test was conducted to evaluate if males and females differed in their reviews, in terms of whether it was authentic or not. The test was non significant,  $t(19) = 1.84, p = .063$ . Although there was a tendency for more males ( $M = 2.20, SD = .45$ ) to post joke reviews than females ( $M = 1.56, SD = .73$ ).

### Performance

The reviewers generally reported the performance of the pens to be less than acceptable ( $M = 2.16, SD = 2.37$ ). A one-sample  $t$  test indicated that this mean value was not significantly different from the midpoint value of 3,  $t(24) = -1.77, p = 0.090$ . Analysis revealed that for 25 reviews analyzed, there was a significant positive relationship between the fit and the performance of the pen ( $r = .43, p = .031$ ). In addition, there was also a significant positive relationship between the appearance and performance of the pen ( $r = .62, p = .001$ ).

## Appearance

A paired samples *t* test was conducted to determine if reviewers were more concerned with performance than appearance. The results indicated the mean concern with performance ( $M = 2.16, SD = 2.37$ ) was non significantly higher than the mean concern with appearance ( $M = 1.64, SD = 2.31$ ),  $t(24) = 1.27, p = .215$ .

## Discussion

The results revealed that the joke reviews generally included less useful information on the performance of the pens than the authentic reviews, for both consumers and producers. In addition, the results also revealed that there was not a significant difference between the number of males and females leaving joke reviews, although there were slightly more males than females who left joke reviews.

Based on the analysis of all the reviews, it was found that the performance of the pens was rated as average, but those who rated the performance of the pen more highly, also rated the fit more highly. Similarly, appearance was also rated more highly by those who rated performance more highly. Regarding appearance, the reviewers were not more concerned with performance than appearance. This information could be beneficial for other consumers and producers.

Therefore, to answer the research questions, the joke reviews do also provide valuable information to both the producers and consumers, since their content did reveal information regarding the performance, appearance and fit - which would benefit both consumers researching the product and producers for valuable feedback. There was not a marked difference between the joke reviews by males and females. However, the sample size was relatively small, and for more accurate results, a larger sample would be beneficial. In addition, more emphasis could have

been placed on the gender differences, providing more data highlighting previously stated gender inequities. However, as noted by Pan and Zhang (2011) regarding the usefulness of reviews, the Amazon *BIC for Her* reviews revealed that reviewers could be motivated by very different opinions regarding a product, that could include social factors, which could explain gender differences in review authenticity. In addition, although the present study determined that the joke reviews could provide useful information, Skalicky and Crossley (2015) noted that these joke reviews are satirical, using irony to provide an elicited meaning that critiques the product. In the case of *BIC for Her* pen reviews, the comments made were around performance, fit and appearance, and although satirical, highlighted important gender stereotyping - possibly making reviewers critically analyze products before purchasing them.

To conclude, further research should be conducted on a wider range of variables, and a larger sample size for this data to conclusively suggest that truly valuable information for both consumers and producers can be found in joke Amazon reviews.

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**Appendix A: Code Book**

**Coding Unit:** Gender

**Define:** Male or Female or Unknown

**Coding Unit:** Usefulness

**Define:** Is this pen useful? Does the reviewer mention the usefulness of the pen?

**Keywords:** writing better, write fast, looks better

**Examples:**

- I can barely write fast enough to let them all out, but these Bic for Her pens have melded to my hands and I've become one with them.
- My note taking is smoother and better
- I got these for the little lady in my life and I have to tell you, her grocery shopping list has never looked better!

**Coding Unit:** Fit

**Define:** How well does this pen fit? Does the reviewer mention the fit of the pen?

**Keywords:** comfortable, size, shape, hands, small, thinner

**Examples:**

- Have a comfortable grip.
- Have a pen that would fit their hands.
- Wish the body was a little thinner.

**Coding Unit:** Performance

**Define:** Does the pen perform well? Are there technical faults with this pen?

**Keywords:** leaks, explodes, flow

**Examples:**

- Leaks out some ink.
- They explode.
- Great ink flow.

**Coding Unit:** Appearance

**Define:** Do reviewers like the appearance of this pen?

**Keywords:** cute, pretty, beautiful, glamour, fanciful

**Examples:**

- I wanted something cute, so I picked the Bic for Her.
- Pretty, fanciful design.

**Coding Unit:** Writing

**Define:** Do reviewers like how this pen writes? How does this pen write?

**Keywords:** beautifully, fine, smoothly, flow,

**Examples:**

- Writes well: The lady pen writes beautifully.
- Pen works fine.
- Excellent in writing.

**Coding Unit:** Joke

**Define:** Is the user likely joking in their review? Were they going for humor over an actual evaluation of the product?

**Keywords:** PMSing, feminist, manly, feminine, cleaning, cooking, grocery lists

**Examples:**

- I can barely keep the men away when I'm holding one of these in my dainty hand.
- When I get all dressed up in my finest girly outfit for a Halloween costume this is the only pen to carry.