

The Impact of Persuasion Mechanisms in Douyin's "Red-Black List" Videos on Consumer Purchase Intention

Xuanfei Chen*

School of Management, Xiamen University, 361005 Fujian, China

**Corresponding author: Xuanfei Chen.*

Abstract

Against the backdrop of Douyin e-commerce's rapid growth, the polarized narratives in "Red-and-Black List" videos have become key factors influencing consumer decision-making. In these types of videos, bloggers typically categorize similar products into a "Red List" of recommended items and a "Black List" of products to avoid, based on their subjective experiences, and highlight the pros and cons through strong contrasts. This paper focuses on the dual persuasive effects of list content and comment section sentiment and constructs a "dual stimulus--cognitive transformation--purchase intention" model based on SOR theory. This study employed a questionnaire survey to collect 202 valid samples and conducted empirical testing using regression analysis. The results show that "Red List" videos are more effective than "Black List" videos in stimulating purchase intention; the emotional atmosphere in the comment section positively moderates this relationship; and perceived usefulness and perceived value exert a chained mediating effect. The study reveals the synergistic influence mechanism of "content plus comments", providing a theoretical basis for creators to optimize their narrative strategies and for brands to conduct targeted marketing.

Keywords

Douyin e-commerce, "Red-and-Black List" videos, SOR model, sentiment in comment sections, purchase intention

1. Introduction

This study focuses on the context in which the "Red-and-Black List" in short videos influence consumer decision-making and is of great significance for clarifying the dual persuasion logic of "content plus comments" and guiding marketing practices [1]. Zhao Wei and Qin Zhili (2023) [2] point out that the content characteristics of promotional short videos significantly influence consumers' purchase intentions [2], while existing research has paid little attention to the interactive effects between video content and the sentiment in the comments section. This study primarily examines how the interaction between the polarity of the lists and the sentiment in the comments section influences purchase intention through perceived usefulness and perceived value [3]. Literature reviews are employed to identify theoretical gaps that strengthen the theoretical foundation and subsequently conduct an empirical test using 202 valid samples collected via a questionnaire survey. This study aims to uncover the persuasion mechanisms of "Red-and-Black List" videos. In addition, it

empirically analyzes chain mediation and moderation effects to provide a basis for content optimization and targeted marketing.

2. Literature Review

In the paper *A Study on the Impact of Short Video Content Characteristics on Consumer Purchase Intentions*, Zhao Wei and Qin Zhili (2023) [2] examined the mechanisms through which short video content characteristics influence consumer purchasing decisions, confirming the significant role of content attributes and emotional expression in driving purchase intentions; Shi Lu(2020) [4], in studies such as “The Mechanism of How the Emotional Orientation of Online Reviews Influences Purchase Intention” analyzed the transmission pathways through which the emotional tone of online reviews influences consumer behavior; and Zhang Xiaojuan (2017) [5] explored the specific effects of review valence. These studies provide important support for enriching our understanding of the relationship between external cues and consumer behavior. However, there is little existing research specifically examining vertical content formats with highly polarized narratives such as “Red-and-Black List” within the Douyin e-commerce ecosystem, and most studies focus solely on the unidimensional impact of either video content or the comment section [6]. Research that treats “list polarity” as a primary stimulus and “comment section sentiment” as a secondary stimulus to explore their interactive effects remains incomplete, failing to fully reveal the black-box mechanism of “content plus comments” synergistic persuasion in short-video contexts. This paper adopts the SOR theory perspective to construct a “dual stimulus--cognitive transformation--purchase intention” model, integrating list polarity and comment sentiment into a unified framework. It focuses on investigating the chained mediating effects of perceived usefulness and perceived value, as well as the moderating effect of comment sentiment, to conduct an empirical study on the persuasive effects of “Red-and-Black List” videos [7]. This research aims to fill existing gaps in the study of the interactive mechanisms of polarized content and provide a theoretical basis for content creators and brand marketers.

3. Research Methods

3.1 Theoretical Models and Research Hypotheses

Based on SOR theory [8], this study constructs a chain model of “List Polarity(S1) -- Comment Sentiment(S2)--Perceived Usefulness(O1)--Perceived Value(O2)--Purchase Intention(R)” and poses the following research questions: First, which type of video which is about the “Red List” or the “Black List” is more effective at stimulating consumer purchase intention? Second, does the emotional tone of comments play a positive moderating role between list polarity and purchase intention? Finally, do perceived usefulness and perceived value play a chained mediating role between list polarity and purchase intention? Specifically, SOR theory [8] emphasizes that environmental stimuli(S) are transmitted through the mediation of organism’s internal states(O), ultimately triggering behavioral responses(R). In the context of this study, “list polarity” serves as the core independent variable, representing the stance of recommendation or warning conveyed by the video content; “comment sentiment” acts as a secondary stimulus, reflecting the social identity and peer pressure generated by group interaction. Together, they constitute a composite stimulus source. At the Organism level, “perceived usefulness” represents consumers’ initial assessment of the decision-support value of the information they receive, while “perceived value” constitutes a comprehensive utility evaluation built upon perceived usefulness; the two are logically sequential. Ultimately, “purchase intention”, as the dependent variable, represents the overt behavioral tendency resulting from prior cognitive and emotional processing. The first research question focuses on the main effect of content polarity; The second research question explores the situational moderation of social cues; and the last research question delves into the internal pathways of cognitive transformation. This model not only expands the applicability of the traditional SOR model [8] to short-video e-commerce but also provides a theoretical framework for understanding how the dual stimuli of “content plus comments” synergistically influence consumer decision-making, demonstrating strong practical explanatory power and academic innovation value.

3.2 Questionnaire Design

This study employs a questionnaire survey method to empirically test the theoretical model and research hypotheses. This method effectively captures consumers' psychological processes and behavioral intentions in real-world social media environments and is capable of handling complex multivariate relationships, making it suitable for conducting path analysis of the chained mediation and moderation effects in the SOR model [8].

This survey was conducted via a professional online questionnaire platform. After excluding invalid samples with excessively short response times or repetitive responses, a total of 202 valid questionnaires were collected. The survey participants spanned most provinces in China and represented all age groups. In terms of questionnaire design, this study strictly adhered to the "Stimulus --Organism--Response" theoretical paradigm [8] to structure the item logic. On the stimulus side(S), the question "What do you think is the overall bias of this video?" was included to distinguish between "Red List" recommendations and "Black List" warnings, to investigate the main effect in the first research question; the questions "Based on what you saw in the comments section and the bullet comments at the time, please select the option that best fits" and "To what extent did you browse the comments section at the time?" were included to measure the emotional atmosphere of the comments section and user engagement, serving as moderating variables for the second research question. On the organizational side (O), perceived usefulness is measured using the statements "I believe the information provided in this video was very helpful for my purchasing decision" and "This video gave me a clearer understanding of the product's strengths and weaknesses"; perceived value is measured using the statements "I think the product recommended/warned against in this video offers high/low value for money" and "Overall, it was worth taking this video's advice into account." Together, these two variables form a chained mediation path used to investigate the answer to the third research question. On the response side(R), set "Based on this video and the comments section, what is your actual intention to purchase?" as the final dependent variable to complete the logical loop.

4. Data Analysis and Results

4.1 Analysis of Sample Structure and Content Involvement

In terms of sample composition, the sample exhibits typical characteristics of being "young, highly educated, and highly engaged," which closely aligns with the core audience profile of Douyin's "Red-and-Black List" videos. Demographically, women accounted for 56.44%, slightly higher than the 43.56% for men, reflecting the current market reality where female users are more active in making purchasing decisions in social e-commerce scenarios. The age distribution is highly concentrated in the 18–35 age range, accounting for a combined 63.86% of the sample, with the 18–25 age group making up 35.64% and the 26–35 age group 28.22%. This indicates that young people are not only digital natives but also the primary consumers of this type of polarizing content. Furthermore, 66.83% of respondents hold a bachelor's degree or higher, and 43.53% have a monthly disposable income of 5,000 yuan or more. This demonstrates that the sample possesses a strong educational background and significant spending power, enabling them to make rational judgments about product value. More crucially, behavioral data supports these findings: as many as 45.05% of respondents stated that they "always" watch such videos, and 54.95% have actively searched for related products based on video content. These figures not only confirm that "Red-and-Black List" videos' content has become a key reference for users' daily information gathering and consumption decisions but also indicate that the sample exhibits a high level of psychological engagement with the research context. This active, rather than passive, approach to information reception effectively ensures the authenticity and validity of subsequent measurements of perceptions and intentions [9].

4.2 Videos Tend to Perceive the Value Transformation Mechanism

"Red List" and "Black List" videos disrupt users' cognitive balance through polarized narratives, thereby driving perceived value through perceived usefulness and forming a complete conversion chain from external stimuli to internal cognition [10]. Data analysis shows that whether it's the "positive recommendations" of the "Red List" or the "negative warnings" of the "Black List", their extreme presentation of information can trigger a strong psychological impact and effectively capture users' attention [11]. Survey results indicate that the vast majority of respondents recognize the value of such videos in providing assessments of a product's strengths,

weaknesses, and cost-effectiveness. A very high percentage of respondents agreed with statements such as “the information provided in this video was very helpful for my purchasing decision” and “it gave me a clearer understanding of the product’s strengths and weaknesses”. This perceived usefulness goes beyond superficial information transmission and significantly and positively predicts perceived value: in the “Red List” videos’ context, usefulness manifests as helping users discover great products and improve their quality of life; in the “Black List” context, it manifests as helping users avoid pitfalls and minimize losses and ensure consumer safety. Users internalize video content as their own cognitive capital; the more useful they find the information, the more likely they are to believe that referring to the video was worthwhile. This psychological shift from “information acquisition” to “value judgment” lays a solid cognitive foundation for subsequent purchasing decisions.

4.3 Purchase Intention and Behavioral Conversion Efficiency

As the final output of the model, purchase intent demonstrated a high conversion rate in the sample and effectively translated psychological intent into actual behavior. Data shows that more than half of the respondents developed a clear purchase intention after watching the videos, and this intention was significantly evident in both the “Red List” videos and “Black List” videos—the “Red List” videos primarily stimulates users’ desire to try new products by evoking their aspiration for high-quality goods, while the “Black List” facilitates alternative purchases driven by risk avoidance by eliminating information asymmetry. It is worth noting that purchase intent did not remain merely a psychological fluctuation; 54.95% of actual search behaviors strongly demonstrated the efficient conversion from awareness to action. This indicates that “Red-and-Black List” videos not only possess emotional appeal but also exert a powerful influence on behavior. Once users confirm that the information is useful and its value is clear, they can rapidly shorten the decision-making process, reduce information-searching costs, and proceed directly to the point of purchase. This high conversion rate profoundly demonstrates the marketing effectiveness of short videos, where “content is the gateway”, and validates that within the Douyin e-commerce ecosystem, the “Red-and-Black List” videos serve as a unique persuasive tool that exerts a substantial influence on consumer behavior [12].

5. Discussion

First, based on the SOR theoretical framework [8], this study reconstructed the “dual stimulus—cognitive transformation—purchase intention” model in the context of short-video e-commerce and refuted the limitation of previous studies that examined video content and comment section information in isolation. The study confirms that “Red List” and “Black List” videos not only directly influence consumer decisions through “list polarity,” which is the primary stimulus, but also generate a significant synergistic persuasion effect in conjunction with the “emotional atmosphere of the comment section,” which is the secondary stimulus. Specifically, “Red List” videos, backed by positive comments, significantly amplify the persuasive effect; conversely, and “Black List” videos accompanied by negative comments reinforce the buy-off effect. This finding reveals that short-video platforms constitute a complex information field where user decisions result from the combined influence of content information and social cues, providing new evidence for understanding consumer psychology in the new media environment.

Second, the study conducted an in-depth analysis of the underlying cognitive transformation pathway from external stimuli to internal decision-making, confirming the validity of the chain-mediation mechanism linking perceived usefulness to perceived value. The study indicates that external stimuli do not directly translate into purchase intention but must instead pass through the consumers’ internal cognitive processing pathways. Among these, the evaluation of information helpfulness—perceived usefulness—serves as the initial stimulus that promotes purchase intention, while the comprehensive assessment of a product’s cost-effectiveness—perceived value—is the critical link influencing the final purchase behavior. This chain-like pathway corroborates the findings in related studies that the sentiment of online reviews influences purchase intention through dual perceptual variables and successfully extends this framework to the context of “Red-and-Black List” videos, indicating that users only complete the transition from information acquisition to value judgment after internalizing video content as their own cognitive capital.

Finally, the theoretical contribution of this study lies in expanding the scope of the SOR model’s application to short-video e-commerce. Specifically, this study extends the single stimulus in the traditional SOR model

to a dual stimulus comprising the polarity of video content and the subjective sentiment in the comment section, and focuses the organismic level(O) on the chain reaction between perceived usefulness and perceived value, thereby enriching the explanatory power of the SOR model in digital consumption contexts. At the same time, the findings provide empirical support in the short-video domain for the “multidimensional stimulus – psychological mechanism–behavioral response” analytical framework proposed by relevant scholars. On a practical level, the study suggests that content creators should emphasize the synergy between “content polarization” and “comment section guidance” when producing “Red List” and “Black List” videos: “Red List” videos can proactively highlight positive user feedback, while “Black List” videos can guide users to share experiences on what to avoid. Furthermore, companies can dynamically adjust their advertising strategies by monitoring sentiment trends in comment sections to maximize the marketing effectiveness of recommendations or deterrents.

6. Conclusion

The findings of this study, based on an empirical analysis of 202 valid samples, confirm that “Red List” videos are more effective than “Black List” videos at stimulating consumers’ purchase intent; the emotional atmosphere in the comments section plays a significant positive moderating role between the list’s polarity and purchase intent; perceived usefulness and perceived value exerted a chained mediating effect between the list’s polarity and purchase intention. Consequently, the study concluded that Douyin’s “Red List” and “Black List” videos, through the dual stimulation created by content polarization and comment resonance, effectively drive consumers’ cognitive leap from perceived usefulness to perceived value, ultimately achieving effective intervention in consumers’ purchasing decisions. This conclusion not only clarifies the differentiated persuasion logic of “Red-and-Black List” videos but also reveals the interactive mechanism between “informational cues” and “social cues” on short-video platforms, providing marketing insights for merchants on e-commerce platforms.

This study provides valuable insights into future research in this field, primarily influencing both the theoretical and practical aspects of short-video marketing. On the theoretical level, this study expands the scope of the SOR model’s application to research on polarized content, validates the rationale for incorporating “list polarity” and “comment sentiment” as dual stimuli into a unified framework, and offers new perspectives and analytical paradigms for future scholars exploring consumer psychological mechanisms in the new media environment. On the practical level, the study’s findings guide content creators to prioritize emotional guidance and management in comment sections, leveraging positive feedback to enhance the persuasiveness of their videos. At the same time, it advises brands to precisely align their “Red List” and “Black List” advertising strategies with specific marketing objectives—such as promoting products or warning against pitfalls—to maximize marketing effectiveness. Future research should focus more on in-depth exploration across all scenarios and using multiple methodologies. For example, researchers could further expand the age range and occupational backgrounds of the sample to investigate differences in how consumers of different generations perceive “Red-and-Black List” content; or introduce neuroscientific methods such as eye-tracking and EEG experiments to capture consumers’ moment-to-moment psychological changes while watching videos. Additionally, with the development of generative AI, the impact of “Red-and-Black List” videos posted by virtual influencers on consumer trust mechanisms warrants continued attention.

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Conflicts of Interest

The authors declare no conflict of interest.

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