

EFFECTS OF ONLINE COMMENTS ON CONSUMER PURCHASE INTENTIONS: EVIDENCE FROM EMERGING E-COMMERCE ECOSYSTEMS IN GHANA

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ABSTRACT

Online customer comments have evolved into powerful informational cues within the digital marketplace, particularly in emerging e-commerce ecosystems where institutional trust mechanisms are still developing. This study investigates how specific textual characteristics of online comments (valence, length, recency and objectivity) shape consumers' purchase intentions in Ghana's e-commerce platforms. Drawing on the signaling theory, information diagnosticity theory and dual-process persuasion models, tested a moderated framework explaining how comment attributes interact to influence behavioral intentions. Using a quantitative cross-sectional survey design, data were collected from 324 online shoppers with prior platform experience. A multiple regression study indicated that valence, recency, and length of comment each have strong positive impacts on purchase intention, collectively accounting for 86.2% of its variance. The length of comments proved to be a significant predictor, highlighting the importance of informational cues in reducing uncertainty. Haye's (2012) moderation analysis further revealed that objectivity strongly influences the association between length and purchase intention. Although both length and objectivity individually enhance purchase intention, their relationship exhibits declining marginal effects: as objectivity rises, the additional persuasive influence of lengthier reviews diminishes. The results theoretically integrate informational and stylistic characteristics within a cohesive interactive model and empirically expand online review research to the setting of a developing Ghanaian market. The findings indicate that e-commerce platforms ought to promote reviews that combine factual accuracy with emotive depth to enhance persuasive efficacy.

Keywords: Online comments, purchase intention, e-commerce, comment length.

INTRODUCTION

Background of the Study

Over the past two decades, the increased growth of social media and e-commerce platforms has made online comments have become key and reliable source for consumer decision-making. While some scholars preferred to call it electronic word-of-mouth (eWOM), online comment is one of the most used and reliable indicators for users. Qiu and Zhang (2024) asserted that 95% of consumers consider online reviews before purchasing. Prior research indicates that consumers regard internet comments or reviews as more valuable and credible than commercial advertisements (Ismagilova, Dwivedi, Slade, & Williams, 2017). Moreover, online comments substantially influence both consumer decision-making and corporate performance. The Spiegel Research Center (Biswas, Sengupta, & Ganguly, 2021) indicates that products featuring a minimum of five reviews are 270% more likely to be purchased compared to those lacking reviews.

Recognizing the significance of online appraisals, both companies and platforms actively encourage customers to express their experiences or rate user satisfaction.

Online comments have gained remarkable attention in management studies. As a key element in purchase intentions and actual purchase, online comments are a crucial metric for most consumers. A recent meta-analysis of contextual and cultural factors confirms that review-related attributes, such as comment type and overall ratings, have consistent and significant effects on purchase intention, highlighting the influential role of online reviews in consumer decision-making (Qiu & Zhang, 2024). Although extensive research has concentrated on aggregate review metrics like valence (positive or negative sentiment) and overall ratings (Ismagilova et al., 2020), it is essential to comprehend how certain attributes of comment text affect consumers' evaluative processes.

Local research indicates that Ghanaian online customers demonstrate increased attention to the quality of information and trust indicators. Nyarko and Osae (2023) discovered that trust in online information strongly influences customers' tendency to participate in e-commerce transactions. This discovery corresponds with the research conducted by Tchao, Diawuo, Aggor, and Kotey (2017), which indicated that fears over e-commerce privacy and trust affect customers' online purchasing behaviors. These intuitions suggest that attributes of textual appraisals that improve clarity, credibility, and informative richness may significantly influence purchase intentions in Ghana. Research on Ghanaian e-commerce has predominantly focused on broader determinants of online buying behavior, such as perceived ease of use and trust (Turkson, Amoah, & Amoah, 2025), with limited emphasis on the content and textual attributes of online comments. The study contributed to knowledge by presenting three key variables: valence, length and recentness of online comments and their impact on purchase intentions. This study enhances the existing literature in three significant aspects. This approach emphasizes the textual characteristics of consumer-generated comments instead of solely relying on aggregate review scores, thereby enhancing the knowledge of how online information signals influence purchasing decisions. Secondly, it situates these effects within an emerging market environment, providing insights into the interaction between online comments features and local consumer expectations and trust dynamics. Third, it incorporates comment length into a comprehensive analytical framework that accounts for interactions with additional comment characteristics (objective and subjective comments).

LITERATURE REVIEW

Online comments and consumer purchase intention

Online comments contain essential information for consumers to make a decision. New consumers spend much time reading, understanding, and comparing various users' comments about a product or service to make an informed decision. In e-commerce, customer purchase intention is the paramount variable to assess and address. Moreover, understanding consumers' intent offers numerous advantages, including enhancing conversion rates, safeguarding brand image, and fostering consumer loyalty. A Web of Science literature search reveals a constant increase in studies examining the association between online reviews and purchase intention throughout the years. Qiu and Zhang's (2024) meta-analysis on online reviews and purchase intentions included approximately 680 studies on online reviews and purchase intentions during the past two years. This showed that purchase intention is becoming a notable concern in online reviews.

Research has demonstrated that comments regarding the product (rather than the reviewer) significantly influence purchase intention (Petty & Cacioppo, 2012). The foundational research by Mudambi and Schuff (2010) established the basis for understanding the impact of online comment characteristics on consumer behavior in digital platforms. Their research highlighted online comments as a crucial factor in review helpfulness, positing that lengthier reviews generally encompass more comprehensive and richer information that aids consumers in assessing product quality. In online marketplaces, where consumers cannot physically examine things before purchase, informational richness serves as a mechanism for risk mitigation, allowing potential purchasers to make more informed judgments. The research by Mudambi and Schuff indicates that the length of reviews is positively associated with perceived credibility and usefulness, thus increasing the probability of consumer purchases (Mudambi & Schuff, 2010). Subsequent empirical research has validated and expanded this understanding across other e-commerce contexts. Zhang et al. (2014) investigated the impact of various review characteristics—such as length, attitude, and extremity—on purchase intentions. Extensive evaluations yield comprehensive product insights, indicate reviewer diligence and genuineness, and thus enhance consumer confidence and likelihood of purchase. Kasilingam, Rajkumar, and Shankar (2015) similarly showed that lengthier customer reviews enhance the perceived legitimacy of online information, fostering positive attitudes toward the evaluated product or service. Zhu and Zhang (2010) established that the quality of review content exerts a greater influence on purchasing behavior than mere review valence (i.e., positive versus negative mood), particularly in product categories characterized by high complexity or uncertainty.

Characteristics of online comments

In our digital age, geographical boundaries are less significant. This also holds for internet comments, which have the potential to directly and widely reach a large audience. User-generated content based on personal experiences is what makes up online customer comments, a type of product information (Chen & Xie, 2020). indicating that internet reviews are crucial for contemporary enterprises. One of the most effective ways to increase online word-of-mouth (WOM) is through online customer evaluations (Duan et al., 2021). Any online comment, whether favorable or unfavorable, of a specific company's goods or services made by a (former) consumer is considered an online comment (Hennig-Thurau et al., 2018).

Online comments aim to achieve two things. First, the internet comment provides information on the product or service; second, it serves as a recommendation. One of the most significant services that can provide consumers with individualized content is recommendations in general (Wang et al., 2019). Social media recommendations are regarded as one of the most crucial services for providing members in an online social network with personalized suggestions, aside from online comments (Wang et al., 2012). The main inquiry in this study is how online comments affect comment attitudes and restaurant visitation buying intentions. Online comments may have a significant influence on comment attitude and, consequently, purchase intention, according to the theory that they are one of the most significant services for providing personal recommendations to others. According to Chevalier and Mayzlin (2014), a number of factors influence the value that is attached to a comment and the outcome that follows reading it. The three comment components chosen for this investigation are length, recentness, and valence. The subsequent subsections explain the various elements that were central to the review's content.

Valence of comments

Valence comments are either positive, negative, or neutral tone expressed in user feedback. The valence comment could be bad or good, used to show sentiment on a product or service. Cheung and Thadani (2019) identified valence as one of the important factors that are associated with the response. Literature has largely categorized valence responses into positive and negative, which applies to online comments (Cheung & Thadani, 2019). Thus, it is appropriate and easy to identify comments as either bad or good ones. Customers who have used the products or bought from the shop can therefore give either positive or negative comments. Research has shown that experience with the usage of products is most sensitive to comments (Park & Lee, 2019). Since it is challenging to test a product before using it, industries with experience-based goods and services are most affected by internet comments. Well-known brand products are particularly vulnerable to internet comments (Park & Lee, 2019). As a result, the majority of the review's material is either excellent or bad (Chatterjee, 2020). A favorable mood and inclination to buy can result from receiving positive information (Sorensen & Rasmussen, 2014). Conversely, unfavorable information may result in a pessimistic outlook and a desire to buy. Numerous writers have examined how valence affects consumers' purchasing decisions. Besides, several scholars have cited that positive or negative information also reduces the trustworthiness of the original advertising (Huang & Chen, 2016). Rahayu et al. (2020) found valence to have a significant effect on the purchase intention variable. Similarly, in this context, the study assumed that valence (positive or negative) comments will affect consumers.

H1: Valence comments positively affect consumers' purchase intention**Recentness of comments**

Recent and past" postdates are the two categories of recentness. According to Gretzel et al. (2017), the date the online comment was uploaded serves as the second independent variable that can be used to alter the comments. According to Cheung and Thadani (2020), recentness is one of the key elements connected to the response. There are two categories of recentness: "old" and "new" postdates. According to a study that looked at the function and real impact of online travel comments, recentness is crucial when assessing a comment Gretzel et al., (2017).

Rahayu et al. (2020) established that there is a positive effect of timeliness on purchase intention.

In this study, the researcher believes products or services go through modifications, improvement, rebranding, etc, within some time. It is vital to consider that 5-year-old comments might not apply to the commodity services or features today. In this case, consumers act on more current comments than past comments. In the same way, other scholars have opined that memory and newness will expire after some time (Pan & Zhang, 2018). Recent research reported that participants prefer recent comments over past comments (Jin et al., 2019). Based on this argument, this study proposed that;

H2: Recent comments positively affect consumers' purchase intention**Length of comments**

The impact of review length is associated with cognitive processing systems. The Elaboration Likelihood Model (ELM) posits that humans utilize central-route processing when presented with comprehensive information, resulting in more lasting attitude development (Petty & Cacioppo, 1986). Extensive reviews, due to their factual richness, elicit greater cognitive engagement and assessments, diminishing uncertainty and potentially enhancing buying intent. Conversely, brief reviews—though more accessible and expedient to peruse—frequently lack adequate content for

comprehensive assessment, especially in high-involvement purchasing decisions (Fileri & McLeay, 2014). Consequently, the duration of reviews can alter consumers' processing approach from heuristic to more systematic evaluation, resulting in enhanced behavioral intentions. Similarly, Chua and Banerjee (2018) observed that extremely long reviews can produce cognitive overload, particularly for time-constrained shoppers, potentially reducing the persuasive impact of voluminous text. According to earlier researchers, brief internet comments on the product probably include less information than lengthier ones (Pan & Zhang, 2020). Online comments that are endless provide more details and may be seen as more credible than those that are brief. Additionally, because customers are more likely to locate the content they are seeking in endless online evaluations, they attract more attention. Thus, when consumers are looking for products, length is one of the most crucial cues they employ (Järveläinen et al., 2013). The more information the decision maker has at their disposal, the more confident they will be.

H3: The length of the comments on the product positively affects consumers' purchase behavior.

Comment type

Irrespective of the length, recentness, and valence of the comments, another important factor is the quality and usefulness of the information that could trigger change. If the comments are so objective (contain vital and sensitive information) on the products or services, their impact on the potential consumer is different from the subjective information. Subject comments are related to an individual own preferences, such as color, subject to external factors like health, environment, or social status. For instance, a person who cannot afford to buy a laptop for \$3000 might comment, "This laptop looks good, but is too expensive for me now". In such comments, the information is conditioned on the individual's purchasing power rather than product or shop characteristics. Meanwhile, potential consumers are not interested in the price of the product but are looking for product quality and experience information to make the decision. Based on this scenario, the study assumed that.

H4: Objective and subject comments moderate valence, recentness, and length such that objective comments have more influence than subjective comments in terms of purchase decisions.

Study Framework

This study theoretically enhances online review research by incorporating signaling theory, information diagnosticity theory, and dual-process persuasion models into a moderated framework.

Beyond favorable, moderate, and negative, the study enhances the comment aspects in this setting. This is due to the fact that comment reviews, including customer feedback and product or business testimonials, have a significant impact on prospective customers' purchasing intentions and behavior. Comments can therefore be a useful source of information for forecasting online buying patterns. The researcher categorized the comments characteristics into valence, recentness and length of the comments (either endless or brief characters). Besides, the study used the quality of comments (subjective or objective information) to moderate the relationships between the independent factors and dependent variables. The study believed these four characteristics of the comments provide vital information for the consumers and it is likely to influence the buyer's attitude as well as purchase intention. Given the scenario of the comment characteristics, the researcher conceptualized the idea in Figure 1.

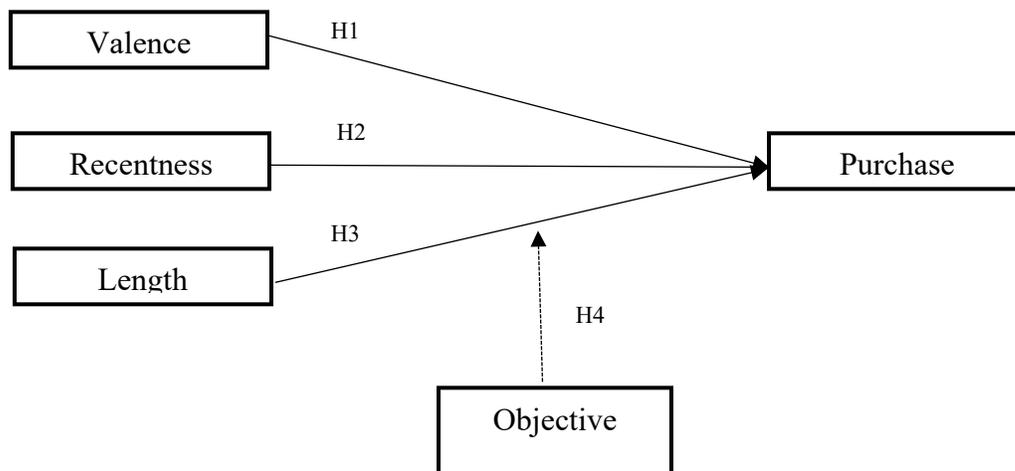


Figure 1: Conceptual model

METHODOLOGY

Research Context and Design

The research was carried out within the framework of prominent e-commerce platforms in Ghana, specifically Jumia Ghana and Kikuu. These platforms offer organized seller information, including verifiable customer reviews, seller ratings, fulfillment metrics, and product feedback systems, rendering them suitable environments for analyzing how comment attributes influence purchasing decisions. The study utilized a quantitative cross-sectional survey approach to investigate the impact of online customer comment attributes on purchase intentions in Ghana's e-commerce environment. A cross-sectional design allows for the simultaneous gathering of data from various respondents at one specific moment, making it especially suitable for examining theoretically established correlations among latent dimensions (Tharenou et al., 2007). This study seeks to examine the relationships between different comment attributes (such as valence, recency, length, and objectivity) and consumer purchase intention, rather than to determine temporal causality; therefore, a cross-sectional approach is methodologically appropriate and aligns with previous research in online consumer behavior. Data was gathered through an online structured questionnaire. The selection of an online survey corresponds with the digital context of the research environment, since participants were required to possess prior expertise with online buying platforms. The research employed a positivist approach and utilized quantitative analysis to assess the provided hypotheses and evaluate the theoretical framework.

Participants

The target population consisted of online businesses or retailers and consumers who engage in buying or selling on the Jumia Ghana and Kikuu platforms. Due to the absence of an accessible sampling frame that includes a complete list of all active users, probability sampling was impractical. This research employed a convenience sampling method to solicit participants with previous online buying experience. Participants were contacted using academic networks, online consumer communities, and targeted advertisements sent via social media platforms and messaging programs. University students were selected due to their significant digital engagement and regular connection with online purchasing platforms in Ghana.

The data collection period extended across five weeks. The study concluded the survey period on August 25, 2025, with 324 valid responses for analysis. This sample size exceeds the generally advised minimum for multivariate regression and moderation analysis, thereby ensuring enough statistical power for hypothesis testing (Hair et al., 2010). Although the sample constitutes a modest segment of the larger population of online buyers and sellers in Ghana, it is sufficient for theoretical examination within a structural framework. However, the application of convenience sampling may restrict the generalizability of the results, as specific demographic groups, like rural customers and elderly adults with diminished digital literacy, may be underrepresented. The study's results are interpreted with recognition of these limitations.

Instrument Development and Measures

Data were gathered utilizing a standardized questionnaire consisting of three sections: a case-based experimental scenario, demographic information of respondents, and assessments of the study constructs. All construct items were assessed using closed-ended statements graded on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). A case-based experimental stimulus was introduced, as illustrated in Figure 2. Participants were shown screenshots of a merchant page sourced from Jumia Ghana, featuring authenticated customer reviews, seller ratings, order fulfillment metrics, and product details. The chosen example involved a merchant named “Guetton Cod,” displaying observable seller performance data, follower count, overall rating, and a combination of verifiable positive and negative comments. The comments exhibited varied attributes aligned with the conceptual model, encompassing positive versus negative valence, objective versus subjective tone, concise versus elaborate length, and historical versus contemporary feedback. Participants were directed to examine the provided information and express their probability of acquiring the product. The paper replicated a genuine online purchasing interface to enhance realism and bolster external validity.

The screenshot displays the merchant page for 'GUEETON-COD' on Jumia Ghana. The page is divided into several sections:

- Merchant Profile:** Shows an 86% Seller Score, 88 Followers, and a 'FOLLOW' button. Seller Performance metrics include: Order Fulfillment Rate: Excellent, Quality Score: Good, and Customer Rating: Good.
- Verified Customer Feedback:** A list of reviews for the 'electric cooker' product. Each review includes a star rating, the reviewer's name, the date, and the text of the review.
 - Good:** Weight and fastness by Emmanuel (08-03-20)
 - electric cooker:** It's very fast when cooking with by Joshua (08-03-20)
 - nice:** Good as perfect by ADOLASOM (16-02-20)
 - I don't really like it:** It is weak and I think is easy to spoil, you can't use it for long. It not that it looks weak so I don't like it but it is really weak. by Nana Ekua Somuah (09-02-20)
 - multi purpose:** Multi purpose by FRANK (06-02-20)
 - Yeah:** Electric part is not removable hence washing with water is a bit of problem. It could be separated. Also, the stainless steel part has started showing signs of rust after using it for two days. by Rachael (31-01-20)
 - it is nice but very small no steamer too:** (08-12-2021)
- Summary and Comments:**
 - Overall rating: 3.8/5 (40 verified ratings)
 - Star distribution: 5 stars (12), 4 stars (13), 3 stars (12), 2 stars (2), 1 star (1)
 - Comments from verified purchases (10):
 - nice:** Should be able to heat up faster by Queen (16-08-2022)
 - Very good:** I was expecting a black lining inside of the bowl. But aside that it works perfectly by Lawrence (14-07-2022)
 - It's a Great Choice:** The dimensions of this cooker is approximately 5in x 12 in. Very light, which is good for travel and heats up very fast too. I bought it because if the stainless steel interior as I am trying to reduce metal poisoning. The packaging seem small and light but trust me, it is 2ltrs and it is very fast to heat up. I am totally in love. by Yaa (17-03-2022)
 - Good:** Weight and fastness (08-03-2022)

The primary segment of the questionnaire assessed independent variables, including comment valence (positive/genuine and negative/weak), comment length (concise versus extensive), temporal orientation (past versus present), and comment type (objective versus subjective), alongside the dependent variable, purchase intention. Supplementary measures assessed respondents' overall awareness and utilization of online comments. Multi-item measures were modified from recognized e-commerce and consumer behavior literature to suit the Ghanaian online purchasing setting. The utilization of several items for each construct facilitated the evaluation of internal consistency and construct validity. Demographic characteristics, such as age, gender, educational attainment, and the frequency of reading internet reviews before making a purchase, were gathered for descriptive and control purposes.

Data Collection Procedure

Prior to the main survey administration, a pilot test was conducted with a small group of participants to evaluate clarity, wording, grammatical accuracy, and item relevance. Minor revisions were made based on feedback to improve comprehensibility and reduce ambiguity. The final questionnaire was created using Google Forms and distributed electronically via messaging applications and social media networks. Participation was voluntary and anonymous. To enhance data quality and reliability, the survey was configured to prevent multiple submissions, require responses to all items, and ensure that no identifying information was collected. These procedural remedies were implemented to minimize common method bias and enhance the credibility of self-reported data.

Data were analyzed using IBM SPSS Statistics (Version 25). Preliminary analyses included data screening, assessment of missing values, and descriptive statistics. Confirmatory factor analysis procedures were conducted to evaluate the measurement properties of the constructs, including internal consistency reliability and construct validity. Reliability was assessed using Cronbach's alpha coefficients, with values above .70 considered acceptable. Pearson correlation analysis was performed to examine bivariate relationships among variables. Multiple regression analysis was subsequently employed to test the direct effects of comment characteristics on purchase intention. To examine moderation effects, Hayes' (2012) PROCESS macro for SPSS was utilized. Bootstrapping procedures with bias-corrected confidence intervals were applied to determine the significance of interaction effects. The results were reported in accordance with APA guidelines, including standardized coefficients, confidence intervals, effect sizes, and appropriate model fit and significance statistics. The findings are interpreted in light of the theoretical framework and prior literature, with attention to both statistical significance and practical relevance.

Before the primary survey administration, a pilot test was executed with a limited cohort of participants to assess clarity, phrasing, grammatical precision, and question relevance. Minor modifications were implemented in response to feedback to enhance clarity and diminish ambiguity. The final questionnaire was developed using Google Forms and disseminated electronically through messaging applications and social media platforms. Participation was optional and confidential. To improve data quality and dependability, the survey was designed to prohibit duplicate submissions, mandate responses to all items, and guarantee the absence of identifying information collection. These procedural remedies were instituted to mitigate frequent technique bias and augment the reliability of self-reported data.

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RESULTS

Demographic background of respondents

As shown in Table 1, the participants' biodata revealed that 48.1% of the respondents were males, whereas 51.9% represent females. In addition, 76.9% of the respondents were between the ages of 26 and 35 years. It was interesting to find out that 97.5% of the respondents attended college or university. The study established that 54.3% of the respondents asserted that they most often peruse through comments, 31.8% said often, 13.6% argued not often, and 0.3% replied they hardly check online comments to make decisions on products or services. This indicates that the participants have sufficient literacy and familiarity with digital platforms to provide informed responses.

Table 1: Respondents' biodata

Variable	Category	Frequency	Percent
Gender	Male	156	48.1
	Female	168	51.9
	Total	324	100.0
Age	Below 25 years	40	12.3
	26-35 years	249	76.9
	36-50 years	35	10.8
	More than 50 years	0	0
	Total	324	100.0
Education	High School /Vocational Training	8	2.5
	College / University	316	97.5
	No formal education	0	0
	Total	324	100.0
I mostly read comments on products	Strongly agree	176	54.3
	Agree	103	31.8
	Neutral	44	13.6
	Disagree	1	.3
	Strongly disagree	0	0
	Total	324	100.0

Respondents' opinion on e-commerce platforms

Before conducting the inferential analysis, the researcher examined the respondents' opinion on e-commerce platform comments in Ghana. Then, the paper focused on main variables discussed in the literature such as the pleasant of the comments, informative aspect, subjective and objective nature of the comments, and importance of the comments to the consumers or user. In Figure 2, the researcher asked the respondents whether most comments found under products were pleasant

or unpleasant. It was discovered that 88.3% of the respondents said they were pleasant while 11.7% were unpleasant about the comments.

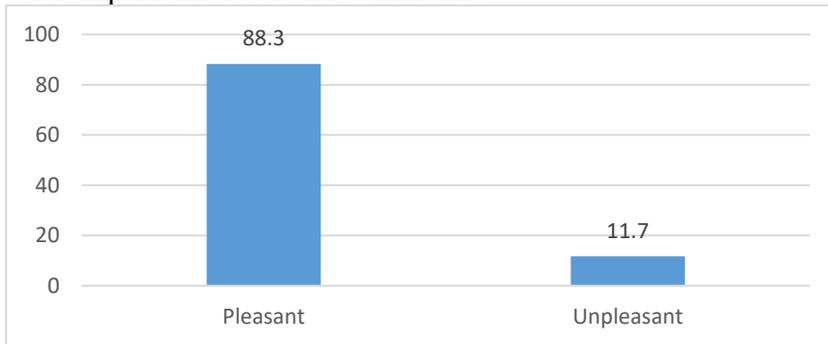


Figure 2. Pleasant comments

Figure 2 illustrates how the participants perceived the information under the comments to be. The study established that 94.4% of the respondents found the comments to be useful, whereas 5.6% argue it was uninformative.

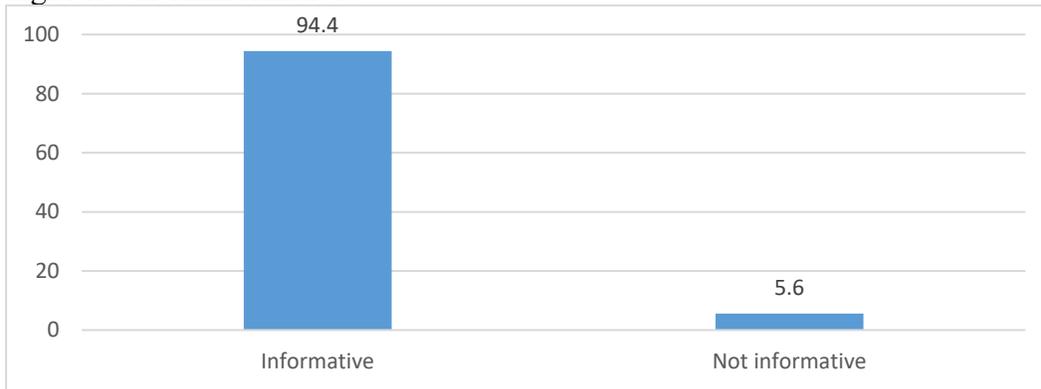


Figure 3: Usefulness of online comments

It was depicted in Figure 4 the objectivity and subjectivity of the comments. The study indicated that 77.2% of the respondents saw the comments as objective, and 22.8% asserted that the comments were subjective in nature.

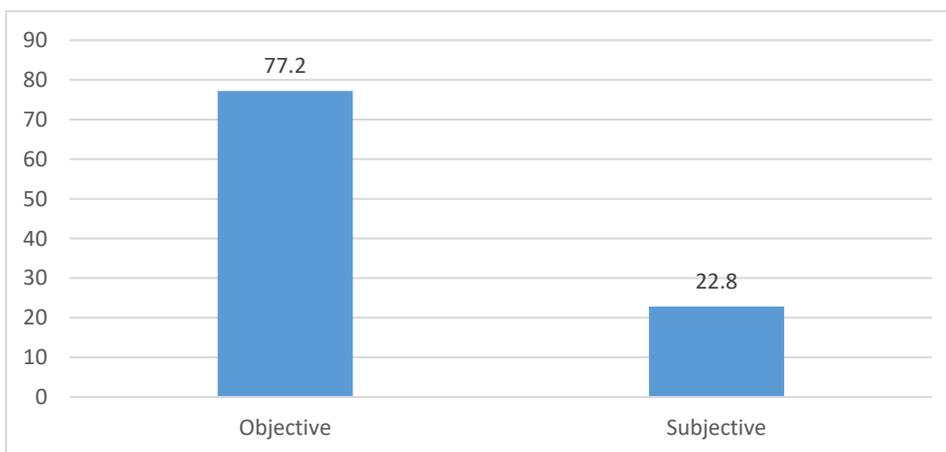


Figure 4. objective vs subjective information

Measurement of Measurement Adequacy

Before the hypothesis testing, the study measured the psychometric properties of the measurement instruments to ensure the data were good for inferential statistics. All study observations were screened for completeness, outliers and abnormal distributions. The study found no substantial violations. The Kaiser–Meyer–Olkin (KMO) statistic was used to evaluate sampling adequacy; the result was 0.765, which was higher than the suggested cutoff of .60 and suggested that the correlation matrix was suitable for factor-based analysis. The results of Bartlett's test of sphericity showed that inter-item correlations were substantial enough to warrant more investigation ($\chi^2 = 4950.353$, $df = 321$, $p < .001$), as shown in Table 2.

Table 2. Validity test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.765
Bartlett's Test of Sphericity	Approx. Chi-Square	4950.353
	Df	321
	Sig.	.000

Secondly, the study used an internal consistency method to assess reliability, commonly evaluated using Cronbach's alpha coefficient (Cortina, 1993). This test examines the consistency of participants' responses across various items within a multi-item scale. The overall reliability score was 0.767 across 17 core items.

Direct Effects Analysis

First, the study used a correlational matrix to identify the direction and strength of the relationship among comment characteristics and purchase intention. Table 3 shows the correlation results among the variables: Valence, Recentness, Length, Objective, and Purchase Intention. The findings reveal strong and significant positive relationships between most of the variables. Valence has a very strong positive correlation with Recentness ($r = .778$, $p < 0.01$), Length ($r = .907$, $p < 0.01$), and Purchase Intention ($r = .900$, $p < 0.01$), and a weak but significant positive correlation with Objective ($r = .188$, $p < 0.05$). Similarly, Recentness is strongly and positively correlated with Length ($r = .728$, $p < 0.01$) and Purchase Intention ($r = .808$, $p < 0.01$), while its correlation with Objective is weaker but still significant ($r = .212$, $p < 0.05$). Length also shows a strong positive correlation with Purchase Intention ($r = .885$, $p < 0.01$) and a moderate correlation with Objective ($r = .285$, $p < 0.01$). Objective, although less strongly correlated overall, has a modest positive relationship with Purchase Intention ($r = .255$, $p < 0.01$). Overall, the results suggest that Valence, Recentness, and Length are particularly important predictors of Purchase Intention, given their strong positive correlations.

Table 3. Correlational matrix

	1	2	3	4	5
Valence	1	.778**	.907**	.188*	.900**
Recentness	.778**	1	.728**	.212*	.808**
Length	.907**	.728**	1	.285**	.885**
Objective	.188*	.212*	.285**	1	.255**
Purchase Intention	.900**	.808**	.885**	.255**	1

Notes: **. 0.01 level; *. 0.05 level

The study formally tested the hypotheses using multiple regression analysis. In Table 4, the overall model was statistically significant, $F(3, 119) = 248.15$, $P < .001$. The study demonstrated strong explanatory power, with $R = 0.929$ and $R^2 = .862$, which indicates that 86.2% of the variance in purchase intention was explained by the combined predictors, reflecting considerable predictive strength within the proposed framework.

Table 4 Model summary

Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.929 ^a	.862	.859	1.73356

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2237.207	3	745.736	248.146	.000 ^b
Residual	357.622	119	3.005		
Total	2594.829	122			

a. Dependent Variable: Purchase Intention

b. Predictors: (Constant), Length, Recentness, Valence

Table 5 presents how Valence, Recentness, and Length contribute to the dependent variable under examination. The results of a multiple regression analysis reveal that all three predictors (Valence, Recentness, and Length) significantly influence the outcome variable.

Table 5. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error				Lower Bound	Upper Bound
1	(Constant)	-.349	.666		-.524	.601	-1.668	.969
	Valence	.386	.090	.378	4.271	.000	.207	.565
	Recentness	.257	.055	.254	4.682	.000	.148	.366
	Length	.327	.074	.357	4.395	.000	.180	.475

a. Dependent Variable: Purchase Intention

Consistent with Hypothesis 1, comment valence exerted a positive and statistically significant effect on purchase intention ($B = .386$, $SE = .090$, $p < .001$), indicating that more favorable evaluations increase consumers' likelihood of purchasing. Hypothesis 2 was also supported, as recentness positively influenced purchase intention ($B = .257$, $SE = .055$, $p < .001$), suggesting

that timely reviews enhance perceived relevance and credibility. Hypothesis 3 received empirical support as well; comment length positively predicted purchase intention ($B = .327$, $SE = .074$, $p < .001$), implying that more detailed reviews reduce uncertainty and strengthen buying confidence. Together, these findings underscore the central role of informational richness and positive signaling in digital purchase contexts.

Moderation Analysis

The study examined how objective comments moderate the relationship between the length of comments and purchase intention. In this analysis, the PROCESS macro v3.5 in SPSS was used to conduct a moderation analysis (Model 1) to examine whether the effect of Length (X variable) on Purchase Intention (Y variable) is influenced by Objective (moderator W). The analysis was set with a 95% confidence interval and 5000 bootstrap samples to enhance the robustness of the estimates. Options were selected to generate interaction plots, test for interaction effects, and probe interactions at -1 SD, the mean, and +1 SD levels of the moderator.

Table 6 presents the model summary and regression coefficient. The moderation model was statistically significant, $F(3, 118) = 154.77$, $p < .001$, accounting for 80% of the variance in purchase intention ($R^2 = .80$). Comment length demonstrated a strong positive main effect ($B = 1.32$, $SE = .20$, $p < .001$), while objectivity also exhibited a positive direct effect ($B = .52$, $SE = .20$, $p = .01$). However, the interaction between comment length and objectivity was negative and statistically significant ($B = -.03$, $SE = .01$, $p < .01$), indicating the presence of a moderating effect. The significant interaction term suggests that although longer comments generally enhance purchase intention, their persuasive impact diminishes slightly as the level of objectivity increases. The incremental variance explained by the interaction term ($\Delta R^2 = .01$, $p = .01$) confirms that objectivity meaningfully conditions the strength of the length–purchase intention relationship. Conditional effects analysis further revealed that the positive effect of comment length remained significant across low, mean, and high levels of objectivity, but the magnitude of the effect decreased as objectivity increased. This pattern suggests a dynamic in online review processing. While both detailed and objective reviews independently enhance consumer confidence, excessive objectivity may weaken the narrative or emotionally engaging elements that often render lengthy reviews persuasive. Thus, the findings highlight a complex interplay between informational depth and evaluative tone in shaping digital consumer decision-making.

Table 6 Model summary and regression coefficient

R	R ²	MSE	F	df1	df2	p
0.89	0.80	4.45	154.77	3.00	118.00	0.00
Variable	Coeff	SE	t	p	LLCI	ULCI
Constant	-7.36	3.68	-2.00	0.05	-14.64	-0.08
Length	1.32	0.20	6.62	0.00	0.93	1.72
Objective	0.52	0.20	2.55	0.01	0.12	0.92
Int_1	-0.03	0.01	-2.61	0.01	-0.05	-0.01

Note: Int_1: Length x Objective comment

Test(s) of highest order unconditional interaction(s):

Furthermore, Table 7 presents the conditional effects of comment length on purchase intention at low, mean and high standard deviation levels. The results demonstrate that the positive effect of length remains statistically significant across all levels of objectivity. At low objectivity (13.22), the effect of length is strongest ($B = 0.96$, $SE = 0.07$, $t = 14.10$, $p < .001$, 95% CI [0.82, 1.09]). At the mean level (17.64), the effect decreases but remains substantial ($B = 0.83$, $SE = 0.04$, $t = 20.60$, $p < .001$, 95% CI [0.75, 0.91]). At high objectivity (22.06), the coefficient further declines ($B = 0.71$, $SE = 0.06$, $t = 12.71$, $p < .001$, 95% CI [0.60, 0.82]). Importantly, none of the confidence intervals include zero, confirming the robustness of the conditional effects.

Table 7: Conditional effects of the focal predictor at values of the moderator

Objective comments	Effect	SE	t	p	LLCI	ULCI
13.22	0.96	0.07	14.10	0.00	0.82	1.09
17.64	0.83	0.04	20.60	0.00	0.75	0.91
22.06	0.71	0.06	12.71	0.00	0.60	0.82

Figure 5 depicts the interaction by plotting the association between Len (length of comments) and Purc (purchase intention). Across all three conditions, the slopes are positive, indicating that longer reviews consistently enhance purchase intention.

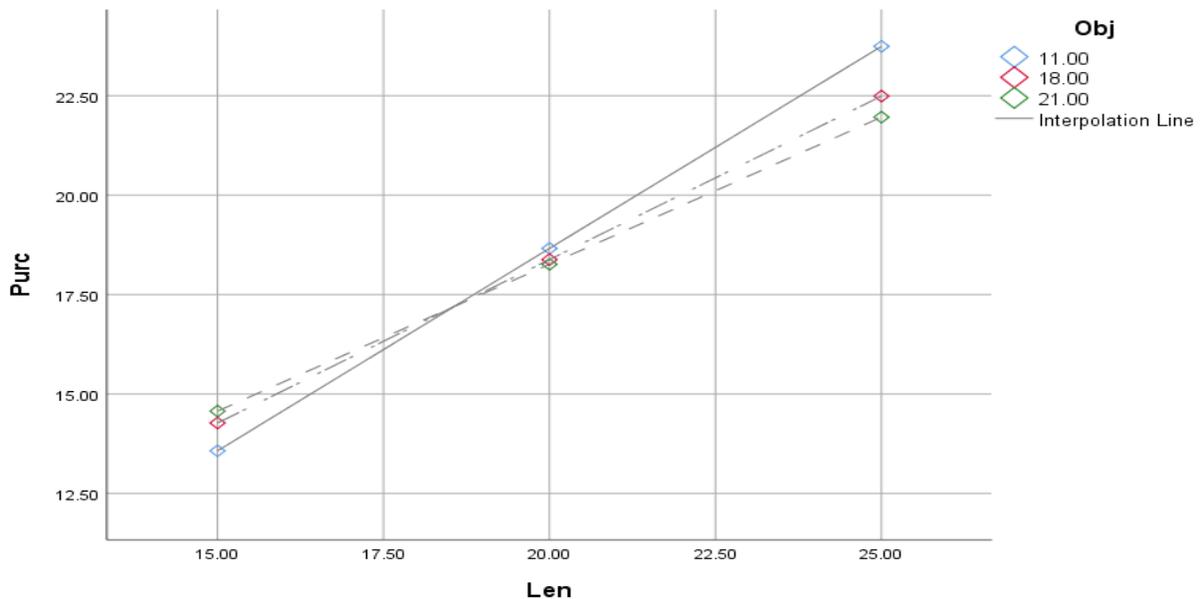


Figure 5. Moderation effect of objective comments

DISCUSSION OF RESULTS

This study examines how specific characteristics of online comments (length, objectivity, valence and recency) shape consumers' purchase intentions within an e-commerce context. The results offer robust empirical evidence for the explanatory capacity of comment characters, with the suggested model explaining 80% of the variance in purchase intention. The significant explanatory

power highlights the importance of user-generated content in e-commerce platforms and affirms that online comments serve not only as secondary indicators but also as essential cues in customer decision-making.

The impact of comment length on purchase intention supports the curiosity perspective in online review studies. In accordance with information diagnosticity theory (Filiery, 2015) and signaling theory (Spence, 1973), lengthier reviews serve as high-information signals that diminish ambiguity and augment perceived reliability. Recent meta-analyses and empirical studies consistently demonstrate that the depth of reviews increases perceived helpfulness and trust (Ismagilova et al., 2020). The current study revealed a robust positive coefficient for length, indicating that comprehensive elaborations offer cognitive resources that enhance risk mitigation and perceived product clarity. This discovery corresponds with dual-process models like the Elaboration Likelihood Model (Petty & Cacioppo, 1986), in which more substantial informational content may activate central-route processing, resulting in enhanced behavioral intentions. Second, purchase intention was positively impacted by objectivity on its own. Utilizing fact-based and impartial language seems to improve perceived authenticity and trustworthiness, aligning with contemporary trust formation models in digital contexts (Li et al., 2020). Objective evaluations may diminish apparent manipulation or exaggeration, hence enhancing credibility perceptions. In digitally mediated marketplaces marked by information asymmetry, objectivity serves as a trust-enhancing heuristic. This is especially significant in emerging e-commerce environments where official institutional assurances may be relatively weaker, and information created by peers acts as an alternative governance mechanism.

The most theoretically compelling contribution is the substantial negative correlation between comment length and objectivity. Although these traits independently enhance purchase intention, their relationship indicates diminishing marginal returns: as objectivity rises, the additional persuasive effect of length diminishes. This discovery expands upon previous studies that have predominantly analyzed review attributes in isolation. The outcome may be analyzed through the perspective of a cognitive-affective trade-off. While legitimate, more objective assessments may diminish the emotional involvement and narrative richness typically found in more extensive remarks. Narrative persuasion theory posits that storytelling components augment engagement and persuasion (Chakraborty, 2019). When online comments become excessively factual, the emotional resonance that enhances persuasive efficacy may diminish. Consequently, customers seem to react most positively to reviews that include substantial information with mild evaluative commentary instead of extreme impartiality.

These findings enhance the literature review in multiple aspects. The study consolidates informative (length), stylistic (objectivity), and structural (interaction) attributes into a unified regulated framework, enhancing a comprehension of the efficacy of comments. Secondly, it presents a refined boundary condition to the dominant presumption that “more information is invariably advantageous.” The findings indicate that efficacy relies on the interplay between content richness and tonal framing. Third, the findings offer empirical validation for the expansion of signaling theory into interactive domains, where signals do not function independently but interactively influence consumer inference development.

CONCLUSION

This study illustrates that the attributes of online comments substantially influence consumer purchasing intentions. Longer and more objective comments independently increase buy intention, affirming that both informative depth and factual tone are esteemed in digital markets. Nonetheless, their synergistic effect demonstrates diminishing returns, as increased objectivity somewhat reduces the incremental impact of more length. These findings emphasize that review efficacy is not merely additive but rather interactional. This study theoretically enhances online review research by incorporating signaling theory, information diagnosticity theory, and dual-process persuasion models into a moderated framework. This study empirically validates the relationship between informational richness and evaluative tone, transcending single-attribute explanations and offering a more comprehensive understanding of consumer interpretation of user-generated material. The findings also address current demands for investigating border conditions in digital persuasion research (Ismagilova et al., 2020; Li et al., 2020). The findings indicate that e-commerce platforms and sellers ought to promote comments that are comprehensive and authentically expressive, rather than overly neutral. Platforms might implement design tactics that encourage contributors to elaborate while maintaining genuine narrative components (e.g., guided prompts that integrate factual details with experiential accounts). Retailers must proactively curate review platforms by emphasizing balanced, informative critiques instead of simply endorsing lengthy commentary.

Notwithstanding its merits, the study possesses drawbacks. Future studies may use longitudinal or experimental methods to examine how review qualities affect purchasing behavior over time, given that the cross-sectional methodology limits the ability to conclude causality. The investigation concentrated on self-reported purchase intentions instead of actual transactional data. Future research may associate review characteristics with behavioral indicators, including click-through rates and sales conversions. Emerging technologies, such as AI-generated reviews, present novel theoretical and managerial inquiries concerning authenticity and informational reliability that necessitate academic scrutiny.

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