



Original Article

An Analytical Study on the Impact of Online Ratings on Consumer Purchasing Decisions with Special Reference to Darbhanga District

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Manuscript ID:
RIGJAAR-2026-030315

ISSN: 2998-4459
Volume 3
Issue 3
Pp. 88-93
March 2026

Submitted: 08 Feb. 2026

Revised: 18 Feb. 2026

Accepted: 15 Mar. 2026

Published: 31 Mar. 2026

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Quick Response Code:



Web: <https://rlgjaar.com>



DOI: [10.5281/zenodo.20178346](https://doi.org/10.5281/zenodo.20178346)

DOI Link:

<https://doi.org/10.5281/zenodo.20178346>



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Abstract

Online ratings function as a vital customer decision-making element which determines what customers will buy in the current digital marketplace. This research investigates how online ratings affect consumer purchasing behavior while studying how consumers use ratings to make buying decisions in Darbhanga District. The research study used primary data which researchers obtained from 184 participants who completed a standardized questionnaire. The researchers used descriptive statistics together with one-sample t-test and chi-square test for their analysis. The study results demonstrate that online ratings fundamentally influence how customers make their buying choices. Most respondents prefer products with higher ratings and avoid products with low ratings. The research shows that positive ratings boost consumer confidence but negative ratings create barriers to purchasing their products. The one-sample t-test results demonstrated that online ratings produce a major effect on consumer buying behavior because all statement means exceeded the neutral level and the test results showed statistical significance. Consumers demonstrate a preference for products that receive higher ratings while they tend to avoid products that receive lower ratings. The research found that consumers who depend on online ratings show a significant connection to their shopping patterns according to the results from the chi-square test. The research shows that online ratings serve as a main information source which helps consumers reach better purchasing decisions while showing higher buying confidence.

Keywords: Online Ratings, Consumer Behaviour, Consumer Purchasing Decision, e-WOM, Darbhanga District

Introduction

Online ratings have become a central factor in shaping consumer purchasing decisions in the digital age, especially in the context of rapidly expanding e-commerce in semi urban and rural India (Chevalier & Mayzlin, 2006; Vimaladevi & Dhanabhakyaam, 2012). In Darbhanga District markets, where people access the internet and use smartphones at increasing rates, consumers make product quality assessments and seller trust evaluations through their reliance on star ratings and customer reviews before making purchasing decisions (Pandey, 2022; Vimaladevi & Dhanabhakyaam, 2012). The electronic word of mouth (e-WOM) signals function as affordable information sources which assist buyers in decreasing their perceived purchase risk and uncertainty when they lack the ability to examine products through physical inspection before making a purchase (Rauschenbach et al., 2022; Chevalier & Mayzlin, 2006). Research on Indian consumer behavior indicates that most shoppers check online ratings before making their final purchase decisions because they prefer to buy products which have positive reviews and higher star ratings (Rauschenbach et al., 2022; Vimaladevi & Dhanabhakyaam, 2012). Ratings determine which products consumers choose in addition to creating certain brand perceptions which affect their satisfaction after making purchases (Pandey, 2022; John et al., 2024). The extent to which product ratings impact purchase choices in Darbhanga district depends on three factors which include digital literacy and trust in online payments and knowledge of e-commerce platforms (Kumar & Sharma, 2023; SDMIMD, 2024). The study needs to test whether online ratings have an impact on actual purchase patterns in these specific regional markets. People follow social cues when they must make decisions under uncertain conditions according to theoretical frameworks which researchers developed from behavioral economics and consumer behavior studies (Chevalier & Mayzlin, 2006; Rauschenbach et al., 2022). The ratings which customers provide in online marketplaces function as social proof because they show which products customers have approved and which products they have rejected.

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How to cite this article:

Kumar, V. (2026). An Analytical Study on the Impact of Online Ratings on Consumer Purchasing Decisions with Special Reference to Darbhanga District. *Royal International Global Journal of Advance and Applied Research*, 3(3), 88–93. <https://doi.org/10.5281/zenodo.20178346>

Research has shown through multiple studies that products which receive higher ratings attract more customer clicks and achieve greater conversion rates which lead to increased sales (Luca, 2016; John et al., 2024). Consumers will face strong obstacles when they try to buy products which receive negative ratings because these ratings create stronger buying resistance than positive reviews create (Chevalier & Mayzlin, 2006; Rauschenbach et al., 2022). Most research studies about online reviews and ratings in India examine major urban centers or national samples while they fail to study particular areas like Darbhanga district (Kumar & Sharma, 2023; SDMIMD, 2024). The research area needs examination because urban residents and semi urban and rural residents show distinct differences in their technology usage and online platform trust and product price evaluation according to Pandey 2022 and Kumar and Sharma 2023. The Darbhanga district in Bihar provides researchers with an opportunity to study consumer behavior because it contains both traditional retail shops and digital shopping platforms.

2. Review of Literature

The current online marketplace includes online ratings as a key element that determines which products consumers will choose to buy. Consumers use ratings and reviews to evaluate products before making their online shopping purchases. Users use these ratings to create electronic word-of-mouth (e-WOM) content, which lets them share their experiences to assist other users. Research demonstrates that this type of information enables consumers to decrease their uncertainty which results in better decision-making (Chevalier & Mayzlin, 2006; Luca, 2016).

2.1 Online Ratings and Consumer Purchasing Decision (H1)

Online ratings have been proven by multiple research studies to affect how customers make their buying choices. The research work of Chevalier and Mayzlin in 2006 showed that even minor rating changes could result in different sales outcomes for products. Luca (2016) discovered that increased ratings boost both customer demand and business income. The research results demonstrate that product ratings serve as indicators for product quality assessment when consumers lack previous knowledge about the product. The idea has gained support through additional research. Rauschenbach et al. (2022) discovered that both positive review content and total review count determine how likely customers are to make a purchase. Consumers usually consider multiple reviews before making a final decision. According to John et al. (2024), Indian consumers display a preference for products that have higher customer ratings with four or five-star ratings being the most popular choice. Vimaladevi and Dhanabhakyaam (2012) discovered that customers make their purchasing decisions based on detailed and trustworthy product evaluations. The research conducted by Pandey (2022) demonstrated that negative product reviews deter customers from buying the item despite its low price. The evidence demonstrates that ratings impact both positive purchasing choices and the decision to stop buying products. Theoretical explanations also support this relationship. People who experience uncertainty about their situation will follow social proof according to social proof theory (Cialdini, 2001). Online ratings act as social proof, showing how many people liked a product. Signal quality theory explains that consumers use basic signals like star ratings to assess product quality (Valck et al., 2009). The evidence from these studies demonstrates that online

ratings create a strong effect on consumer buying behavior which confirms the first hypothesis.

2.2 Reliance on Online Ratings and Purchasing Decision (H2)

The extent to which consumers depend on online ratings for their decision-making process represents an essential factor that governments need to evaluate. Research findings indicate that different levels of trust will bring about various purchasing outcomes. The study by Rauschenbach et al. (2022) showed that consumers who read and compare reviews will become more influenced by those reviews. The strength of dependence on information sources will differ according to multiple elements that exist. Wang and Zhang (2020) established that reviewer credibility functions as a vital component during the evaluation process. Consumers increase their review trust, when they perceive the source to be trustworthy. Consumers develop a higher rating dependence for unknown products while they need to depend less on ratings for brands they already know. Online ratings display different usage patterns between rural and semi-urban areas and urban regions in the case of Darbhanga. The research by Kumar and Sharma (2023) demonstrated that digital literacy and internet access and trust in online platforms function as essential factors that shape consumer behavior. Consumers living in those areas exhibit a tendency to verify information through their social connections before making any purchasing choices. The research conducted by SDMIMD (2024) found that delivery convenience and payment options and trust in platforms operate as imperative factors that determine purchasing choices together with product ratings. The research indicates that ratings do not serve as the exclusive factor which determines consumer behavior in those areas. The studies show that fake review concerns lead to decreased online rating trust from consumers (JISRET, 2023). The study found that consumers who check ratings still maintain some level of doubt about their accuracy when making final choices. International research also supports the importance of reliance. Liu (2006) found that a higher number of reviews increases product popularity, while Zhang and Zhu (2021) observed that clearly displayed ratings improve purchase decisions. The studies fail to investigate how reliance affects real-life purchasing habits.

2.3 Research Gap and Justification

The research shows that online ratings affect purchase choices but the study fails to measure how much consumers depend on these ratings in Darbhanga's district-level environment. Most research studies concentrate on urban locations or societal groups which do not accurately represent how consumers in semi-urban areas behave. The research needs to examine how online ratings affect consumer behavior together with their specific impact on regional purchasing patterns. The research will address this gap through the examination of specific relationships existing within Darbhanga District.

3. Objectives of the Study

1. To examine the influence of online ratings on consumer purchasing decisions in Darbhanga District
2. To study the association between consumers' reliance on online ratings and their purchasing decisions.

4. Hypotheses of the Study

- NH₁: Online ratings do not have a significant influence on consumer purchasing decisions.
AH₁: Online ratings have a significant influence on consumer purchasing decisions.
NH₂: There is no significant association between consumers' reliance on online ratings and their purchasing decisions.



AH₂: There is a significant association between consumers' reliance on online ratings and their purchasing decisions.

5. Research Methodology

5.1 Research Design

The present study is descriptive and analytical in nature, as it aims to examine the impact of online ratings on consumer purchasing decisions and to analyze the association between consumers' reliance on online ratings and their buying behaviour. The study uses primary data which researchers collected through a structured questionnaire. The researchers used secondary data from research papers and journals and online sources to establish the theoretical framework.

5.2 Sampling Design of the Study

This study was conducted in Darbhanga district, Bihar, India, by using Convenience Sampling method with Sample Size of 184 respondents.

The methodological framework of the study is presented in Table 1.

Table 1: Key Methodological Framework

Component	Details
Sampling Method	Convenience sampling
Sample Size	184 respondents
Study Area	Darbhangha district, Bihar, India
Data Type & Collection Instrument	Primary data & Structured questionnaire
Statistical Tools	Descriptive statistics, One-sample t-test, Chi-square test

6. Results and Interpretation

The demographic information of study participants is shown in Table 2. It provides information related to gender, age, marital status, education, income, and occupation. The study found that 105 male respondents made up 57.07 percent of the 184 total respondents while 79 female respondents made up 42.93 percent of the total. The study found that there were more male participants than female participants. Most respondents belong to the younger age group. About 95 respondents (51.63%) are below 30 years of age. The age group of 30–40 years includes 48 respondents (26.09%), followed by 40–50 years with 26 respondents (14.13%), and only 15 respondents (8.15%) are above 50 years. The data shows that most respondents belong to the young age group who probably know about online platforms. The study shows that 109 respondents who are unmarried make up 59.24 percent of the sample, while 75 respondents who are married make up 40.76 percent of the sample. This shows that unmarried

5.3 Data Collection Instrument

Data collection was conducted through a systematic questionnaire and it includes three sections:

Section A: Demographic characteristics

Section B: Usage and reliance on online ratings (categorical questions)

Section C: Impact of online ratings on purchasing decisions (5-point Likert scale)

5.4 Tools and Techniques of Analysis

The gathered information has been examined by statistical methods which include:

Descriptive Statistics, One-Sample t-test- To examine whether online ratings significantly influence purchasing decisions and Chi-square Test- To study the association between reliance on online ratings and purchasing decisions

individuals form a larger part of the sample. The highest number of respondents hold graduation degrees, with 72 respondents (39.13%) who completed this level of education. About 56 respondents (30.43%) have education up to 12th standard, 22 respondents (11.96%) are postgraduates, and 34 respondents (18.48%) belong to other categories. This shows that most respondents have completed basic to higher-level education. The largest group of respondents (78 or 42.39%) earns between ₹30,000 and ₹50,000. About 51 respondents (27.72%) earn between ₹15,000–₹30,000, while 30 respondents (16.30%) earn less than ₹15,000. Only 25 respondents (13.59%) have income above ₹50,000. The results show that most respondents belong to the middle-income group. The higher category includes 70 respondents who work in government jobs, which represents 38.04 percent of the total. The group includes 51 respondents who work in private jobs 40 respondents who work for themselves and 23 respondents who are students.

Table 2: Demographic Profile of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	105	57.07%
	Female	79	42.93%
	Total	184	100%
Age	Less than 30 years	95	51.63%
	30-40 years	48	26.09%
	40-50 years	26	14.13%
	More than 50years	15	8.15%
	Total	184	100%
Marital Status	Married	75	40.76%
	Unmarried	109	59.24%

	Total	184	100%
Educational Qualification	Up to 12 th	56	30.43%
	Graduation (UG)	72	39.13%
	Post-Graduation (PG)	22	11.96%
	Others	34	18.48%
	Total	184	100%
Monthly Income (in thousand)	Less than 15000	30	16.30%
	15 - 30	51	27.72%
	30 - 50	78	42.39%
	Above 50	25	13.59%
	Total	184	100%
Occupation	Government Job	70	38.04%
	Private Job	51	27.72%
	Self-Employed	40	21.74%
	Students	23	12.50%
	Total	184	100%

Source: Primary Data

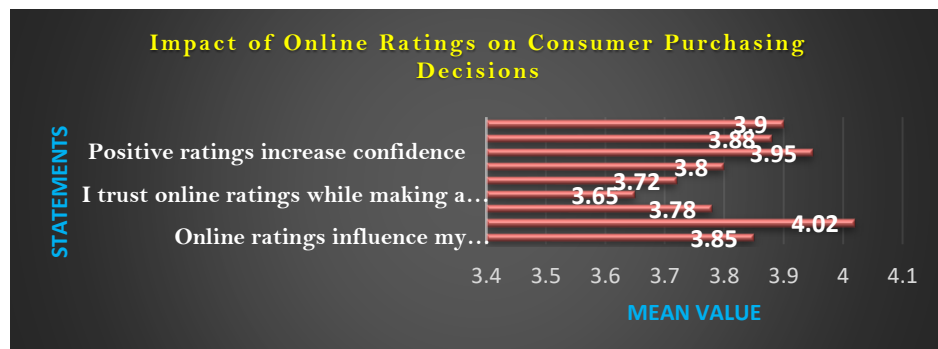
Table 3 shows the findings of a one-sample t-test which assessed the impact of online ratings on consumer purchasing behavior. The test value is taken as 3, which represents a neutral level of agreement. The results and figure 1 show that all statements received mean values above 3. This finding shows that respondents mostly agree with statements which connect online ratings to their ability to affect purchasing choices. The statement "I prefer products with higher ratings" received the highest mean rating of 4.02 because most respondents showed strong agreement with this statement. Respondents showed high agreement with both "Positive ratings increase confidence" which obtained a mean score of 3.95 and "Online ratings influence my purchasing decision" which received a mean score of 3.85. The study produced positive t-values which achieved statistical significance. The p-values for all the statements are less than 0.05 ($p < 0.001$), which indicates that the results are highly significant.

Table 3: One-Sample t-Test Results (Test Value = 3, N = 184, Significant at 5% level)

Statements	Mean	t-stat (2-tailed)	p-value	Null Hypothesis	Interpretation
Online ratings influence my purchasing decision	3.85	9.12	< 0.001	Reject	Significant
I prefer products with higher ratings	4.02	11.45	< 0.001	Reject	Significant
I avoid products with low ratings	3.78	8.36	< 0.001	Reject	Significant
I trust online ratings while making a purchase	3.65	6.92	< 0.001	Reject	Significant
Number of reviews affects my decision	3.72	7.88	< 0.001	Reject	Significant
I compare ratings before buying	3.80	8.95	< 0.001	Reject	Significant
Positive ratings increase confidence	3.95	10.21	< 0.001	Reject	Significant
Negative ratings discourage purchase	3.88	9.67	< 0.001	Reject	Significant
Online ratings play an important role in final decision	3.90	9.98	< 0.001	Reject	Significant

Source: Primary Data

Figure1: Mean values showing the impact of online ratings on consumer purchasing decisions



Source: Table 3

Table 4 shows how online rating systems impact consumer shopping behavior. The table shows that respondents who "always" or "sometimes" rely on online ratings have a higher level of agreement that ratings influence their purchasing decisions. The ratings-only group confirms their decision-making process through ratings according to 42 of its members while only 5 members decide to reject this statement. The respondents who "rarely" or "never" use online ratings have shown a distinct pattern of behavior. In the "never" category, 23 respondents decided to reject the

statement that ratings control their decision-making process. The data demonstrates that consumers use ratings to determine their buying behavior. Table 5 displays the Chi-square test results which researchers used to determine whether the existing relationship has statistical significance. The calculated Chi-square value is 55.68 with 6 degrees of freedom. The p-value shows statistical significance because it falls below the 0.05 threshold which reports ($p < 0.001$) value.

Table 4: Contingency Table of Chi-Square Test of Association Between Reliance on Online Ratings and Purchasing Decision

Reliance on Online Ratings	Agree	Neutral	Disagree	Total
Always	42	10	5	57
Sometimes	35	12	8	55
Rarely	10	14	12	36
Never	5	8	23	36
Total	92	44	48	184

Source: Primary Data

Table 5: Chi-Square Test Result (Significant at 5% level)

Test	Value
Chi-square (χ^2)	55.68
Degrees of Freedom (df)	6
p-value	< 0.001

Source: Primary Data

7. Findings and Discussion

The research study aimed to determine how online ratings affect consumer buying choices while studying how consumers use ratings to decide what products to purchase. The study results are presented in the following section. First, the demographic profile shows that most respondents are young, educated, and belong to the middle-income group. The fact that many respondents who participated in the study belong to the age group under 30 shows that young people actively shop through online platforms. The group members use digital platforms at a higher rate than other groups because they know digital platforms better than other groups. Consumers who study products through online ratings show that they will use their knowledge to make online product choices. The one-sample t-test results demonstrate that online ratings have a strong impact on how consumers make their purchasing choices. The respondents who participated in the study showed that they believed ratings would influence their decisions because all rating statements received mean scores that exceeded neutral points. The respondents demonstrated their product preference by selecting items that received higher ratings while they stayed away from items that received lower ratings. The respondents showed that their positive product evaluations made them feel more confident about buying the product while negative product evaluations made them stop buying the product. Online ratings function as a vital factor which guides how consumers make their purchasing choices. Another important finding is that consumers do not rely on a single review. Instead, they look at the overall rating and the number of reviews before making a decision. Consumers try to gather more information because they want to decrease their risk and improve their decision-making abilities. The online shopping experience shows that ratings function as a quick and simple method for customers to access product details. The results of the Chi-square test further support these findings. The way consumers use online ratings directly affects their purchasing behavior. The people who responded to this survey showed that they need ratings to

make their choices. The level of consumer reliance on products directly impacts their purchasing decisions. The findings also suggest that trust plays an important role. Online ratings receive usage from most customers but some customers still doubt their precision. People in semi-urban areas commonly use information from their friends and family to verify details before making their final choices. The importance of ratings exists but they do not determine all aspects of purchasing behavior.

8. Conclusion

The research studied how online ratings impact consumer buying behavior in Darbhanga District. The study results demonstrate that online ratings function as a vital component which online shoppers use to make their purchasing choices. Most consumers consider ratings and reviews before selecting a product, especially when they do not have prior experience with it.

The results show that higher ratings combined with positive reviews lead to increased product sales, while low ratings together with negative reviews result in decreased consumer interest. Online ratings enable consumers to evaluate product quality which assists them in making better purchasing decisions.

The study also shows that the level of dependence on online ratings varies among consumers. Some people strongly rely on ratings, while others use them only as a supporting factor. The final decision process depends on how much people rely on ratings because different people have different reliance levels.

The research demonstrates that online ratings serve as an important factor which determines how consumers behave. The information serves as a valuable resource for consumers, which enables them to make improved buying choices with increased assurance.

9. Limitations and future research scope

Every study contains particular restrictions which limit its research capabilities. The researchers conducted their study in Darbhanga District because their results do not apply to other regions. Urban residents show different

consumer behavior patterns compared to residents of other states.

The research used 184 respondents as its sample size yet this number does not depict the complete makeup of the population. The research findings would improve with a larger sample size.

The researchers used primary data which they gathered through a questionnaire survey as their study foundation. The results rely on the truthfulness and comprehension skills of the participants who might exhibit biased behavior during the study.

The research only examines online customer reviews while excluding essential elements like brand reputation and product costs and product attributes and advertising content which affect consumer buying choices.

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