



A Study of the Role of Online Promotions in Influencing Consumer Buying Behaviour Among Online Shoppers in Bengaluru

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ABSTRACT

The rapid growth of digital technology and e-commerce has significantly changed the way consumers search for information and make purchasing decisions. Online promotions, including discounts, coupons, cashback offers, flash sales, free shipping, loyalty rewards, and limited-time offers, have become an important digital marketing tool for attracting customers and encouraging purchases. This study examines the role of online promotions in influencing consumer buying behaviour among online shoppers in Bengaluru. It looks at the promotional tools that attract consumers, their influence on purchase decisions, the relationship between consumer characteristics and responses to promotions, and the effect of promotions on impulse buying and shopping frequency.

A descriptive, quantitative survey design was used. Primary data were collected from 72 online shoppers through a structured questionnaire of 29 closed-ended questions. The data were analysed using frequencies, means, one-sample Wilcoxon tests, the Friedman test, Spearman correlation, Mann-Whitney and Kruskal-Wallis tests, chi-square tests, and multiple regression.

Online promotions have a significant influence on buying behaviour: 65.3% of respondents agree that promotions significantly influence their buying behaviour (mean 3.85 on a 5-point scale), and 55.6% say that promotions influence their purchase decisions. Discounts are the most attractive offer (50.0%), and every promotional tool is rated significantly above neutral, with no significant difference in effectiveness among the seven tools (Friedman $p = .075$). Promotions also encourage brand switching (59.7% agree), higher shopping frequency (62.5%), and impulse buying (55.6%). However, consumers rate product reviews as more important than promotional offers (mean 3.93, the highest of all items). Trust in platform promotions is the strongest correlate of overall influence ($p = .53$; $\beta = .39$ in regression), followed by loyalty rewards and cashback. Among consumer characteristics, only online shopping frequency is significantly related to the influence of promotions; gender, age, occupation, education, spending, and platform showed no significant differences. The findings suggest that online promotions work best when they are trusted and combined with credible product information, and that no single promotional tool is clearly superior.

Keywords: Online Promotions, Digital Marketing, Consumer Buying Behaviour, Online Shopping, Purchase Decision, Discounts, Cashback, Flash Sales, Bengaluru, E-commerce.

1: INTRODUCTION

1.1 Introduction

Digital marketing has become an important part of modern business as consumers increasingly use the internet and digital platforms to search for information, compare products, and make purchases. The growth of smartphones, social media, e-commerce platforms, and digital payment systems has made online shopping convenient and accessible to consumers. As a result, businesses are increasingly using digital marketing strategies to attract and retain customers in the competitive online marketplace.

Among the various digital marketing strategies, online promotions play an important role in attracting consumers and encouraging them to purchase products or services. Online promotions include discounts, cashback offers, coupons, promotional codes, free delivery, flash sales, buy-one-get-one offers, and limited-period deals. E-commerce platforms and online businesses frequently use these promotional techniques to create customer interest, increase sales, and improve customer engagement.

Consumer buying behaviour refers to the process through which individuals identify their needs, search for information, evaluate alternatives, make purchasing decisions, and evaluate their purchases after buying. In an online shopping environment, consumer behaviour can be influenced by several factors, including price, product reviews, convenience, brand image, website experience, social media content, and promotional offers. Among these factors, attractive online promotions can create a sense of value and urgency, which may influence consumers' purchase decisions.

Bengaluru is an important market for studying online consumer behaviour because of its large urban population, strong presence of technology-oriented consumers, widespread internet usage, and growing adoption of e-commerce. Online shoppers in Bengaluru are exposed to promotional messages through e-commerce websites, mobile applications, social media platforms, emails, and digital advertisements. Different consumers may respond differently to these promotions depending on their age, income, shopping frequency, product preferences, and previous online shopping experiences.

Therefore, this study focuses on the role of online promotions in influencing consumer buying behaviour among online shoppers in Bengaluru. The study aims to examine the role of online promotional activities in influencing consumers' purchase decisions and to understand which promotional factors are more noticeable and appealing to online shoppers. It also examines whether online promotions influence purchase frequency, impulse buying, and preference for particular online shopping platforms.

The study collects primary data from online shoppers in Bengaluru through a structured questionnaire. The findings can provide useful information for digital marketers and e-commerce businesses about consumer responses to online promotional strategies. The study may also help businesses understand how promotional offers can be designed to attract consumers while creating a positive online shopping experience.

1.2 Statement of the Problem

E-commerce platforms spend heavily on promotions such as discounts, cashback, and flash sales on the assumption that these offers increase sales. However, consumers are exposed to a very large number of similar offers, may compare offers across platforms, and may place more weight on reviews and trust than on promotions themselves. It is therefore uncertain how strongly promotions actually influence purchase decisions, which promotional tools are most effective, whether promotions mainly encourage unplanned purchases, and whether different types of consumers respond differently. Earlier studies are mostly general, concentrate on other cities or on international markets, or examine only a single promotional technique. This study addresses the problem for online shoppers in Bengaluru, considering several promotional tools together.

1.3 Significance of the Study

- For e-commerce platforms and digital marketers, the study identifies which promotional tools consumers value, and whether any tool is clearly more effective than others.
- For businesses designing promotional budgets, it shows how promotions interact with trust and reviews, and the extent to which promotions drive impulse buying, brand switching, and repeat purchases.
- For consumers and consumer-protection bodies, it indicates how far promotions encourage unplanned buying.
- For researchers, it provides a recent, city-specific dataset for Bengaluru that can be extended with larger samples.

1.4 Research Objectives

1. Analyze the relationship between consumers' demographic characteristics and their responses to online promotional offers.
2. To identify the level of awareness of online promotional offers among online shoppers in Bengaluru.
3. Analyze the different types of online promotions that influence consumers, such as discounts, cashback, coupons, flash sales, promotional codes, and free delivery offers.
4. To examine the influence of online promotions on consumers' purchase decisions.
5. To examine whether online promotions influence impulse buying and purchase frequency among online shoppers.

1.5 Research Hypotheses

Based on the objectives and the literature reviewed in Chapter 2, the following hypotheses were tested. For H1 and H3, the null hypothesis is that the mean response equals the neutral mid-point (3) of the scale.

- **H1:** Online promotions significantly influence consumers' purchase decisions (overall influence is significantly above neutral).
- **H2:** Consumers respond differently to different promotional tools (the tools differ significantly in their rated effectiveness).
- **H3:** Online promotions significantly influence impulse buying, shopping frequency, and preference for platforms offering better promotions.
- **H4:** Promotional tools (discounts, cashback, free shipping, coupon codes, flash sales, limited-time offers, and loyalty rewards) significantly predict the overall influence of online promotions on buying behaviour.
- **H5:** Demographic and shopping-profile characteristics (gender, age, occupation, education, monthly spending, years and frequency of online shopping, platform) are significantly associated with responses to online promotions.
- **H6:** Trust in promotional offers provided by online platforms is positively related to the overall influence of promotions on buying behaviour.

1.6 Scope of the Study

The study covers online shoppers in Bengaluru of different ages, educational levels, and occupations, who buy products such as fashion, electronics, groceries, home items, and books through online platforms. It examines seven promotional tools and their relationship with purchase decisions, impulse buying, brand switching, shopping frequency, and platform preference. It does not measure actual sales, the profitability of promotions, or the effect of any particular company's campaign.

2: REVIEW OF LITERATURE

2.1 Introduction

This chapter reviews earlier research on online shopping behaviour and promotions. The studies cover the factors that affect online shopping in India, the effect of promotions and value consciousness, demographic influences on online buying, consumer response to conditional promotions, trust and technology acceptance, city-specific buying behaviour, and the timing of purchases during promotions. Each study is summarised with its contribution and with the limitation that leaves room for the present study.

2.2 Dahiya (2012)

Richa Dahiya (2012), in *"Factors Influencing Online Shopping Behaviour of Consumers in India: An Exploratory Study"* published in the Siddhant Journal, examined the major factors affecting online shopping behaviour among Indian consumers. The study considered factors such as security, website features, psychographic characteristics, and technology. The findings indicated that security and website features significantly influence consumers' online purchasing decisions. The study provided early evidence on online shopping behaviour in India. However, it did not specifically examine the role of online promotional activities such as discounts, cashback, coupons, and promotional offers among consumers in Bengaluru.

2.3 Rakesh and Khare (2012)

Sapna Rakesh and Arpita Khare (2012), in *"Impact of Promotions and Value Consciousness in Online Shopping Behaviour in India"*, examined the impact of promotional activities and value consciousness on online shopping behaviour. The major variables included promotional offers, deal proneness, and value consciousness. The study found that promotions alone did not strongly influence Indian consumers, while the utility and usefulness of the website played an important role in online shopping behaviour. The study is particularly relevant because it directly examined promotional offers in the context of online shopping. However, it was conducted during the early stage of Indian e-commerce and did not specifically focus on online shoppers in Bengaluru.

2.4 Kooti et al. (2015)

Kooti et al. (2015), in *"Portrait of an Online Shopper: Understanding and Predicting Consumer Behavior"*, analysed online shopping patterns and consumer spending behaviour using factors such as demographics, spending habits, and purchase frequency. The findings indicated that demographic characteristics such as age, gender, and income can influence online buying behaviour. The study contributed to the understanding of online consumer behaviour through large-scale behavioural data analysis. However, it did not specifically examine the influence of online promotional strategies on consumers' purchase decisions.

2.5 Nigam et al. (2022)

Achint Nigam et al. (2022), in *"Consumer's Response to Conditional Promotions in Retailing: An Empirical Inquiry"*, investigated how consumers respond to conditional promotional offers in retailing. The study examined factors such as payment mode, cart value, and promotional thresholds. The findings showed that consumers may modify their purchase behaviour in order to qualify for promotional benefits. The study is significant because it demonstrates how promotional conditions can influence consumers' purchase decisions. However, it did not specifically focus on online shoppers in Bengaluru or examine a wider range of online promotional tools.

2.6 Singh and Basu (2023)

Kandarp Singh and Rituparna Basu (2023), in *"Online Consumer Shopping Behaviour: A Review and Research Agenda"*, reviewed existing research on online consumer shopping behaviour and identified major factors influencing online purchase intentions. The study focused on factors such as consumer trust, technology acceptance, and shopping intentions. The review indicated that trust and technology acceptance are important drivers of online purchasing behaviour. Its major contribution was a comprehensive review of existing research on online consumer behaviour. However, the study identified limited empirical evidence from different Indian cities and did not specifically focus on the influence of online promotions among shoppers in Bengaluru.

2.7 Deepika and Metta (2024)

A. Deepika and Sukanya Metta (2024), in *“Online Buying Behaviour of Indian Consumers with Reference to Hyderabad”*, examined factors affecting the online buying behaviour of Indian consumers with specific reference to Hyderabad. The study considered product variety, convenience, payment methods, and psychological factors. The findings indicated that convenience and payment methods strongly influence online buying behaviour. The study provides city-specific evidence regarding online shopping behaviour. However, it does not specifically analyse promotional tools such as discounts, cashback offers, coupons, and other online promotional activities, and it focuses on Hyderabad rather than Bengaluru.

2.8 Zhu et al. (2024)

Tao Zhu et al. (2024), in *“When Do Consumers Buy During Online Promotions? A Theoretical and Empirical Investigation”*, examined consumer purchasing behaviour during online promotional periods. The study focused on factors such as time pressure, memory decay, discount level, and promotion duration. The findings indicated that the timing of promotions and the level of discounts can significantly affect consumers' purchase decisions. The study provides a theoretical and empirical understanding of consumer responses to online promotions. However, it does not specifically focus on Indian consumers or the Bengaluru online shopping market.

2.10 Research Gap

The reviewed literature shows that online shopping behaviour is influenced by several factors, including website features, security, convenience, payment methods, consumer trust, technology acceptance, and promotional offers. Rakesh and Khare (2012) specifically examined promotions and value consciousness in online shopping, while Nigam et al. (2022) studied consumer responses to conditional promotions. Zhu et al. (2024) further examined how discount levels, timing, and promotion duration affect consumer purchasing during online promotions.

However, the existing studies do not provide a focused examination of the role of different online promotional techniques in influencing consumer buying behaviour among online shoppers in Bengaluru. Some studies are general in nature, while others focus on different locations such as Hyderabad or broader Indian and international markets. There is also limited location-specific research examining how online shoppers in Bengaluru respond to promotional tools such as discounts, cashback offers, coupons, flash sales, free delivery, and limited-period offers.

Therefore, the present study attempts to address this gap by examining the role of online promotions in influencing consumer buying behaviour among online shoppers in Bengaluru.

3: RESEARCH METHODOLOGY

3.1 Research Design

The study follows a descriptive and quantitative research design based on a cross-sectional survey. A survey is appropriate because the objectives require measuring the awareness, attitudes, and self-reported buying behaviour of a defined group of consumers at one point in time.

3.2 Population and Sample

The population consists of online shoppers in Bengaluru. The sample comprised **72 respondents**, selected by convenience sampling. Respondents were 63.9% female and 36.1% male; 86.1% were aged 30 years or below; 54.2% were students; and 48.6% were undergraduates.

3.3 Sources of Data

Primary data were collected through a structured online questionnaire [insert data collection period]. **Secondary data** were taken from published studies on online shopping behaviour and promotions, as reviewed in Chapter 2.

3.4 Questionnaire Design

The questionnaire contains 29 closed-ended questions, apart from the respondent's name, in three parts (the full instrument is in the Appendix).

Table 3.1 Structure of the questionnaire

Part	Questions	Content
A. Demographic profile	Q1–Q4	Gender, age group, educational qualification, occupation
B. Online shopping profile	Q5–Q9	Shopping frequency, most used platform, main products purchased, years of online shopping, monthly online spending
C. Response to promotions	Q10–Q12	Whether promotions influence purchase decisions, most attractive offer, frequency of buying because of offers
D. Attitude statements	Q13–Q29	17 five-point Likert statements on promotional tools, comparison of offers, impulse buying, brand switching, shopping frequency, trust, reviews, platform preference, loyalty programmes, social media ads, value for money, and overall influence

3.5 Measurement and Coding

The 17 attitude statements (Q13 to Q29, except Q12 as explained below) were measured on a five-point Likert scale (Likert, 1932) coded Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly Agree = 5. The question on how often respondents buy because of promotional offers (Q12) was coded Never = 1, Rarely = 2, Sometimes = 3, Often = 4, Always = 5. Two composite indices were created as the mean of related items: the **Promotional Tools Index** (discounts, cashback, free shipping, coupon codes, flash sales, limited-time offers, and loyalty rewards) and the **Behavioural Response Index** (impulse purchases, brand switching, higher shopping frequency, and platform preference).

3.6 Data Preparation

The raw responses were cleaned before analysis. The steps and their effect are described so that the analysis can be checked.

- **Spelling and case:** responses such as “strongly disagree” and “Strongly Disagree”, “21-30 years” and “21–30 years”, and “graduate” and “Graduate” were standardised.
- **Merged categories:** “Coupons” and “Coupon Codes” were combined (11 respondents); “Home Appliances” and “Home & Kitchen” were combined (8); a food-and-daily-necessities answer was classified under Groceries; and platforms named by single respondents (Meesho, Savana, and a quick-commerce answer) were grouped under Other.
- **Missing values:** one respondent each left education, occupation, coupon codes, flash sales, trust, and loyalty items blank, and two did not state their platform. Tests use all available responses for each variable, so *n* is slightly lower for some items.
- **Frequency question (Q12):** 52 respondents answered with a frequency (Never to Always), but 20 answered with agreement wording (Strongly Disagree to Strongly Agree). For analysis these were placed on the same five-point scale (for example, Agree = 4 and Often = 4). As a check, the main correlation of Q12 with overall influence among the 52 frequency answers alone was significant ($\rho = .35$, $p = .012$).
- **Grouping for tests:** to avoid very small groups, ages 31 and above were combined (10 respondents); occupations were grouped into Student, Employee, Self-employed/Business, and Other; monthly spending above ₹5,000 was combined (25); and shopping frequency was grouped as Rarely/occasionally (35), Monthly (10), and Weekly or more (27, covering Weekly, Frequently, Daily, and Very frequently).
- **Duplicate names:** one name appears twice, but the two responses differ in age and occupation and were treated as different respondents.

3.7 Tools of Analysis

- **Descriptive statistics:** frequencies, percentages, means, and standard deviations.
- **One-sample Wilcoxon signed-rank test:** to test whether mean agreement differs from the neutral value of 3 (H1, H3).
- **Friedman test and Kendall’s W:** to compare the seven promotional tools (H2).
- **Multiple regression and Spearman correlation:** to test the effect of promotional tools and trust on overall influence (H4, H6).
- **Mann–Whitney U, Kruskal–Wallis, and chi-square tests:** to compare groups (H5).

Non-parametric tests were used for the main comparisons because the responses are ordinal and the sample is small. Regression was used as an additional check on the combined effect of several variables. Significance was assessed at the 5% level using Python (pandas and SciPy).

3.8 Reliability

Internal consistency was assessed using Cronbach's alpha (Cronbach, 1951). The seven promotional tool items gave $\alpha = .72$, the four behavioural response items gave $\alpha = .72$, and all 14 combined perception and behaviour items (seven tools, four behaviours, trust, value, and overall influence) gave $\alpha = .86$. Values above .70 are generally considered acceptable, so the items are sufficiently consistent for the composite indices.

3.9 Ethical Considerations

Participation was voluntary and respondents were told the data would be used for academic purposes only. Names collected in the survey were not used in the analysis, and results are reported in aggregate.

4: DATA ANALYSIS AND INTERPRETATION

This chapter presents the analysis of the 72 responses. Section 4.1 describes the sample; Sections 4.2 to 4.7 present descriptive results organised around the research objectives; Section 4.8 reports the hypothesis tests; and Section 4.9 checks the consistency of two measures of influence. Percentages are based on $n = 72$ unless stated, and may not add to 100 because of rounding and missing responses.

4.1 Demographic Profile of Respondents

Table 4.1 Demographic profile ($n = 72$)

Variable	Category	Respondents	%
Gender	Female	46	63.9
	Male	26	36.1
Age group	Below 20 years	26	36.1
	21–30 years	36	50.0
	31–40 years	8	11.1
	Above 40 years	2	2.8
Education	Intermediate	8	11.1
	Undergraduate	35	48.6
	Graduate	18	25.0
	Postgraduate	9	12.5
	PhD	1	1.4
	Not stated	1	1.4
Occupation	Student	39	54.2
	Employee	18	25.0
	Self-employed	8	11.1
	Other	3	4.2
	Professional	2	2.8
	Business	1	1.4

Variable	Category	Respondents	%
	Not stated	1	1.4

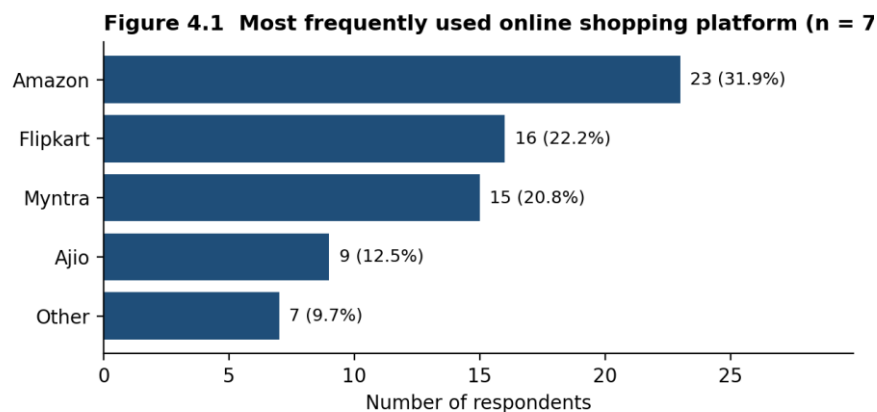
The sample is young and educated: 86.1% are 30 years or younger, 73.6% hold an undergraduate degree or higher, and 54.2% are students. Women form almost two-thirds of the sample. The findings therefore mainly describe younger online shoppers in Bengaluru.

4.2 Online Shopping Profile

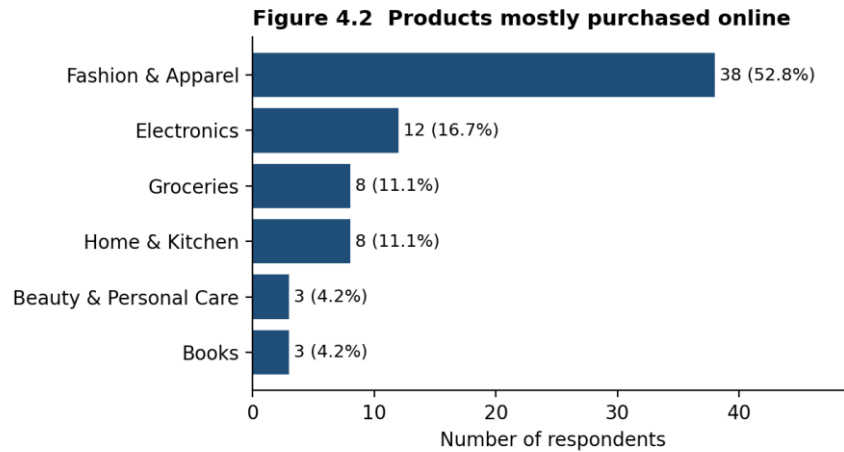
Table 4.2 Online shopping profile

Variable	Category	Respondents	%
Shopping frequency	Rarely	2	2.8
	Occasionally	33	45.8
	Monthly	10	13.9
	Weekly	10	13.9
	Frequently	6	8.3
	Daily	7	9.7
	Very frequently	4	5.6
Years of online shopping	Less than 1 year	17	23.6
	1–3 years	18	25.0
	3–5 years	16	22.2
	More than 5 years	21	29.2
Monthly online spending	Below ₹1,000	23	31.9
	₹1,001–₹5,000	24	33.3
	₹5,001–₹10,000	16	22.2
	Above ₹10,000	9	12.5

Respondents are experienced shoppers: 51.4% have shopped online for more than three years. Shopping frequency varies widely: 48.6% shop rarely or occasionally, 13.9% monthly, and 37.5% weekly or more often. Spending is spread across levels, with 34.7% spending more than ₹5,000 a month.



Amazon is the most used platform (31.9%), followed by Flipkart (22.2%) and Myntra (20.8%). Ajio accounts for 12.5% and other platforms for 9.7%; two respondents did not name a platform.



Fashion and apparel is by far the most commonly purchased category (52.8%), followed by electronics (16.7%), and groceries and home and kitchen products (11.1% each). The popularity of fashion matches the prominence of Myntra and Ajio and suggests that results are largely about categories where promotions are very common.

4.3 Awareness of and Engagement with Online Promotions (Objective 1)

The questionnaire did not contain a direct question on awareness of promotional offers. Awareness is therefore assessed through related measures: respondents' recognition of and response to each promotional tool, their attention to promotions across websites, and their exposure to promotional advertising on social media.

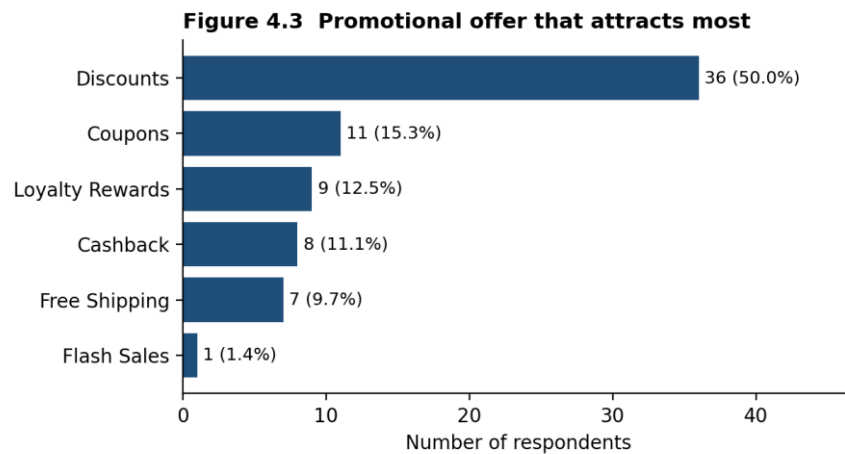
Table 4.3 Frequency of purchasing because of promotional offers (Q12)

Response	Respondents	%
Never	6	8.3
Rarely	13	18.1
Sometimes	29	40.3
Often	11	15.3
Always	13	18.1

Includes 20 respondents who answered with agreement wording, recoded to the same scale (see Section 3.6). Mean = 3.17, SD = 1.17.

Only 8.3% never buy because of promotions, while 33.4% often or always do so and a further 40.3% sometimes do. Respondents are also active in engaging with promotions: 62.5% agree that they compare promotional offers across websites before purchasing (mean 3.72), and 59.7% agree that social media advertisements influence their online buying decisions (mean 3.67). Every promotional tool is recognised and rated by respondents, with 55.6% to 72.2% agreeing that each tool affects them (Section 4.4). Taken together, these results indicate a high level of awareness of and engagement with online promotions among the respondents, although it was not measured with a dedicated item.

4.4 Types of Promotions that Influence Consumers (Objective 2)



Discounts are the most attractive offer, chosen by half of the respondents (50.0%). Coupons and coupon codes (15.3%), loyalty rewards (12.5%), cashback (11.1%), and free shipping (9.7%) follow, and flash sales were chosen by only one respondent. Discounts therefore dominate as the first preference, even though the other tools are also effective.

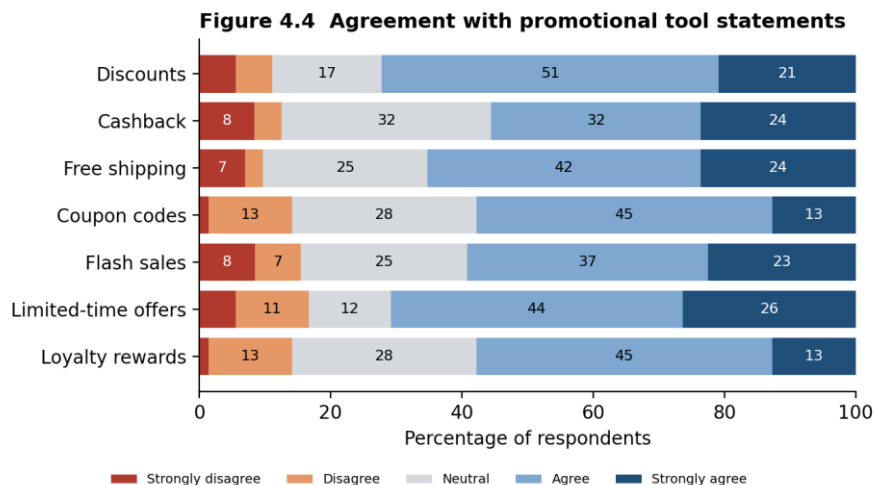


Table 4.4 Descriptive statistics for promotional tools and related statements

Statement	n	Mean	SD	% agree	% neutral	% disagree
Discounts encourage me to buy	72	3.76	1.03	72.2	16.7	11.1
Limited-time offers create urgency	72	3.75	1.14	70.8	12.5	16.7
Free shipping influences purchase	72	3.72	1.08	65.3	25.0	9.7
Flash sales encourage immediate buying	71	3.58	1.17	59.2	25.4	15.5
Cashback motivates me	72	3.58	1.15	55.6	31.9	12.5
Coupon codes increase likelihood	71	3.55	0.92	57.7	28.2	14.1
Loyalty programmes encourage repeat purchase	71	3.55	0.92	57.7	28.2	14.1
I compare offers across websites	72	3.72	0.98	62.5	27.8	9.7

Statement	n	Mean	SD	% agree	% neutral	% disagree
Social media ads influence me	72	3.67	0.89	59.7	31.9	8.3
I trust offers by online platforms	71	3.58	0.94	54.9	35.2	9.9
Reviews are more important than offers	72	3.93	0.91	70.8	23.6	5.6
Promotions give good value for money	72	3.83	0.84	63.9	31.9	4.2

% agree = Agree + Strongly agree; % disagree = Disagree + Strongly disagree. All means are significantly above 3 (one-sample Wilcoxon, $p < .001$).

All seven tools are rated significantly above neutral. Discounts (mean 3.76), limited-time offers (3.75), and free shipping (3.72) are rated highest, while coupon codes and loyalty rewards (3.55 each), flash sales (3.54), and cashback (3.55) are slightly lower. However, the differences between tools are small. A Friedman test on the 69 respondents who rated all seven tools found no significant difference in their effectiveness ($\chi^2 = 11.48$, $df = 6$, $p = .075$), and Kendall's W was only .03, indicating very little agreement in how respondents rank the tools. Consumers appear to respond to promotions in general and not to one tool in particular.

4.5 Influence of Online Promotions on Purchase Decisions (Objective 3)

Direct evidence of influence comes from two items: a yes/no/sometimes question (Q10) and the overall statement that promotions significantly influence buying behaviour (Q29).

On the direct question, 55.6% (40) say that online promotions influence their purchase decisions, 9.7% (7) say they do sometimes, and 34.7% (25) say they do not. On the overall statement, 65.3% agree (mean 3.85, SD 0.90, Wilcoxon $p < .001$), 27.8% are neutral, and only 6.9% disagree; no respondent strongly disagreed. Promotions are also seen as worthwhile: 63.9% agree that they give good value for money (mean 3.83) and only 4.2% disagree.

Promotions are not seen as the only or even the main consideration, however. The statement "Product reviews are more important than promotional offers" received the highest mean score of any item (3.93), with 70.8% agreeing and only 5.6% disagreeing. Reviews and promotions appear to work together: respondents who value reviews more also report higher overall influence of promotions ($p = .25$, $p = .033$), and trust in promotions is unrelated to the importance placed on reviews ($p = .05$, $p = .675$). Consumers therefore use promotions as a reason to buy a product that they already consider good, rather than as a substitute for evidence about quality.

4.6 Impulse Buying, Brand Switching, Shopping Frequency and Platform Preference (Objective 5)

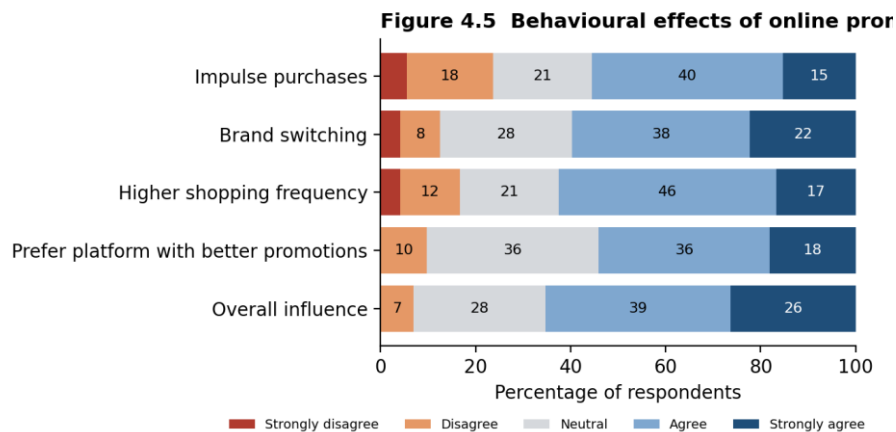


Table 4.5 Behavioural effects of online promotions

Statement	Mean	SD	% agree	% disagree	p-value
Promotions increase my overall shopping frequency	3.58	1.04	62.5	16.7	< .001
I switch brands because of attractive promotions	3.65	1.05	59.7	12.5	< .001
I prefer the platform offering better promotions	3.62	0.90	54.2	9.7	< .001

Statement	Mean	SD	% agree	% disagree	p-value
Promotions lead me to make impulse purchases	3.42	1.12	55.6	23.6	.004

All four behavioural effects are significantly above neutral. Promotions are most strongly associated with higher shopping frequency (62.5% agree) and brand switching (59.7%). Impulse buying has the lowest mean (3.42) and the highest disagreement (23.6%), but it is still reported by a majority (55.6%). Impulse buying and higher shopping frequency are closely linked ($p = .50$, $p < .001$), and both are associated with how often respondents buy because of offers ($p = .30$ for each, $p \approx .01$). People who comparison-shop across sites are also more likely to report impulse purchases ($p = .29$, $p = .013$), which suggests that attentiveness to deals and unplanned buying go together.

4.7 Comparison of All Statements

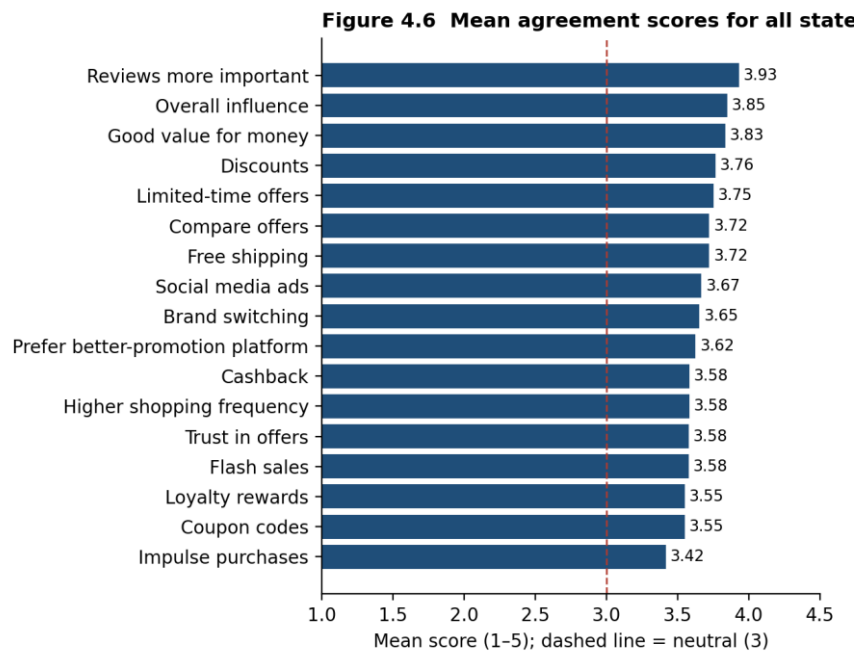


Figure 4.6 ranks all 17 statements by mean score. All are significantly above the neutral value of 3. The highest are the importance of reviews, value for money, and overall influence, followed by discounts and limited-time offers. The lowest are the individual behavioural and trust items, with impulse buying the lowest. This pattern shows that respondents readily endorse general benefits of promotions, but are more reserved when asked about specific behavioural consequences such as impulse buying or trusting platform offers.

Table 4.6 Composite indices

Index	Items	Cronbach's α	n	Mean	SD
Promotional Tools Index	7	.72	69	3.61	0.65
Behavioural Response Index	4	.72	72	3.57	0.76

The two indices are strongly related ($\rho = .52$, $p < .001$): respondents who respond more to promotional tools also report stronger behavioural effects. Both are positively related to overall influence ($\rho = .47$ and $\rho = .39$ respectively, $p < .001$).

4.8 Hypothesis Testing

H1: Influence on purchase decisions

The overall influence item has a mean of 3.85, significantly above the neutral value (Wilcoxon $p < .001$), and 65.3% agree that promotions significantly influence their buying behaviour. **H1 is supported.**

H2: Differences among promotional tools

The Friedman test found no significant difference among the seven tools ($\chi^2 = 11.48$, $df = 6$, $p = .075$, Kendall's $W = .03$). **H2 is not supported:** the tools are rated similarly, although discounts, limited-time offers, and free shipping have the highest means.

H3: Impulse buying, shopping frequency, and platform preference

Impulse buying ($p = .004$), shopping frequency ($p < .001$), and preference for platforms with better promotions ($p < .001$) are all significantly above neutral (Table 4.5). **H3 is supported.**

H4: Promotional tools as predictors of overall influence**Table 4.7 Spearman correlations with overall influence (Q29)**

Variable	ρ	p-value	Result
Trust in platform promotions	.53	< .001	Significant
Loyalty rewards	.46	< .001	Significant
Cashback	.45	< .001	Significant
Coupon codes	.40	< .001	Significant
Impulse purchases	.40	< .001	Significant
Good value for money	.36	.002	Significant
Free shipping	.33	.005	Significant
Brand switching	.31	.007	Significant
Higher shopping frequency	.31	.008	Significant
Limited-time offers	.30	.011	Significant
Discounts	.27	.020	Significant
Reviews more important than offers	.25	.033	Significant
Compare offers across websites	.24	.043	Significant
Flash sales	.23	.054	Not significant
Frequency of buying because of offers	.21	.076	Not significant
Prefer platform with better promotions	.20	.085	Not significant
Social media ads influence	.20	.099	Not significant

Table 4.8 Multiple regression: predictors of overall influence (Q29)

Predictor	Model 1 B	Model 1 β	p	Model 2 B	Model 2 β	p
Constant	1.282		.026	0.511		.394
Discounts	-0.015	-.02	.873	-0.053	-.06	.563
Cashback	0.248	.32	.021	0.146	.19	.151
Free shipping	0.056	.07	.571	0.090	.11	.330
Coupon codes	0.220	.22	.074	0.122	.12	.297
Flash sales	-0.062	-.08	.490	-0.142	-.18	.107

Predictor	Model 1 B	Model 1 β	p	Model 2 B	Model 2 β	p
Limited-time offers	-0.020	-.03	.826	-0.053	-.07	.530
Loyalty rewards	0.295	.30	.015	0.265	.27	.019
Trust in promotions				0.375	.39	.002
Reviews more important				0.169	.17	.103

Model 1: $n = 69$, $R^2 = .383$, adjusted $R^2 = .313$, $F(7, 61) = 5.42$, $p < .001$. Model 2: $n = 68$, $R^2 = .498$, adjusted $R^2 = .420$, $F(9, 58) = 6.40$, $p < .001$.

All promotional tools except flash sales are significantly correlated with overall influence. In the regression, the seven tools together explain 38.3% of the variation in overall influence (Model 1), with cashback ($\beta = .32$) and loyalty rewards ($\beta = .30$) as the only individually significant tools. Once trust and reviews are added (Model 2), the explained variation rises to 49.8%, trust becomes the strongest predictor ($\beta = .39$), loyalty rewards remain significant ($\beta = .27$), and cashback loses significance. Discounts, free shipping, flash sales, and limited-time offers do not add significantly, probably because they overlap with the other tools and are widely endorsed by almost all respondents. **H4 is supported** (the tools jointly predict overall influence, with cashback and loyalty rewards the strongest individual tools), although most individual tools are not independently significant.

H5: Demographic and shopping-profile characteristics

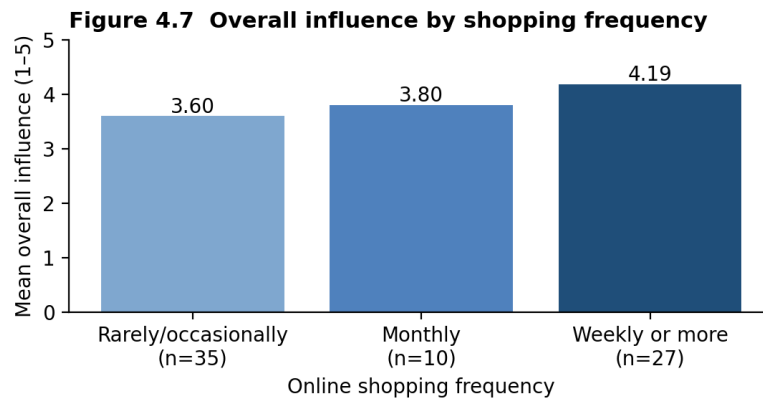


Table 4.9 Comparison of overall influence (Q29) across groups

Variable	Test	Statistic	p-value	Result
Gender	Mann–Whitney U	608.0	.907	Not significant
Age group (3 groups)	Kruskal–Wallis H	0.93	.628	Not significant
Occupation (4 groups)	Kruskal–Wallis H	1.76	.623	Not significant
Education	Kruskal–Wallis H	0.70	.874	Not significant
Monthly spending (3 groups)	Kruskal–Wallis H	0.74	.690	Not significant
Years of online shopping	Kruskal–Wallis H	2.15	.541	Not significant
Shopping frequency (3 groups)	Kruskal–Wallis H	6.65	.036	Significant
Main platform	Kruskal–Wallis H	0.79	.939	Not significant
Main product category	Kruskal–Wallis H	7.55	.183	Not significant
Preferred promotional offer	Kruskal–Wallis H	3.65	.456	Not significant

Of ten characteristics, only shopping frequency is significantly related to the overall influence of promotions. Mean influence rises from 3.60 among rare or occasional shoppers to 3.80 for monthly shoppers and 4.19 for those who shop weekly or more often. Frequent shoppers therefore report the strongest influence of promotions. Impulse buying differs by shopping frequency only at the margin of significance ($p = .070$), and, interestingly, the highest mean impulse score is for monthly shoppers (4.10) and not for the most frequent shoppers (3.15). The Promotional Tools Index does not differ significantly by any characteristic (all $p > .12$), although women score slightly higher than men (3.68 versus 3.48, $p = .253$) and Myntra and Ajio users score higher than Amazon users (3.83 and 3.81 versus 3.37, $p = .245$). Monthly spending is positively related to trust in promotions ($\rho = .24$, $p = .044$) but not to overall influence.

Table 4.10 Chi-square tests: association with whether promotions influence purchase decisions (Q10)

Variable	χ^2	df	p-value	Note
Gender	5.23	2	.073	Not significant
Age group	3.21	4	.523	Not significant
Education	12.96	8	.113	Not significant
Monthly spending	4.21	4	.378	Not significant
Shopping frequency	2.43	4	.658	Not significant
Years of online shopping	8.44	6	.208	Not significant
Main product category	11.30	10	.335	Not significant
Preferred promotional offer	7.81	10	.648	Not significant
Occupation	29.33	6	< .001	Cells too small*
Main platform	15.60	8	.048	Cells too small*

*Some cells have expected counts below 1, so the chi-square approximation is unreliable and these two results are not interpreted as evidence of association.

Responses to the direct yes/no question are not significantly associated with any characteristic where the test is reliable. The gender result ($p = .073$) is borderline: 58.7% of women and a smaller share of men answered “yes”. **H5 is partially supported:** only shopping frequency is significantly related to the influence of promotions, and the other characteristics show no significant relationship in this sample, which is small.

H6: Trust and overall influence

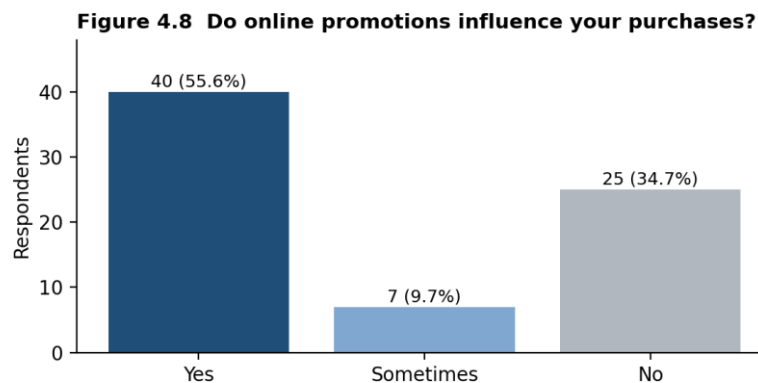
Trust in promotional offers provided by platforms is the strongest correlate of overall influence ($\rho = .53$, $p < .001$) and is also related to the perception of value for money ($\rho = .41$, $p < .001$). It remains the strongest predictor in the regression after controlling for all tools and reviews ($\beta = .39$, $p = .002$). Mean trust is 3.58, with 54.9% agreeing and 9.9% disagreeing. **H6 is supported.**

Table 4.11 Summary of hypothesis tests

Hypothesis	Test	Result	Decision
H1: Promotions influence purchase decisions	Wilcoxon vs 3	Mean 3.85, $p < .001$	Supported
H2: Tools differ in effectiveness	Friedman	$\chi^2 = 11.48$, $p = .075$	Not supported
H3: Impulse buying, frequency, platform preference	Wilcoxon vs 3	All $p \leq .004$	Supported
H4: Tools predict overall influence	Regression	$R^2 = .38$ (.50 with trust)	Supported
H5: Characteristics and responses	Mann–Whitney; Kruskal–Wallis; chi-square	Only shopping frequency significant	Partially supported

Hypothesis	Test	Result	Decision
H6: Trust and overall influence	Spearman; regression	$\rho = .53, \beta = .39$	Supported

4.9 Consistency of the Two Measures of Influence



The two measures of influence give somewhat different pictures. On the direct question, 34.7% answered that promotions do not influence their purchase decisions, yet on the overall statement only 6.9% of all respondents disagreed. Among the 25 respondents who answered “no” to the direct question, 12 (48%) agreed or strongly agreed that promotions significantly influence their buying behaviour. The two answers are nevertheless related: respondents who answered “yes” or “sometimes” score higher on the overall statement (4.05 and 4.00) than those who answered “no” (3.48; Kruskal–Wallis $p = .040$), and they also report buying because of offers more often (means 3.48, 2.57, and 2.84 for yes, sometimes, and no). The difference may reflect that the direct question asks respondents to admit to being influenced, whereas the overall statement asks for a general perception. It means that the more conservative figure, 55.6% definitely influenced, is the safer measure of the proportion of consumers whose decisions are changed by promotions, while 65.3% reflects the wider perception of influence.

5. FINDINGS, AND SUGGESTIONS CONCLUSION

1. The sample is young (86.1% aged 30 or below), mostly female (63.9%), and educated; 54.2% are students. Fashion is the main purchase category (52.8%) and Amazon (31.9%), Flipkart (22.2%), and Myntra (20.8%) are the main platform.
2. Engagement with promotions is high: only 8.3% never buy because of promotional offers, 33.4% often or always do, 62.5% compare offers across websites, and 59.7% say social media ads influence their buying.
3. Discounts are the most attractive offer (50.0%) and have the highest agreement (72.2%), followed by limited-time offers (70.8%) and free shipping (65.3%).
4. All seven promotional tools are significantly above neutral, but they do not differ significantly in effectiveness (Friedman $p = .075$).
5. 65.3% agree that promotions significantly influence their buying behaviour (mean 3.85), and 55.6% say promotions influence their purchase decisions.
6. Product reviews are rated more important than promotions (mean 3.93, the highest of all items), so promotions work alongside reviews and not instead of them.
7. Trust in platform promotions is the strongest predictor of overall influence ($\rho = .53; \beta = .39$), followed by loyalty rewards and cashback.
8. Only shopping frequency is significantly related to the influence of promotions: frequent shoppers report higher influence (4.19) than occasional shoppers (3.60). Gender, age, occupation, education, spending, years of shopping, platform, and product category show no significant difference.
9. Promotions are reported to increase shopping frequency (62.5%), cause brand switching (59.7%), and lead to impulse purchases (55.6%), all significantly above neutral. Impulse buying and higher shopping frequency are strongly related ($\rho = .50$).

5.2 Implications and Suggestions

- Since trust is the strongest predictor of influence, platforms should display genuine reference prices, state conditions clearly, and avoid misleading discount claims.
- Reviews and ratings should be placed next to promoted products, because consumers rate reviews above offers.

- Lead with discounts, supported by free shipping and time-limited offers. These have the highest agreement, and discounts are the most attractive first choice.
- Invest in cashback and loyalty programmes to encourage repeat purchases, since these were the strongest individual tools in the regression.
- Target frequent shoppers with personalised promotions, as they report the greatest influence, and use comparison-friendly price displays for shoppers who compare across websites.
- Use social media advertising to publicise offers, as 59.7% report that it influences them.
- Consumers should be aware that offers are designed to create urgency and unplanned purchases, and should compare prices and reviews before buying.
- Regulators and platforms may consider stronger rules on transparent pricing and the presentation of limited-time offers, since more than half of respondents report impulse purchases because of promotions.

5.3 Limitations of the Study

- The sample (n = 72) is small and was chosen by convenience, so results cannot be generalised to all online shoppers in Bengaluru. The sample is young, mostly female, and student-dominated.
- There was no direct question on awareness of promotions, so Objective 1 was assessed through related items.
- The questionnaire did not record a respondent's city or area, so the Bengaluru focus rests on how the sample was approached.
- Responses are self-reported and subject to social desirability bias; the direct and overall measures of influence did not fully agree (Section 4.9).
- Twenty respondents answered the frequency question (Q12) with agreement wording, and these answers were recoded; categories with very few respondents were merged for the tests, and some chi-square tests had very small cells.
- The study is cross-sectional and shows association, not causation, and does not examine actual sales or specific platforms' campaigns.

5.4 Conclusion

This study examined the role of online promotions in influencing consumer buying behaviour among online shoppers in Bengaluru. Online promotions have a significant effect on buying behaviour: about two-thirds of respondents agree that promotions significantly influence them, more than half say they influence their purchase decisions, and promotions are associated with brand switching, higher shopping frequency, and impulse buying. Discounts are the most attractive offer, but all promotional tools are seen as similarly effective.

At the same time, promotions are not seen in isolation. Consumers consider product reviews more important than offers, and trust in the promotions offered by platforms is the strongest factor linked to their influence. Among consumer characteristics, only shopping frequency makes a significant difference, with frequent shoppers the most responsive. For digital marketers, the practical message is that promotions are most effective when they are credible, supported by reviews, and designed to encourage repeat purchases through cashback and loyalty rewards, and not merely when they offer the deepest price cut. Larger and more representative studies are needed to confirm these findings.

5.5 Scope for Further Research

Future studies could use a larger, probability-based sample drawn from different parts of Bengaluru and other cities; include a direct, multi-item measure of awareness; study the effect of specific platform campaigns (for example, festival sales); examine mediating factors such as trust, perceived value, and price consciousness using structural equation modelling; track actual purchase data; and compare promotion effects on planned and impulse purchases across product categories.

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