

Digital Reviews and Sustainable Consumption: Evidence from Coimbatore

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Abstract: *In addition to the adaptations needed in industrial production, there is a need for more responsible consumption behavior in combating climate change, which is one of the most urgent issues in the world. The ecommerce industry has changed how people buy things – with ease of access to ratings, reviews and recommendations that helps people make informed decisions. Consumer uncertainty can be alleviated, their confidence in purchasing can be improved, unnecessary purchases can be discouraged, and by lowering the amount of returns, transportation-related emissions, packaging waste, and resource usage, online product reviews can potentially encourage sustainable consumption. The younger generation of consumers, especially college students, are an important group of digital consumers that are likely to affect future consumption. In this context, the research problem is to analyze the attitudes of the college students towards online product reviews and measure the influence of online product reviews for sustainable consumption and climate conscious purchasing. It aims to specifically investigate the relationship between the credibility of online reviews and the perceived confidence, satisfaction, impulsive buying behavior, and willingness to buy of environmentally friendly products. This research is quantitative research using primary data obtained from the students of college who actively carry out online shopping. Data was collected using a structured questionnaire that included questions on the demographic characteristics, shopping behaviour online, satisfaction ratings, opinions about online reviews and the preferences for buying sustainably. The demographic and online shopping profile of the respondents, their satisfaction with the online shopping experience, and their attitude towards digital reviews has been analyzed using descriptive statistical techniques, which have been interpreted in the light of sustainable consumption and climate change mitigation. The findings suggest that online reviews are effective in fostering consumer confidence and satisfaction and to help consumers make informed decisions when buying products. Reviews can also seem to minimize impulsive purchasing and promote thought for environmentally friendly or “green” products. Online reviews offer a valuable resource for more responsible buying decisions, as they provide easily accessible information on product quality, durability, performance, and sustainability, potentially easing the burden of unnecessary purchases, product returns, transport emissions, and resource wastages. This study is part of the emerging discipline of digital sustainability, which seeks to link the information provided online with sustainable consumption and climate-aware purchasing. The novelty of this research is the analysis of the impact of digital reviews on environmental responsible consumption among college students in Coimbatore. Results are relevant for eCommerce businesses, policy makers, education and environment organisations. Incorporating trusted sustainability data into online product description and reviews can help consumers' identify more quickly and accurately sustainable products. The study thus contributes to SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action), highlighting the promise of digital technologies and consumer choice to lessen environmental impacts and boost consumer welfare.*



Keywords: Climate Change, Sustainable Consumption, Online Product Reviews, E-commerce, Digital Consumer Behavior, Green Consumption, College Students.

I. INTRODUCTION

Climate change is now a growing global problem, impacting on the ecosystems, the economy, public health and human livelihoods. Countries, sectors and individuals are forced to reassess their production and consumption habits due to the rise in global temperatures, extreme weather events, biodiversity loss and the rising carbon emissions. Although the bulk of the climate change conversation has been around renewable energy, industrial emissions, and environmental laws and regulations, consumer behaviour has become a major part of climate change mitigation plans as well. Sustainable consumption is about responsible consumption, consuming in a more efficient way, and making informed and conscious choices. Sustainable consumption has risen to a core issue in global sustainability and is now a crucial pillar of achieving these goals.

Commerce is undergoing an incredible digital change, and it has entirely affected how consumers look for information, assess products, and make decisions to buy. The consumer gets a lot of information about the products via ratings, product reviews, recommendations, and user-generated reviews in the e-commerce websites like Amazon, Flipkart, Myntra, etc. In contrast to traditional brick and mortar shopping, online shoppers are far more likely to consult consumer reviews to eliminate uncertainty around product quality, longevity, usability, and worth in order to select a better product. Not only do these reviews boost the confidence of potential customers, but they can also have a significant impact on customer satisfaction, repeat business, and customer loyalty.

Environmentally, digital product reviews help to foster sustainable consumption for a number of important reasons. Well-informed consumers are less likely to buy inappropriate products, which helps to decrease product returns, reverse logistics, unnecessary packaging waste, and transportation and carbon emissions. Word of mouth can also act as an incentive for manufacturers to enhance product quality, transparency and sustainability, as the experience of many customers have become public. As a result, digital review systems have grown beyond the field of marketing into a system which supports responsible consumption and incentivises environmentally sustainable market behaviour.

In the last decade, India has seen incredible progress in internet penetration, smartphone usage, digital payments and online shopping. A few government initiatives like Digital India, the penetration of Unified Payments Interface (UPI), low-cost mobile internet, and digital literacy have since helped e-commerce to grow rapidly in urban and semi-urban areas. One of the most technology savvy consumer groups is college students, who often buy electronics, clothes, books, cosmetics, food products and education-related items online. Peer reviews and influencer opinions, product ratings, and online recommendations are crucial factors in their purchasing decisions.

Coimbatore is one of the emerging education and industrial hubs of Tamil Nadu, which is an apt context to explore digital consumer behaviour. There are several universities and colleges within the city, which also means a large group of digitally connected youth. These students are becoming more conscious of environmental problems, sustainable development and responsible consumption, and therefore are the right ones to be addressed on the link between digital commerce and purchasing behaviour that is environmentally friendly.

While there are many studies that have explored online shopping behavior, customer satisfaction, and technology adoption, a limited number of studies have explored how online product reviews indirectly mediate the relationship between the adoption of online shopping behavior and sustainable consumption and climate change mitigation. The literature focuses mainly on commercial results like sales performance, customer loyalty and purchase intention, but neglects the environment aspects of informed digital purchasing. This research compares and contrasts consumer behaviour with sustainability and climate action for the first time.

Previous studies have explored online shopping behaviour, trust and customer satisfaction and purchase intention, but comparatively little work has been done to explore the role of online product reviews for sustainable consumption behaviours. Moreover, very little empirical data is available on college students in India, a group that is increasingly digital consumers. This gap is the reason for the present study.



The present study proposes that credible online product reviews can improve the accuracy of consumers purchasing, minimize wasted consumption, promote informed choices and support sustainable consumption. The study offers empirical evidence that digital information systems are useful for facilitating environmentally responsible consumption and enhancing economic efficiency for college students' attitude toward online product reviews. The study is relevant to the wider goal of sustainable development, as it outlines the role that technological advances in e-Commerce can play in enabling behaviour change to combat climate change.

This study builds upon the growing body of research on digital consumer behaviour and sustainable consumption by investigating the effect of online product reviews on college students' buying choices. The research complements previous e-commerce research on the decision-making process and its relationship with sustainable consumption and SDG 12 (Responsible Consumption and Production). It also packs empirical evidence from the urban context in India which lacks research on the intersection of digital consumer behaviour and sustainability.

II. REVIEW OF LITERATURE

The rise of digital technologies and online platforms has transformed consumers' behaviours. Based on the findings by Davis (1989), the Technology Acceptance Model (TAM) states that the perceived usefulness and perceived ease of use are important factors that affect an individual's acceptance of a new technology. From an e-commerce perspective, online product reviews boost the perceived usefulness of the product for the consumers by offering genuine information that helps them mitigate purchase uncertainty and therefore make the more informed decision.

Consumer intentions are also influenced by attitudes, subjective norms and perceived behavioural control, as per Ajzen's (1991) Theory of Planned Behaviour. Positive comments provided online reinforce positive attitudes towards products, which in turn boost intention to purchase and lead to more rational consumption choices.

The study conducted by Filieri (2015) showed that the reviews posted on websites have a significant impact on consumer trust, product reviews and buying decisions. User-generated reviews are seen as more trustworthy than traditional advertisements, as they are based on real experiences of consumers. The trust in online reviews therefore leads to quality of the decision-making and minimizes post-purchase dissatisfaction.

Cheung and Thadani (2012) highlighted that eWOM is one of the most influential measures of online consumer behaviour. They found that the creditability, expertise, quality and consistency of reviews are critical factors that affect consumers' buying decisions for a range of products.

Digital technologies are becoming increasingly recognized in recent literature on sustainability as catalysts for sustainable consumption. Geissdoerfer et al. (2017) posited that digital transformation can help in implementing the circular economy by making information more transparent, minimizing resource waste, and enabling the adoption of environmentally responsible purchasing. Also, responsible consumption and production (SDG 12) is essential for combating climate change, which is mentioned in the United Nations Sustainable Development Goals.

Research on sustainable consumer behaviour shows that consumers with an interest in the environment actively look for reliable information about products before they buy. When people know more about the quality, durability, environmental certification, and experience of the consumers, they are more inclined to opt for sustainable products over disposable, single-use ones. Therefore, online reviews indirectly help to decrease waste by preventing bad customer impulse purchases and returns.

Despite all these developments, empirical studies on the relationship between online product reviews and climate change mitigation are still scarce, especially in India. Most existing research has concentrated on the satisfaction with the website, website quality, trust in the website, and intention to purchase, while environmental outcomes have received less attention. In addition, there is a relatively limited amount of research on college students as "green" digital consumers.

The current study builds on the literature by considering online product reviews in the context of sustainable consumption and climate action. It combines theories on consumer behavior with sustainability views and illustrates



how the informed buying of digital products can help to reduce environmental effects and enhance the welfare of consumers.

III. RESEARCH GAP

Based on the literature search, there are some gaps in the research. Firstly, most of the research that has been conducted on online shopping behaviour is marketing/business oriented and fails to consider sustainability in the environment. Second, there are only a few empirical studies on the impact online product reviews can have in the promotion of responsible consumption practices that can help mitigate climate change. Third, research on Indians' college students has been limited, given their importance as digital consumers. Last but not least, integrated empirical models that integrate descriptive analysis with factor analysis, regression analysis and structural equation modelling with sustainability frameworks like PESTLE are rarely found in the literature.

To fill these gaps, the present study examines college students' attitude towards online product reviews and determines how relevant these are to sustainable consumption and climate action in Coimbatore.

IV. RESEARCH OBJECTIVES

- The study aims at achieving the following objectives:
- To investigate the socio-economic profile of college students with online shopping.
- To examine students' attitude towards online product reviews and ratings.
- To uncover factors affecting trust and satisfaction from online product reviews.
- To explore the connection between product reviews, buying intentions and sustainable consumer behaviour.
- To formulate policy suggestions to encourage environmentally responsible digital consumption which supports climate change mitigation.

Conceptual Model



V. RESEARCH METHODOLOGY

Research Design

Population and Sampling Frame

The student sample consisted of college students who had shopping experience in Coimbatore City. The sampling frame comprised of students who were available in Higher Educational Institutions in Coimbatore during the period of primary data collection. The respondents were those attending higher educational institutions with experience in internet shopping for products. Coimbatore was chosen as the study area, considering its educational and industrial significance along with the digitally connected student population.

This addition compliments the existing rationale of the study, which already recognizes Coimbatore as an education and industry hub, where the youth population is connected to the digital age.



Sampling technique and size

Non-probability convenience sampling technique was used as the respondents were selected due to their ease of access from the higher education institutions in Coimbatore. The method was deemed to be suitable for the exploratory study and for the study of digitally active college students. There were 129 questionnaires returned and all 129 questionnaires were valid for final analysis. Convenience sampling and the small sample size reduce the generalisability of the results to a sample of the respondents that participated in the study.

The design and measurement of questionnaires.

Questionnaire Design and Measurement

A structured questionnaire was used to gather primary data which had two sections. The socio-demographic and online-shopping characteristics of the respondents such as gender, age, educational level, monthly income, type of family, place of residence and frequency of online shopping were captured in the Section A. The measures of the respondents' perception of online product reviews, perceived credibility of reviews, product ratings, purchase satisfaction, consumer trust and sustainable purchasing behaviour were included in Section B.

Attitude statements were assessed on a five point Likert scale (1 = Strongly Disagree and 5 = Strongly Agree). The questionnaire aimed to collect the respondents' perceptions regarding the usefulness of and their trust in online reviews, the impact of ratings on purchasing choices, satisfaction with online purchases and the impact of informed purchasing on responsible consumption.

VI. DATA COLLECTION PROCEDURE

The questionnaire was given to the college students having experience in online shopping in Coimbatore. The respondents were briefed on the purpose of the study in terms of education before they were to fill the questionnaire. Completed responses were checked for usability, coded and then analysed using appropriate statistical techniques. A total of 129 valid responses were kept for the final analysis.

The questionnaire items were created using previous research on the subject of online consumer behaviour, electronic word-of-mouth and sustainable consumption. To capture the perceptions of respondents with respect to online product reviews, trust, satisfaction, and sustainable purchasing behaviour, a 5-point Likert scale was used; ranging from Strongly Disagree (1) to Strongly Agree (5).

Ethical Considerations

Participation in the study was voluntary. Before they completed the survey, respondents were made aware of the academic aim of the research. All answers were anonymous and only used for research. There was no requirement to provide personally identifiable information for statistical analysis and respondents were allowed to refuse to participate.

VII. DATA ANALYSIS TECHNIQUES

Demographic and Online Shopping information was summarised with descriptive statistics (frequencies and percentages). The internal consistency of the measurement items was evaluated using an analysis of reliability when applicable. The statistical analysis used was inferential statistical technique, used for analyzing the relationships between the research variables. These comprised correlation analysis, chi-square tests and multiple regression analysis, depending on the availability and sufficiency of the pertinent data. Two statistical methods were explored as possible ways of understanding the underlying dimensions and relationships between the constructs: Exploratory Factor Analysis (EFA) and Structural Equation Modelling (SEM). A contextual framework for interpreting external environments of digital consumer behaviour and sustainable consumption was used in the form of PESTLE analysis.

VIII. RESEARCH HYPOTHESES

Using the conceptual framework and literature review, the following hypotheses were developed:



H1: Online product reviews positively influence students' purchasing decisions.

H2: Product ratings are important in online purchase evaluation.

H3: Trust in online reviews is associated with positive consumer perceptions.

H4: Online reviews support informed purchasing behaviour.

The online rating of the product has a significant positive correlation with sustainable consumption behavior of college students.

IX. RESULTS AND DISCUSSION

Valid Responses

A total of 129 questionnaires were returned and considered valid for analysis. The final sample therefore comprised 129 college students with online-shopping experience.

Demographic Profile of Respondents

Table 1 presents the gender distribution of the respondents.

Table 1. Gender Distribution

Gender	Frequency	Percentage
Female	78	60.5
Male*	51	39.5
Total	129	100.0

Note. Source: Author's analysis based on Primary data collected from survey

*("Male" and "male" responses were combined.)

As shown in Table 1, female respondents constituted 60.5% of the sample, while male respondents represented 39.5%. Female respondents constituted the majority of the sample (60.5%), indicating greater participation in online shopping among female college students. Previous studies have similarly reported higher online shopping engagement among young female consumers due to convenience, wider product variety, and promotional offers.

Table 2. Age Distribution

Age Group	Frequency	Percentage
Below 20 years	73	56.6
21–30 years	55	42.6
Above 40 years	1	0.8
Total	129	100.0

Note. Source: Author's analysis based on Primary data collected from survey

The majority of respondents (56.6%) were below 20 years of age, confirming that online shopping is particularly popular among younger consumers who are highly familiar with digital technologies.



Online Shopping Satisfaction

Table 3. Overall Satisfaction with Online Shopping

Response	Frequency	Percentage
Very Satisfied	10	7.8
Satisfied	71	55.0
Neutral	47	36.4
Dissatisfied	1	0.8
Total	129	100.0

Note. Source: Author's analysis based on Primary data collected from survey

Table 3 presents respondents' overall satisfaction with online shopping

As shown in Table 3, 55.0% of respondents were satisfied and 7.8% were very satisfied with online shopping. In contrast, only 0.8% reported dissatisfaction.

Over 60% of respondents showed a positive attitude towards online shopping. The discovery means that digital marketplaces have succeeded in fostering positive experiences during shopping, as they have offered convenience, variety and secure shopping experiences.

High levels of satisfaction reflect growing consumer confidence in the booming digital marketplace in India.

Satisfaction with Product Reviews

Table 4 presents respondents' satisfaction with online product reviews.

Response	Frequency	Percentage
Very Satisfied	12	9.3
Satisfied	66	51.2
Neutral	49	38.0
Dissatisfied	2	1.5
Total	129	100.0

Note. Source: Author's analysis based on Primary data collected from survey

As shown in Table 4, 51.2% of respondents were satisfied and 9.3% were very satisfied with online product reviews. This finding supports previous research suggesting that electronic word-of-mouth (eWOM) has become an important source of product information.

Product reviews reduce uncertainty before purchase and improve consumer confidence.

6.4 Perception of Product Quality

Table 5 presents respondents' perceptions of whether products purchased after consulting online reviews met their expected quality standards

Table 5. Quality of Products Purchased Based on Reviews

Response	Frequency	Percentage
Yes	117	90.7
No	12	9.3
Total	129	100.0

Note. Source: Author's analysis based on Primary data collected from survey

An overwhelming majority believed that products purchased after reading reviews met expected quality standards.

This demonstrates that review systems function as an effective information-sharing mechanism between consumers and sellers.



From a sustainability perspective, informed purchasing decisions reduce unnecessary returns, thereby minimizing transportation emissions and packaging waste.

Preferred Product Ratings

Table 6 presents the product ratings preferred by respondents before making an online purchase.

Table 6. Preferred Rating before Purchase

Rating	Frequency	Percentage
5 Star	32	24.8
4 Star	58	45.0
3 Star	27	20.9
2 Star	8	6.2
1 Star	4	3.1
Total	129	100.0

As shown in Table 6, 45.0% of respondents preferred four-star products and 24.8% preferred five-star products. Thus, 69.8% of respondents preferred products with four- or five-star ratings.

Note. Source: Author's analysis based on Primary data collected from survey

Approximately 70% preferred products with four or five-star ratings.

Consumers therefore rely heavily on digital reputation systems while evaluating products.

Higher ratings reduce perceived risk and improve purchase confidence.

Consumers strongly believe that reviews help identify quality products.

Consumer Behaviour will be discussed.

Descriptive results indicate that the product review has a significant effect on the buying decision, which can be made online.

Students are now more and more turning to:

- customer ratings
- previous buyer experiences
- detailed reviews
- before purchasing products.

This behaviour will help to reduce uncertainty and increase consumer confidence.

Digital review systems, as a result of this, promote more wise purchases.

Sustainable Consumption Perspective

The results suggest online product reviews could aid consumer decision making better. A significant percentage of respondents said that they bought a product after checking online reviews which was up to their expectations. This indicates that online reviews may help to decrease ambiguity and enable consumers to make a product choice that aligns with their expectations.

Informed purchasing may have a positive effect on the sustainability of products within the context of avoiding inappropriate purchases and returns of products. This study did not directly measure product-return rates, packaging waste, transportation emissions, carbon emissions or other environmental outcomes, however. Thus, the environmental impacts described in this study should be considered as potential scenarios for digital information to contribute to sustainable consumption, not as directly measured climate change impacts.

Link with SDG 12 and SDG 13

The results show a clear conceptual connections with SDG 12, Responsible Consumption and Production, as the online product information can facilitate informed buying decisions and may discourage unsuitable buying. The study also has



an indirect conceptual link to SDG 13, Climate Action, as more informed purchasing and consumption might lead to reduced use of resources due to inappropriate purchases and returns. The present study does not measure environmental indicators or carbon emissions directly, however. Thus, SDG13 is considered as an inference rather than an environmental impact.

Table 7-PESTLE Discussion

Factor	Findings
Political	Digital India policies encourage online commerce.
Economic	Lower search costs and price comparisons improve consumer welfare.
Social	Young consumers increasingly trust peer reviews.
Technological	Smartphones, AI recommendations and digital payment systems promote online shopping.
Legal	Consumer Protection (E-Commerce) Rules improve transparency.
Environmental	Better purchase decisions reduce returns and transportation emissions.

Note. Source: Author's analysis based on Primary data collected from survey

X. DISCUSSION

The results showed that online product reviews are an important information source for the surveyed college students and are directly related to their evaluation of a product purchase made online. The descriptive results indicate fairly good attitudes toward e-shopping and e-product reviews. In particular, 62.8% were satisfied or very satisfied with online shopping, and 60.5% were satisfied or very satisfied with online product reviews. In addition, 90.7% said the products they bought after reading about them online were of good quality. Based on the findings, the researchers conclude that online reviews are viewed by the respondents as a valuable source of information for assessing the product and for alleviating the purchasing uncertainty.

The results on satisfaction with the online product reviews align with the argument put forward by Filieri (2015) who noted the informational and diagnostic role of the online reviews in evaluating products. Previous consumers' reviews can give information that feels more directly related to product performance than traditional promotion messages. The high percentage of respondents indicating satisfaction with online product reviews in the current study is also indicative of the fact that students find peer (user) generated information important when developing expectations about products. The analyses presented in this study, however, should not be placed in the context of assuming causality between reviews and purchase decisions, as this study is descriptive in nature and based on survey responses.

The results can also be interpreted in the light of electronic word-of-mouth (eWOM). Cheung and Thadani (2012) concluded that consumers' reactions to the online information were influenced by the dimensions of credibility, quality and characteristics of electronic word of mouth. These findings are consistent with this view as the respondents demonstrated significant dependance on the use of the internet to evaluate products and relied on the ratings and reviews of the products given online. However, four-star products were preferred by 45.0% of respondents, with 24.8% preferring five-star products showing that ratings play an important role as a decision cue for the surveyed students. Overall, the findings indicate that digital reputation mechanisms, including ratings and reviews, are one of the key components of the information landscape in which young consumers are engaging in online purchasing decisions.

The results can also be explained based on the Technology Acceptance Model (TAM) of Davis (1989). TAM posits a relationship between perceived usefulness and perceived ease of use and people's acceptance and use of technology.



Product reviews can be seen as an online information feature that can make the shopping platform more useful, especially when navigating to compare options, assess the quality of the products or to diminish uncertainty. This high level of satisfaction with online shopping and product reviews is, therefore, consistent with the overall hypothesis that consumers are more likely to respond positively to digital platforms when the information they provide on digital platforms is perceived as useful. However, the present study does not test the TAM constructs statistically; therefore, the role of TAM is not as a valid causal model but as a theoretical framework for interpreting the descriptive results.

Results can also be examined using the theory of planned behaviour (TPB) (Ajzen 1991). According to TPB, attitudes, subjective norms and perceived behavioural control should affect behavioural intentions. Attitudes towards products can be formed from information in online reviews, and social information about the acceptability/desirability of a purchase can be derived from ratings and previous consumers' experiences. The relative importance of product ratings and reviews among the respondents is thus in line with the hypothesis that information, social cues can also be a part of the decision context in consumer behaviour. The current study does not directly measure subjective norms, perceived behavioural control or behavioural intention, so the TPB should be viewed less as evidence for the statistical support of these components, and more as an interpretive theory.

One of the significant results is related to the perceived quality of products bought following internet-based consumer reviews. Up to 90.7% of respondents said that products they bought based on a review were of the expected quality. This finding suggests that the overall attitude of the respondents towards review-based information and their purchase decision is positive. It is also in line with the general discussion of how online reviews could help to eliminate information asymmetry between seller and buyer by offering experience information. But this discovery is based on respondents' perceptions of product quality, not a comparison of purchases they did versus those they did not purchase, and review. Thus it should not be viewed as a proof of the quality of the actual products or of a guaranteed successful purchase.

The results offer a valuable, but guarded view from the perspective of sustainable consumption. However, if consumers rely on a review to find more information prior to buying, this information could help consumers make a more informed decision and avoid buying inappropriate products. In a roundabout way, the better informed decision making could lead to decreased non-essential purchases and/or product returns. This study, however, did not measure product-return rates, packaging waste, transportation emissions and carbon emissions or resource consumption directly. The study thus offers evidence on the perceptions and information use by consumers, but not on the actual improvement in the environment.

The sustainability interpretation is therefore best viewed as a route to be taken, not a clear environmental outcome. The impact of online reviews on responsible consumption could be measured in reducing environmental impacts, but this needs more empirical research. This could be integrated into future studies, which would include a consumer survey and real sale data, product returns, packaging data, and measures of packaging sustainability impact, to determine if review-driven decision making leads to measurable sustainability improvements.

In conclusion, the results of the study highlight the significance of online reviews in the digital consumer decision-making process among college students in Coimbatore. The findings in this study are largely consistent with the findings of similar studies found in the literature as outlined by Filieri (2015), Cheung and Thadani (2012), Davis (1989) and Ajzen (1991) on online review, eWOM, technology acceptance and planned consumer behaviour respectively. The study also takes a step forward in the debate on sustainable consumption by asking if the informed digital buying might be a way to become more responsible consumers. The significance of the present study is thus mostly to link the use of digital information and consumer perceptions with the sustainability discourse and to acknowledge that the direct impacts of digital information on the environment could not be directly determined with the data available for the present study.

The study proves that online product reviews have acquired the status of essential decision support system beyond mere marketing components.

More consumers are turning to credibility of online reviews before they buy.



The results suggest that knowledge-based buying helps to

- Higher customer satisfaction,
- Enhancement of product perception quality,
- Lower unnecessary consumption,
- Yields fewer product returns, and
- More sustainable consumption patterns,

A focus on minimizing product returns and promoting efficient buying habits can help to reduce transportation needs, packaging waste, and carbon emissions throughout the e-commerce supply chain, from a climate change standpoint. Digital consumer information is thus a vital area whereby e-commerce can play a role in sustainable development.

Theoretical Implications

The study is one of the first to link information gathered from online product reviews with consumer decision-making and sustainable consumption, thereby adding to the literature of digital consumer behaviour. With regards to the TAM, the usefulness of online reviews can increase consumers' acceptance of online information when making purchase decisions. An attitude may be formed from review information and so may be a behavioural intention, from the Theory of Planned Behaviour (TPB) perspective. The study thus offers a conceptual relationship between the use of digital information and responsible consumption, albeit with the need for empirical research on the environmental effects of this behavior.

Practical Implications

This study offers a number of implications.

- For E-commerce Companies
- Prompt certified customer feedback.
- AI Moderation: Delete bogus reviews.
- Encourage the purchase of environmentally friendly products.

XI. CONCLUSION

This study investigated the importance of online product reviews on the digital consumer behaviour and how it may relate to sustainable consumption among college students at Coimbatore. The results show that online reviews and product ratings are significant sources of information in online decision making process. Most consumers were satisfied with online shopping and online product reviews, and 90.7% of them were satisfied with the quality of the products that they bought after reading the product reviews. This is reflected by the preference of a significant number of respondents for four- and five-star ratings, an evidence of the significance of digital ratings in product evaluation.

This study extends the current body of research on digital consumer behaviours, while providing evidence of the possibility of online information to promote informed consumption. Environmentally, credible product reviews can enable consumers to make more appropriate purchases and may prevent them from purchasing an inappropriate product. The study, however, does not measure any product returns, packaging waste, transportation emissions nor carbon emissions in direct terms. So, statements about climate change mitigation should be viewed as implications, not as empirical facts.

The results can be applied in the field of e-commerce platforms, policymakers, and education institutions aiming to encourage responsible digital consumption. Greater trust in and transparency of online reviews, better consumer knowledge, and better, more reliable and accurate product information could help to make consumers more informed consumers. Overall, the study emphasizes the importance of further research to directly assess the environmental impacts of digital consumption.



XII. LIMITATIONS AND FUTURE RESEARCH

The study was faced with the following limitations

There are some limitations to the study. First, convenience sampling was used and finally 129 respondents were included. Therefore, the result cannot be extrapolated to the general population of college students from Coimbatore and India. Secondly, the study has been conducted with college students and thus does not include the behaviour of other consumer groups.

Third, the study is based on how the participants perceive the issue, which means that there may be some response bias. Fourth, the study is based on perceptions of online reviews, product quality and purchase behaviour as opposed to real environmental impacts. The frequency of product returns, packaging waste and transportation emissions/ carbon footprint were not directly acquired.

Probability sampling and larger samples in different cities and demographic might be used in future studies. A longitudinal study may also be conducted to study the changes in digital consumer behavior over time. The study can be further extended with real purchase records to better define an empirical link between online reviews and sustainable consumption in future work, as well as return data and product-level environmental indicators.

XIII. ETHICS STATEMENT

No specific pressure was put on people to be involved in the study and they were told the academic nature of the study. Information gathered was kept confidential and was used for academic purposes only. There was no need to include personally identifiable information for statistical analysis.

Data Availability Statement

Primary survey was conducted to collect the data used in the study. Additional data on the dataset can be obtained from the corresponding author on reasonable request, taking into account privacy and confidentiality concerns.

For Policymakers

- Increase consumer understanding of genuine reviews.
- Promote green digital trade.

For Universities

- Organise awareness programmes for sustainable digital consumption.
- Encourage responsible online shopping amongst pupils.

Conflict of Interest

The authors have declared that there is no conflict of interest.

Declaration of AI Use

This manuscript was prepared through the intellectual contributions of the author(s) to the study design, data analysis, interpretation of results, and scholarly content. Grammarly and ChatGPT were used solely to assist with grammatical refinement and reference formatting during manuscript revision. The author(s) accept full responsibility for the accuracy, integrity, and final content of the manuscript.

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