ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

Volume–XIII, Special Issues–I(b) Jan – Feb 2026

Original Research Article

A STUDY ON CONSUMER SUSCEPTIBILITY IN AI DRIVEN PERSONALIZED RETAILING

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Abstract:

The rapid growth of AI-driven personalization in Indian e-commerce has fundamentally altered how consumers discover and purchase products online. Platforms such as Amazon, Flipkart, and Myntra increasingly rely on artificial intelligence to deliver targeted recommendations, creating a shifting dynamic between algorithmic influence and consumer decision-making. This study

examines consumer susceptibility to AI-driven personalized retailing across four key dimensions: awareness of AI personalization techniques, its influence on buying behaviour the moderating role of data privacy concerns, and the impact of platform trust on long-term engagement and repeat purchase intention. A quantitative, descriptive research approach was adopted, with primary data collected from Indian consumers through a structured online questionnaire. The study finds that AI personalization meaningfully shapes consumer purchasing behaviour, with platform trust emerging as a particularly significant factor. The findings contribute to a growing understanding of how intelligent retail systems influence Indian consumers and carry implications for ethical AI deployment in e-commerce

Key words: *AI-Driven Personalization, Consumer Susceptibility, Online Purchase Behaviour, Data Privacy Concern*

Introduction:

Artificial Intelligence has fundamentally transformed retail, enabling businesses to deliver highly customized shopping experiences. Through machine learning, data analytics, and recommendation engines, retailers analyze individual consumer behavior to suggest products, adjust pricing, and deliver targeted advertisements a stark contrast to conventional one-size-fits-all marketing. As e-commerce platforms, mobile applications, and social media expand, consumers increasingly encounter personalized content ranging from product recommendations to AI-powered chatbot assistance. These intelligent systems process vast consumer data to anticipate preferences and purchasing intentions, ultimately driving revenue and enhancing satisfaction. Nevertheless, personalization raises notable concerns. Consumer susceptibility the degree to which individuals are influenced by digital recommendations and promotional offers has become a significant area of interest. AI systems can subtly shape purchasing decisions, potentially encouraging impulse buying and excessive platform dependency.

Several factors influence how consumers respond to AI recommendations, including perceived usefulness, ease of use, trust, social influence, and fear of missing out. Privacy and data security concerns further complicate this

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Volume–XIII, Special Issues–I(b) Jan – Feb 2026

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relationship. This study therefore examines how AI-driven personalization shapes consumer behavior and vulnerability within digital retail environments.

Statement of problem:

Online retail platforms increasingly rely on AI-powered personalization to influence consumer purchasing behavior, often collecting personal data without explicit consent. This raises significant privacy concerns, contributing to unplanned purchases, data vulnerabilities, and eroding trust in major e-commerce platforms. Despite growing consumer awareness, standardized frameworks governing ethical AI usage in retail remain inadequate. This study examines how AI-driven personalization affects consumer susceptibility, privacy perceptions, and trust, aiming to highlight the urgent need for transparent and responsible data practices.

Significance of the Study:

The rapid expansion of AI in online retailing has transformed shopping experiences through personalized recommendations, targeted advertisements, and dynamic pricing, while subtly shaping consumer decision-making. This study addresses a notable gap in understanding how Indian shoppers, particularly young adults and professionals, respond to such technologies on platforms like Amazon, Flipkart, and Myntra. By investigating AI awareness, susceptibility to recommendations, privacy concerns, and platform trust, the research uncovers how algorithmic influence drives impulse purchases and long-term loyalty.

The findings benefit multiple stakeholders. Retailers can develop ethical personalization strategies that build trust without exploiting vulnerabilities. Policymakers gain evidence to strengthen data protection frameworks in India's expanding e-commerce sector. Consumers become more aware of influence tactics, enabling informed decisions. For academics and students, the study contributes valuable India-specific insights into AI's behavioural impact on digital shopping behaviour.

Scope and Limitations of the Study:

This quantitative study explores consumer susceptibility to AI-driven personalization among 85 Indian online shoppers from various states, mainly students and professionals shopping 2-3 times monthly. It addresses four objectives: awareness of AI techniques; susceptibility's impact on buying; privacy concerns' moderating effect; and trust's role in engagement. Data from a structured online survey was gathered in one week, with 47% aged 18-21 and 26-27% aged 41+.

The scope targets Indian e-commerce behaviors on platforms like Amazon and Flipkart, excluding algorithms or offline retail. Limitations encompass the sample size of 85, potentially underrepresenting rural users; self-report biases; short collection period lacking depth; and no controls for variables like income. Findings are preliminary, ideal for larger future studies. (210 words)

Objective:

1. To examine the level of awareness among Indian consumers regarding AI-driven personalization techniques used in online retail platforms.
2. To assess the degree of susceptibility of Indian consumers to AI-generated personalized recommendations and its influence on their purchase decisions.

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E- 2394-8450

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Volume–XIII, Special Issues–I(b) Jan – Feb 2026

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3. To evaluate the extent to which data privacy concerns moderate consumer susceptibility to AI-based personalization in the Indian retail context.
4. To determine the role of consumer trust in AI-powered retail platforms in shaping long-term engagement and repeat purchase intention among Indian shoppers

Review of Literature:

Artificial Intelligence is rapidly transforming the retail industry, enabling platforms to deliver highly personalized shopping experiences. However, as these technologies grow more sophisticated, questions surrounding consumer vulnerability and the psychological influence of AI-driven recommendations on buying behaviour have become increasingly significant.

Conceptual Background:

AI-driven personalized retailing functions by aggregating consumer-generated data to construct predictive behavioural profiles, which in turn enable retailers to deploy targeted interventions including personalized recommendations, dynamic pricing, and context-sensitive promotional offers. While research confirms that such features elevate purchase intention and platform engagement, a parallel discourse highlights the risk of algorithmic opacity — the condition in which consumers remain unaware that their choices are being systematically curated. This opacity intensifies the potential for behavioural influence, situating consumer susceptibility not merely as a marketing outcome but as a psychological and ethical concern within digital commerce.

Review of Selected Studies:

Hassan (2025) conducted an empirical investigation into the moderating role of AI-powered personalized recommendations within the trust–satisfaction–loyalty framework in online retail. The study found that accurate and contextually relevant recommendations significantly strengthened consumer trust in digital platforms, which subsequently translated into higher satisfaction and long-term loyalty. Hassan's findings reposition recommendation systems as relational mechanisms rather than mere sales tools, demonstrating their capacity to forge enduring consumer–platform bonds. However, the study does not examine the susceptibility-inducing effects that such trust cultivation may simultaneously produce, particularly among consumers with limited awareness of algorithmic influence.

Esmeli (2021) investigated the role of AI-generated personalization cues in triggering impulsive buying behaviour during active browsing sessions. Employing machine learning classifiers including decision tree and random forest models, the study analyzed real-time behavioural signals such as session duration, product dwell time, and navigation patterns to identify impulse-prone consumers. The central finding was that AI systems could accurately predict and target such consumers with precisely timed promotional stimuli, amplifying purchase likelihood before any deliberate decision-making occurred. While the study offers valuable insight into behavioural susceptibility, it frames the phenomenon primarily as a commercially exploitable variable, with limited engagement with its psychological or ethical dimensions.

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Kumar et al. (2023) adopted a qualitative approach, conducting in-depth interviews with Indian online consumers to examine the tension between the perceived benefits of AI personalization and concerns surrounding data privacy. Respondents appreciated the convenience of tailored suggestions but expressed discomfort when algorithmic familiarity felt intrusive, generating anxiety around data misuse and eroding trust. The study concludes that consumer acceptance of personalization is conditional, governed by a perceived cost-benefit calculus in which privacy risk must not outweigh experiential value. Though the study is significant for its focus on Indian consumers, its qualitative scope limits the generalizability of findings and stops short of empirically measuring the psychological mechanisms underlying susceptibility.

Research Gap:

Collectively, the reviewed literature has advanced understanding of how AI personalization influences trust, satisfaction, loyalty, impulse buying, and privacy perception. However, a substantive gap remains: the construct of consumer susceptibility the affective and cognitive vulnerability through which AI-driven personalization exerts its influence has not been adequately theorized or empirically measured as a standalone phenomenon. Existing studies address susceptibility only implicitly, as a by-product of trust or impulse buying, rather than as a primary construct warranting direct investigation.

Moreover, the majority of empirical work in this domain has been conducted in Western retail contexts, where digital literacy and data awareness differ markedly from conditions in emerging markets. India, despite being one of the world's fastest-growing digital commerce ecosystems, remains underrepresented in this literature. Indian consumers navigate AI-driven retail environments characterized by heterogeneous digital literacy, varying privacy consciousness, and culturally distinct patterns of trust yet dedicated empirical research into their susceptibility to algorithmic personalization is conspicuously absent.

Conclusion:

Existing research on AI-driven personalized retailing predominantly focuses on outcomes like loyalty and impulse buying, neglecting the psychological condition of consumer susceptibility that underlies these behaviors. This gap is particularly evident in the Indian context. This study addresses that void by surveying 86 Indian online shoppers, empirically examining susceptibility as a primary construct to contribute meaningful insights into consumer behavior and AI ethics in digital retailing.

Research Methodology :

Research Design:

The present study adopts a descriptive research design. A descriptive design is well-suited to this study because the primary intent is to accurately describe and interpret the existing attitudes, perceptions, and behaviours of Indian consumers with respect to AI-driven personalization in online retail. Rather than establishing causal relationships or testing hypotheses through experimentation, this study seeks to paint a clear and factual picture of how aware consumers are, how easily they are influenced, how they perceive data privacy risks, and how trust shapes their engagement with platforms. The structured nature of descriptive research also facilitates systematic data collection, allowing for precise quantification of consumer responses across the four objectives of this

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study.

Research Approach:

A quantitative research approach has been employed in this study. Quantitative methodology is appropriate here because the study aims to measure and numerically analyze consumer susceptibility, awareness levels, privacy concerns, and trust-related behaviours. By collecting data through closed-ended survey questions with fixed response options, the study generates measurable data that can be analyzed using statistical tools to identify patterns and draw generalizable conclusions. This approach aligns with the study's objective of understanding broad consumer trends rather than exploring individual lived experiences in depth. The use of a quantitative approach also ensures consistency in data collection, minimizes researcher bias, and allows for comparison across demographic segments such as age groups and occupational categories.

Data Collection Method:

Primary data was collected for this study through the survey method, which is one of the most commonly used techniques in descriptive research. A structured questionnaire was developed comprising twelve questions, with each set of three questions aligned to one of the four research objectives. The questionnaire was administered in online mode using Google Forms, which enabled rapid and widespread distribution across geographies without the constraints of physical access. The online mode also offered respondents the convenience of participating at their own time and pace, which is particularly relevant given that the study focuses on online shopping behaviour the digital survey medium itself mirrors the context being studied. All questions were framed in simple, easy-to-understand language to ensure clarity and reduce the likelihood of misinterpretation.

Sampling Method:

The study employs a non-probability convenience sampling technique. Given the exploratory and academic nature of this research, convenience sampling was deemed most practical, as it allowed the researcher to access respondents who were readily available and willing to participate. The survey link was shared through digital channels including WhatsApp groups, social media platforms, and email networks, thereby reaching a cross-section of online shoppers across different age groups and professional backgrounds. While this method does not guarantee a perfectly representative sample of the entire Indian consumer population, it is widely accepted in academic studies of this scale and scope, particularly at the undergraduate level.

Sample Size and Respondent Profile:

A total of 86 valid responses were collected for this study. The respondent profile reflects a diverse cross-section of Indian online consumers. In terms of age distribution, the largest proportion of respondents (45.3%) fell in the 18 21 years age bracket, followed by those aged 41 years and above (29.1%), and 22–25 years (12.8%). Respondents aged 26–30 years accounted for 7%, while those in the 31–40 years category comprised approximately 6% of the sample. Regarding occupational status, 50% of respondents identified as students, 30.2% as working professionals, 12.8% as self-employed or business owners, and the remaining responses were distributed across homemakers and other categories. This varied respondent profile strengthens the study's

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E- 2394-8450

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ability to capture diverse consumer perspectives on AI-driven personalization across different life stages and professional contexts.

Data Analysis and Interpretation Hypothesis:

H01. AI-based personalized recommendations have no significant influence on purchase decisions among highly susceptible consumers in online retailing.

H11. AI-based personalized recommendations positively influence purchase decisions among highly susceptible consumers in online retailing.

H02. AI-driven personalized advertisements have no significant effect on increasing impulse buying behavior in consumers susceptible to external influences.

H12. AI-driven personalized advertisements significantly increase impulse buying behavior in consumers susceptible to external influences.

H03. Consumers susceptible to marketing cues demonstrate no significant difference in awareness of personal data usage in AI-driven personalized retail recommendations compared to non-susceptible consumers.

H13. Consumers susceptible to marketing cues demonstrate low awareness of personal data usage in AI-driven personalized retail recommendations.

H04. Consumer trust in AI does not moderate the positive effect of personalized recommendations on purchase intentions among susceptible online shoppers.

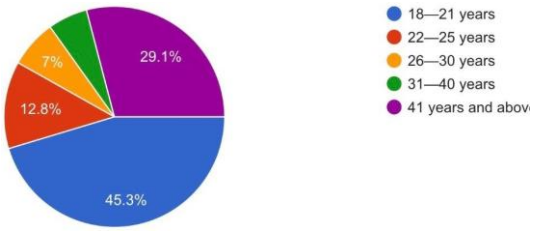
H14. Consumer trust in AI moderates the positive effect of personalized recommendations on purchase intentions among susceptible online shoppers

Data Analysis Technique:

The data collected through the structured questionnaire has been analysed using simple percentage analysis and frequency distribution, which are standard techniques in descriptive quantitative research. The responses to each question have been tabulated and expressed as percentages of the total sample size of 86 respondents. These percentages have been used to interpret the extent of consumer awareness, susceptibility, privacy concern, and trust across the study's four objectives. Visual representations in the form of pie charts, generated through Google Forms, have been used to supplement the textual

analysis and present the data in a reader-friendly format. This method of analysis is appropriate for the study's scale and allows for straightforward interpretation of consumer trends without requiring complex statistical modelling

1) ***What is your age group***



The majority of respondents (45.3%) fall in the 18–21 years age group, making it a predominantly young sample.

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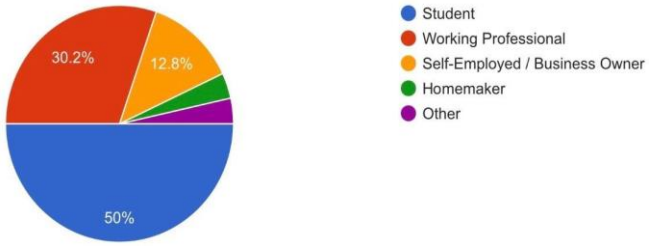
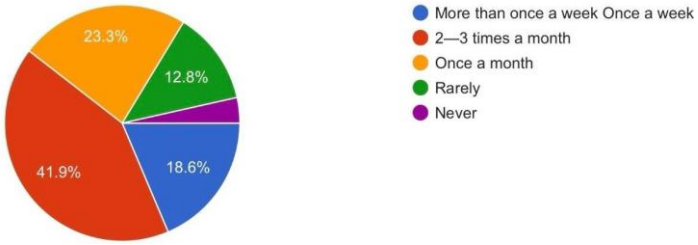
The second largest group is 41 years and above at 29.1%, followed by 22–25 years at 12.8%, 26–30 years at 7%, and 31–40 years being the smallest segment

1) ***What is your current profession?***



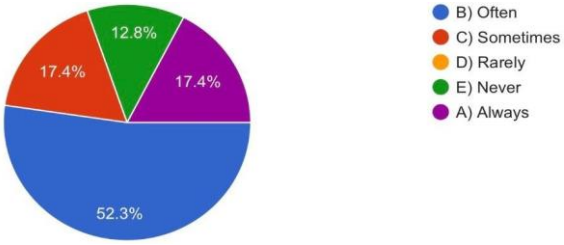
Half of the respondents (50%) are Students, which aligns with the dominant young age group. Working Professionals make up 30.2%, followed by Self-Employed/Business Owners at 12.8%, while Homemakers and Other occupy small remaining portions.

2) ***How often do you shop online? (e.g., Amazon, Flipkart, Myntra, etc.)***



Amazon dominates preferences (35%), reflecting its market leadership in India. flipkart trails at 25%, indicating strong competition among urban e-commerce platforms. This distribution suggests brand loyalty drives platform choice over price or features.

1) ***How often do you notice that the products shown to you on online shopping apps (like Amazon, Flipkart, Myntra) are based on your past searches or purchases?***



The majority of respondents (52.3%) reported noticing personalized recommendations Often", with a combined 69.7% selecting either 'Often' or "Always'. Only 12.8% stated they 'Never notice such recommendations, indicating that Al-driven personalization is highly visible to the modern online shopper.

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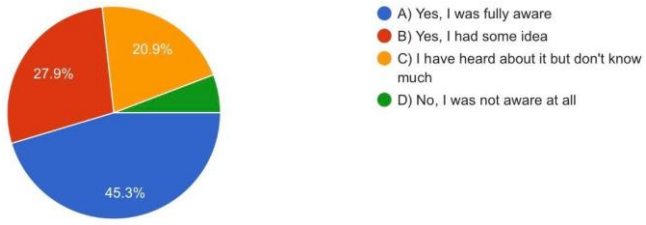
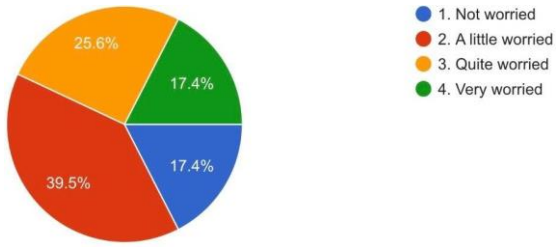
2) ***Were you aware that online shopping platforms use Artificial***
Intelligence (AI) to show you personalised product recommendations?



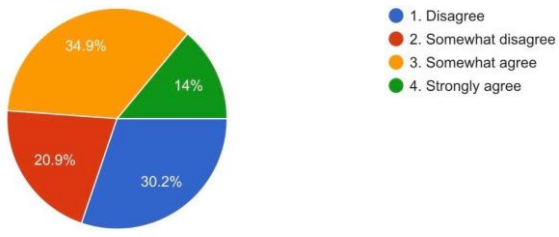
45.3% of respondents stated they were fully aware that Al powers product recommendations, while 27.9% had some prior knowledge — resulting in a combined awareness rate of 73.2%. Approximately 20.9% had heard of the technology but lacked substantive understanding, and fewer than 6% were entirely unaware

3) ***How worried do you feel when websites or apps track your online shopping (like what you view or buy) using AI?***



Responses indicate a broadly distributed level of concer. The largest segment 39.5%) reported feeling 'A little worried", while a notable 43.0% expressed moderate o-high concern (Quite worried" or "Very worried"). Only 17.4% reported no concern whatsoever.

4) ***When AI tracks my online shopping habits. I feel more easily influenced to buy things I didn't plan to.***



30.2% of respondents Disagreed with this statement and 20.9% Somewhat Disagreed, while 34.9% Somewhat Agreed and 14% Strongly Agreed. This means 48.9% acknowledge some level of unplanned purchase influence attributable to Al tracking

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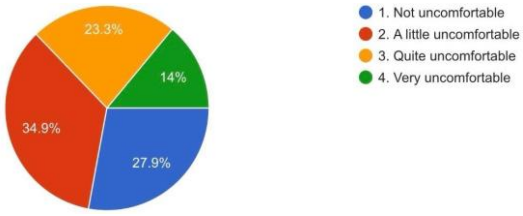
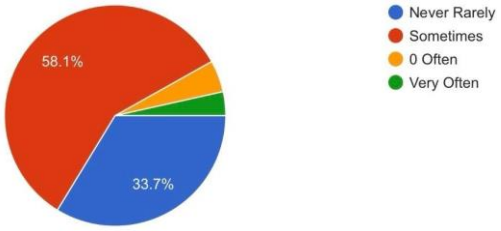
5) ***How uncomfortable do you feel knowing AI uses your shopping data to suggest products just for you?***



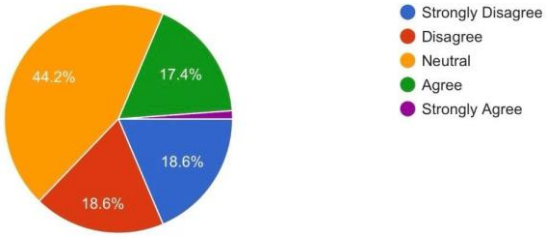
27.9% of respondents reported feeling Not Uncomfortable, while 34.9% felt A Little Uncomfortable. Combined moderate-to-high discomfort was expressed by 37.3%, with 23.3% Quite Uncomfortable and 14% Very Uncomfortable

6) ***How often you buy products online without planning if they are recommended based on my browsing history.***



The majority of respondents (58.1%) indicated they Sometimes make unplanned purchase based on browsing-history recommendations, while 33.7% said Never or Rarely. Only a small fraction reported doing so Often or Very Often**.**

7) ***Do you trust Al-based recommendations (e.g., "Recommended for You") more than general advertisements.***



The largest share of respondents (44.2%) remained Neutral on this question. Equal portions of 18.6% selected both Strongly Disagree and Disagree, while 17.4% chose Agree and only a marginal percentage selected Strongly Agree.

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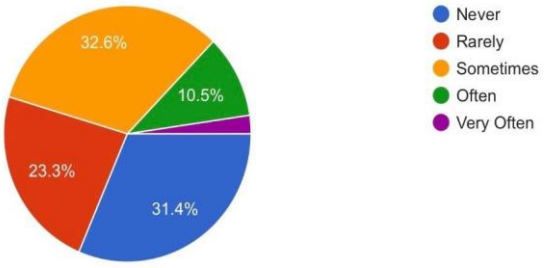
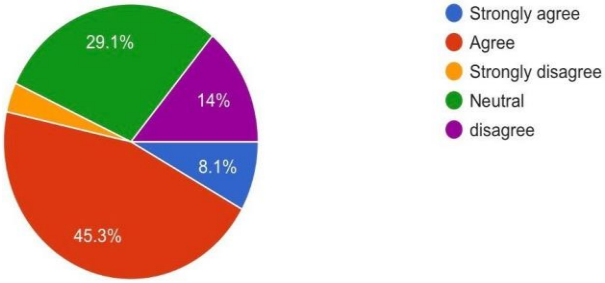
8) ***Do you more likely to buy a product if the platform shows "Only 2 left" or "Trending Now".***



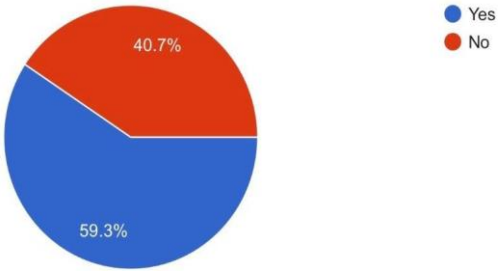
31.4% of respondents stated they are Never influenced by scarcity or social-proof cues, and 23.3% said Rarely totaling 54.7% largely unaffected. However, 32.6% indicated they are Sometimes influenced, 10.5% Often, and a small fraction Very Often.

9) ***Do you feel that trusted platforms understand your needs better through AI-based personalization?***



The most common response was 'Sometimes' (37.2%), followed by 'Often' (22.1%) Never (17.4%), 'Always' (16.3%), and 'Rarely' (7%). Combined, 38.4% believe platforms handle data responsibly always or often, while 24.4% hold a largely skeptical view.

10) ***Have you ever bought something without much thinking because you trusted the platform?***



A clear majority of 59.3% of respondent confirm that they have made an impulse purchase driven by platform trust while 40.7% stated they have not.

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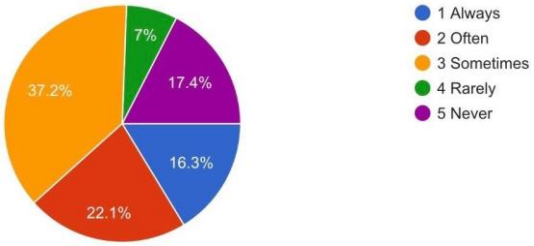
11) ***Do you think trusted platforms use your data responsibly for personalization?***



The most common response was 'Sometimes' (37.2%), followed by 'Often' (22.1%). Never (17.4%), 'Always' (16.3%), and 'Rarely' (7%). Combined, 38.4% believe platforms handle data responsibly always or often, while 24.4% hold a largely skeptical view Based on the survey of 86 respondents, AI-driven personalized retailing is highly visible and moderately influential among consumers, particularly young adults and students. While 73.2% are aware of AI recommendations and 69.7% frequently notice them, privacy concerns persist alongside acceptance. Trust in platforms drives impulse purchases, yet skepticism around data responsibility remains, highlighting the need for transparent and ethical AI personalization practices.

Conclusion:

This study examined consumer susceptibility to AI-driven personalized retailing across four dimensions: awareness of AI personalization, its influence on buying behaviour, the moderating role of data privacy concerns, and the impact of platform trust on continued engagement. Based on responses from 86 Indian online consumers, the findings reveal that while 73.2% possessed awareness of AI recommendations, such awareness did not prevent susceptibility to algorithmic influence. Nearly half the respondents acknowledged making unplanned purchases triggered by AI tracking, and over 37% expressed significant discomfort regarding personal data usage. Platform trust emerged as the most consequential factor, with a majority reporting impulse purchases driven by confidence in the platform.

These findings align with existing literature while contributing a contextually grounded Indian consumer perspective. The study highlights the pressing need for ethical AI governance, transparent data practices, and consumer education to ensure that personalization in digital retail remains both effective and responsible.

Refrences:

1. ***Gupta, S., Sharma, L., & Mathew, R. (2025).*** *Balancing personalization and privacy in AI-enabled marketing: Consumer trust, regulatory impact, and strategic implications — A qualitative study using NVivo. Advances in Consumer Research, 2(5), 46–57. https://acr-journal.com/article/balancing-personalization-and-privacy-in-ai-ena bled-marketing-consumer-trust-regulatory-impact-and-strategic-implications-a-qualitative-study-using-nvivo-1633/*
2. ***Hardcastle, K., Vorster, L., & Brown, D. M. (2025).*** *Understanding customer responses to AI-driven personalized journeys: Impacts on the customer experience. Journal of Advertising, 54(2), 176–195. https://doi.org/10.1080/00913367.2025.2477100*

ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

Volume–XIII, Special Issues–I(b) Jan – Feb 2026

Original Research Article

3. ***Hassan, N., Abdelraouf, M., & El-Shihy, D. (2025).*** *The moderating role of personalized recommendations in the trust–satisfaction–loyalty relationship: An empirical study of AI-driven e-commerce. Future Business Journal, 11(1), 1–15. https://doi.org/10.1186/s43093-025-00476-z*
4. ***Shamim, K., & Misra, S. C. (2025).*** *Leveraging AI to drive online impulse buying: A SOBC perspective. International Journal of Retail & Distribution Management, 53(10–11), 1040–1056. https://doi.org/10.1108/IJRDM-07-2024-0334*
5. ***Tandon, A., & Aggarwal, A. (2025).*** *Unveiling the impact of AI-driven personalization on customer loyalty in online shopping: The moderating effects of privacy concerns. Journal of Promotion Management, 31(5). https://doi.org/10.1080/10496491.2025.2525099*
6. ***Nath, S. (2025).*** *AI-driven personalization: Impact on consumer trust and purchase behaviour. International Journal of Research Publication and Reviews, 6(1), 5110–5115. https://ijrpr.com/uploads/V6ISSUE1/IJRPR38190.pdf*

Cite This Article: **Asst. Prof. Lakhyani S., Singh S., Khemnani D., Angre S. & Deshmukh K.R. (2026)** *A Study on Consumer Susceptibility in AI Driven Personalized Retailing.* **In Educreator Research Journal: Vol. XIII (Issue I),** pp. 288–299