

Factors Influencing Users' Perception of "Marketing Overload" and Boundary Conditions of Attitude-Behavior Split: A Case Study of Douyin Platform

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Abstract. This study investigates how marketing intensity, ad intrusiveness, and linguistic pressure shape consumers' perception of marketing overload on the Douyin platform and identifies the boundary conditions under which an attitude-behavior split occurs. In other words, it is when consumers dislike a brand's marketing yet continue to purchase its products. Data were drawn from a main survey of 91 active Douyin users aged 18-30, a pilot study of 19 respondents, and 320 valid user comments collected from a Douyin advertisement video through web crawling. The study finds that marketing density is the strongest predictor of overload perception ($r = 0.52$), followed by ad intrusiveness ($r = 0.44$) and linguistic pressure ($r = 0.38$), by using SPSS for descriptive statistics, Pearson correlations, t-tests, one-way ANOVA, and factor analysis, along with sentiment and thematic analysis of the social media comments. The results show that although perceived overload does not significantly reduce purchase intention overall, three boundary conditions emerge that weaken the effect: urgent need ($r = 0.53$), product uniqueness ($r = 0.43$), and brand trust ($r = 0.41$). Analysis of Douyin comments corroborates these survey findings, showing that consumers frequently continue purchasing despite disliking excessive advertising when products are trusted or needed urgently. These findings extend advertising avoidance and psychological reactance theories by clarifying when negative attitudes toward marketing overload fail to translate into avoidance behavior, offering practical guidance for moderating marketing frequency on digital platforms.

Keywords: Douyin platform, marketing overload perception, attitude-behavior split, boundary conditions, purchase intention

1. Introduction

Brand promotion through the Douyin platform frequently adopts strategies such as high-frequency repetition, forced irrelevant placement, and sensationalism. Such strategies contribute to the feeling of "marketing overload," meaning that the users become subject to an adverse emotional and cognitive experience triggered by information exceeding their psychological capacity [1]. Such excessive marketing creates the effect of negative externalities and consumer fatigue [2]. According to the principle of advertising avoidance, when consumers perceive an obstacle to their goal

achievement, they tend to avoid advertisements [3]. Similarly, according to psychological reactance theory, consumers resist ads due to excessive persuasion, which leads them to skip or block the advertisements [4].

While advertising avoidance theory supposes that consumers will disengage from excessive marketing, during the research process, many users, although not appreciating such marketing, still buy these products. The attitude-behavior split in this regard contradicts conventional theories. Therefore, the current research poses two related questions in succession. First, how do marketing density, ad intrusiveness, and linguistic pressure affect users' perceptions regarding marketing overload? Second, under what boundary conditions will marketing overload not have an impact on the reduction of purchase intention? This paper attempts to provide empirical findings through questionnaires and social media analysis to address the above research questions.

2. Methods

2.1. Study design and sample

In Study One, data collection took place between April 9 and 10, 2026, via the WJX platform. The participants were active Douyin users aged between 18 and 30 years, using the platform for at least five days each week. A total of 111 respondents were gathered, of which those aged 18-25 ($n = 79$) and 26-30 ($n = 12$) did not differ significantly on market overload through a test for an independent samples t-test ($p=0.13$). Thus, the 18-25 and 26-30 groups were combined to make up the 18-30 group consisting of 91 participants, and the rest were excluded because they belonged to the 31+ category. The Study One survey contained 18 questions on demographics, usage behavior, marketing density perceptions (Q6, 1-5), intrusive ads (Q9, 1-5), linguistic pressure (Q12, 1-5), total feeling of being overloaded (Q15, 1-7), purchase intention (Q16, decreased/unchanged/increased), and purchase behavior. For purchase behavior, participants were asked to select the statement that best described their usual response to overload marketing: "The more I dislike marketing, the less I buy." (avoidance), "I still buy occasionally, e.g., due to discounts or actual need." (occasional buy), or "I will buy it if the product is good enough." (product quality).

Data collection for the pilot study occurred on May 17, 2026, where 19 responses were recorded. The participants were 94.74% women and 89.47% ages 18-25. Given the small sample size and low reliability, the study is used solely for exploring trends and hypotheses. The survey included questions about the frequency of being overloaded, brand trust, kind of product, price level, urgency, substitutability, discounting, price sensitivity, and the dependent variable, "probability of buying even if overloaded," which was rated on a 1-5 scale. The overload marketing strategy was compared to regular marketing techniques.

This research also applies a crawler to obtain the emotional trends of the Douyin users. Social media comment data was obtained from an advertisement video posted on Douyin by GrainRain Radiance Repair Essence Water, where it had very visible screen-filling marketing practices. The initial number of comments collected through the Houyi web crawler is 500, while only 320 remain after removing duplicate, irrelevant, and blank comments.

2.2. Recommended paper structure

For Study One, SPSS 26.0 was used for descriptive statistics, Pearson correlations, t-tests, one-way ANOVA, factor analysis, and reliability analysis. KMO value was found to be 0.789 while the sphericity test was found to be statistically significant ($p<0.001$), indicating appropriateness for

factor analysis. Two components were obtained, accounting for 41.9% of the variability. The Cronbach's alpha value was 0.680, which is satisfactory. For the pilot study, the minimum detectable correlation coefficient was found to be 0.44 based on a sample size of 19, significance level of 0.05 (two-tailed), and power of 0.80. Analysis of social media comments was done through the DeepSeek large language model that would classify sentiments expressed by users as positive, negative, or neutral. The same analysis was done to derive themes. The reliability of the automated categorization was tested using manual categorization by the researcher of a randomly selected sample of 60 statements and comparison with the output of the algorithm.

3. Results

3.1. Study one main sample

In the case of 91 participants who ranged from ages 18 to 30 years old, 82.14% were females, and 82.14% were students. Usage patterns revealed that 72.32% used Douyin 5-7 days weekly, 50% spent 30 minutes to 2 hours using Douyin each day, while 27.68% were using the app for over 2 hours a day. The mean value of Q6 (annoyed by three times per day) is 4.09 (SD = 1.02). The mean value of Q9 (interrupted by unrelated ad) is 4.41 (SD = 0.85). The mean of Q12 (urging phrases make me not want to order) was 3.47 (SD = 1.18). The mean of Q15 (overload rating) was 6.01 (SD = 1.08), with 68.75% of participants scoring 6 or 7, corresponding to high or very high perceived overload. Whereas purchase intention change was distributed as: "decrease" in 21.6%, "no change" in 60.4%, and "increase" in 18.0%.

Factor analysis revealed that Q12 had a low communality of 0.172, indicating it does not align well with the other items. Pearson correlations showed that marketing density was positively correlated with overload rating ($r = 0.52$, $p < 0.001$). Ad intrusiveness also correlated positively ($r = 0.44$, $p < 0.001$). Correlation with linguistic pressure was positive ($r = 0.38$, $p < 0.001$). Correlation between overload rating and purchase intention change was $r = -0.18$ ($p = 0.06$) and statistically insignificant.

As per the buying pattern, there were three categories. The basic avoidance category (the more I dislike, the less I buy) was 21.43%. The occasional buy category (still buy occasionally, for example, due to discounts or actual requirement) was 60.71%. The group of those who disliked the product but whose purchases were not affected because it was good enough was 16.96%. There was a significant difference between the three groups in terms of overload ratings, using one-way ANOVA $F(2,88) = 4.12$, $p = 0.02$. least significant difference (LSD) post-hoc analysis demonstrated that the avoidance group had a significantly higher overload score ($M = 6.33$) when compared to the occasional buyer group ($M = 5.88$, $p = 0.01$), whereas there was no significant difference with regard to the product-good-enough group ($M = 6.11$, $p = 0.38$). Regarding impulsive shopping that has been influenced by screen filling marketing (multiple choices allowed), 46.43% have buyer's remorse, 31.25% were satisfied, 33.93% have not purchased anything, while 15.18% cancelled their purchases.

3.2. Pilot study: exploratory boundary conditions

Of the 19 respondents, 73.68% considered Douyin brand marketing overload as relatively serious (score 4), with a mean severity of 3.95 out of 5. Over half (52.63%) often encountered overload, and 47.37% occasionally encountered it. The outcome variable was the likelihood of still buying when a brand's marketing is perceived as overload (1-5). Pearson correlations with potential boundary

conditions were as follows. Urgent need (no time to compare prices) correlated at $r = 0.53$ ($p = 0.020$). Product uniqueness (few substitutes) and brand trust both showed positive but only marginally significant, with the correlations at $r = 0.43$, $p = 0.069$, $r = 0.41$, $p = 0.081$, respectively. Notably, whatever price is low or high, it shows no linear relationship with purchase likelihood in this sample. Non-essential or hedonic products and everyday consumables also showed a weak correlation of $r = 0.25$, $p = 0.305$, and $r = 0.02$, $p = 0.928$, respectively.

3.3. Social media comment validation

Among the 320 valid comments on the GrainRain Radiance Repair Essence Water video, 22.5% were positive, 48.8% were negative, and 28.7% were neutral or mixed. In the negative remarks, the most common problems cited include too much advertisement or advertising at frequent intervals (43.6%), misleading or overstated claims (26.9%), allergies/skin irritation (19.9%), and price/volume-related complaints (9.6%). This distribution corresponds to the questionnaire results from Study One: correlation coefficient $r=0.52$ for marketing frequency, which suggests that marketing density is a major influential factor in market overload. Notably, 34.0% of the negative comments (16.6% of all comments) expressed ambivalence because even if they were annoyed by too many advertisements, they ended up buying the product anyway. Common responses were: "Lots of GrainRain ads, but it works"; "Another GrainRain... but it is a good one"; and "Sick of seeing this one around, but I trust its formulation and therefore buy." These responses highlight how product effectiveness and brand trust can drive purchasing habits regardless of ad fatigue. This figure is smaller compared to 60.4% of occasional purchasers in the questionnaire, but the direction is in agreement, indicating the presence of an attitude-behavior split in actual usage situations.

4. Discussions

4.1. Core factors influencing marketing overload perception

The highest correlation occurred between marketing density and overload perception ($r = 0.52$), thus confirming that the mere exposure effect is conditional in its nature. It was found that a mere exposure to a stimulus leads to an increased level of liking [5], however, subsequent research showed that the positive effects of mere exposure diminish under negative conditions of exposure [6], which on Douyin may result from ads being viewed as disturbing the viewing experience or being unrelated to it. The advertising avoidance theory suggests that the perception of goal impeding is the most significant predictor for advertising avoidance [7]. This conclusion correlates highly with ours. Regarding ad intrusiveness, the correlation was at $r = 0.44$, which represented the users' sensitivity towards being interrupted while watching. For linguistic pressure, the correlation was lower at 0.38, and the communality for the urging-phrases scale was extremely low. This indicates large individual variations in response to expressions such as "limited time." The marketing language of Douyin also employs rhetorical questions and exclamations to create an aura of urgency [8].

4.2. Boundary conditions of the attitude-behavior split

There was no significant correlation between the perception of overload and the changes in the purchase intention ($r = -0.18$, $p = 0.06$), with 60.4% of consumers continuing to make purchases occasionally. Analysis of the pilot study provides the indications required for replication. Need for

urgency was highly correlated with purchase intention ($r = 0.53$). With time pressure involved, the decision process becomes one that entails reasoning rather than emotional judgment, disregarding negative emotions, as explained in dual systems theory. Uniqueness of product ($r = 0.43$) decreases the accessibility of other options, leading to increased tolerance among consumers towards overload; this could possibly be partially attributed to the psychological effort associated with the search process when there is nothing available as an alternative option. Brand trust ($r = 0.41$, marginally significant) also acts as a potential condition against the negative effects of overload. Also, according to relationship marketing theory, trust diminishes uncertainty and fosters the establishment of relationships [9]. That is, previous trust in the brand may lead to a different understanding of the high frequency of the advertisements. Instead of seeing the ads as being too much, the trusted brand loyalists will see them as a manifestation of the brand's belief in their products, hence minimizing any negative impact on advertising overload.

In other words, where there is high substitutability, a lack of urgency, and low trust, overload causes avoidance, as evidenced by 21.43% of the respondents who selected "the more I dislike, the less I buy." The Information Overload Theory asserts that where information input exceeds information-processing capacity, an individual faces cognitive strain and avoidance [10].

However, special needs can momentarily trump the above pattern for consumers. It is uncertain whether this can be done on a consistent basis; post-purchase assessment through regrets (46.43%) or satisfaction (31.25%) may have a role to play in determining brand attitudes in the future.

4.3. Practical implications and limitations

This research makes three primary contributions. First, it empirically classifies the construct of marketing overload on Douyin platforms into three distinct perceptual aspects: density, intrusiveness, and linguistic pressure. And demonstrates their differential associations with overload perception. Second, it claims an attitude-behavior split in the context of digital marketing overload, which challenges the straightforward predictions of advertising avoidance and psychological reactance theories. Third, it identifies boundary conditions: urgent need, product uniqueness, and brand trust, which help to explain when and why consumers override their negative attitudes and continue to purchase.

Practically, these findings suggest that single-brand exposure must be minimized by allowing no more than two such advertisements in one day and once every hour. The use of soft placements of ads must be ensured, and any sort of sudden logo insertion must be avoided. Use "Limited time offer" instead of "Today only." Moderate intensity of marketing is acceptable for necessities, unique, valuable, or trustworthy. In contrast, strict control over the level of intensity is needed when marketing products that are highly substitutable or lack strong trust. Notably, price level was not considered as a boundary condition in this study.

Also, it should not be ignored that this research is limited by a number of factors. First, the sample was mostly represented by young women, and thus, generalization of the results is unlikely since women are more sensitive to excessive marketing. Second, the boundary conditions analysis was based on an extremely small sample ($n = 19$) and low reliability, making the findings speculative only. Third, the social media comments were drawn from only one brand's video, which may not be indicative of all categories of products.

5. Conclusions

Marketing density, intrusiveness of advertisements, and linguistic pressure all have significant influences on the perception of marketing overload in Douyin. Among all three constructs, Marketing Density is found to have the most substantial influence, having a correlation of 0.52. Overload perception does not have a significant correlation with Purchase Intention Change. Nevertheless, an overwhelming majority of people (60.4%) continue making their purchases despite the excessiveness of the marketing process. The boundary conditions that help reduce the negative influence of overload are urgent need, product uniqueness, and high brand trust. In contrast, where the product is highly substitutable, non-urgent, and lacking trust, dislike would likely lead to disengagement and user churn.

Therefore, in order to improve the effectiveness of enterprise marketing, brands need to concentrate more on frequency moderation and content relevance rather than relying solely on marketing intensity, as the effect is often counterproductive.

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