

Factors Influencing Online Purchase Intention in Bangladesh: The Role of Free Shipping, Price Discounts, and Shipping Costs

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Abstract

Bangladesh e-commerce growth has led to the use of promotions, by online merchants. This e-commerce growth also brings chances for promotions. Among them shipping and price discounts are two of the most common types of promotion. I wonder which type of promotion is more appealing, to customers when shopping online. To find answers this paper Compare how free shipping and price discounts influence consumer perception of savings and purchasing behavior. This research looks at shoppers, in urban areas of Bangladesh especially in Dhaka. A quantitative method has been used for this research. In this method, data is collected through a structured questionnaire based on various scenarios of shopping and scaled at 5 points. The influences of independent variables (type of promotional offer and the cost of cart) and dependent variables (perceived savings and the rate of purchase abandonment) are studied. Besides that the effects of age, income and shopping frequency are also examined in this research. The study will help to determine which of the two types of promotions is more beneficial for online customers.

Keywords: Shipping Charges; Offers; Shopping Online; Customers' Behaviour; E-commerce Industry

1. Introduction

1.1 Background of the Study

The rise of e-commerce in Bangladesh has coincided with the rapid increase in internet usage, smartphone penetration, and the availability of digital payment systems. According to DataReportal data, Bangladesh had 82.8 million internet users, or 47 % of its population, in 2026. This significantly expands the pool of potential customers for online sellers (DataReportal, 2026).

Due to increasing competition among e-commerce providers, companies are resorting to novel advertising methods to attract customers. For example, some companies, such as Daraz Bangladesh, Chaldal, and Pickaboo, develop marketing campaigns with discounts and promotional offers, including free delivery only during the special occasions like Eid or Pohela Boishakh or during the sales of 11.11. These promotions are a successful combination of two appealing offers since discounts reduce the prices of products whereas free delivery decreases the cost which may be perceived by customers as unfair (Kotler, Keller and Chernev, 2022; Joshi and Naik, 2026).

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The significance of the topic is that it is known that consumers in Bangladesh have a higher degree of sensitivity for pricing and that they tend to compare the promotional offers before making the purchase through the Internet. According to the recent investigations into online shopping behavior of consumers in Bangladesh, it was discovered that price is one of the key factors that influence their intention to shop online (Hossain, Yeasmin and Sultana, 2026).

Due to the increased implementation of promotional strategies it becomes essential to know how consumers react to the different types of offers. Free shipping and discounts can both serve as motivations for online purchases, but they act differently on the consumers. It is vital to understand this difference for electronic commerce companies when designing promotional offers.

1.2 Research Problem

From a behavioral perspective, the buyer's mental faculties are very likely to get compromised regarding their spending habits. People just don't like to pay for shipping and are very responsive to the word "FREE" which makes them think they got a good deal. The companies face the problem of choice of different marketing instruments. The business should establish some principles based on psychology about the behavior of consumers. They also need to know when free shipping makes sense versus discounts. It is sensible for online retailers to know which marketing technique is the most effective in the decision making process of the consumers. It would also be helpful for the buyer to know what discount would make free shipping more reasonable. It has been established that while price reduction not only boosts demand for commodities, it must be noted that it also urges individuals to buy when the price goes down to zero (Shampanier, Mazar, and Ariely, 2007).

Shipping costs are the main reason that pushes online customers not to make their purchases. They account for nearly half of all the cases when the shopping carts are abandoned online (Baymard Institute, 2025).

Therefore, the issue is worth to be addressed as there are many studies on free shipping and price reduction but few works explore the effectiveness of free shipping as a promotional strategy against discount strategies in terms of its effect on purchase intention of e-commerce customers in Bangladesh. Therefore, a better understanding of the problem, it is possible to determine the promotional strategy that would be more effective in terms of online purchase intention.

1.3 Research Questions

The research seeks answers to the following questions:

- Does the factor of free shipping have more effect on consumers in Bangladesh compared to the factor of discount?
- How does the price in the basket of goods for the consumer influence their decision-making?
- What percentage of each of the two options leads to a conversion or abandonment?

- What is the impact of age, income and shopping frequency on consumers' choice in preference of deals?

1.4 Research Objectives

General Objective

To investigate the psychological and rational factors that drive consumers' online purchase decisions, particularly in response to free shipping and price discount offers.

Specific Objectives:

- To examine the psychological factors influencing consumers' preferences for free shipping and price discounts.
- To investigate how the attractiveness of a deal influences consumers' purchase decisions.
- To determine the extent to which different promotional offers lead to purchase conversion or cart abandonment.
- To examine whether demographic and shopping characteristics, such as age, income, and shopping frequency, influence consumers' responses to promotional offers.

1.5 Significance of the Study

This topic is relevant because many Bangladeshi consumers are known to be more price sensitive, which was proven by comparing discount offers before their online purchase. The findings of this study will contribute to the existing body of knowledge by examining the effectiveness of free shipping and higher discount in the e-commerce domain for the Bangladeshi consumers. This study will equip marketers and website owners with the tools to assess the effectiveness of different types of promotions on the consumer's intention to buy goods online. Besides, the study will also help to understand how to respond to different promotional programs and increase the revenue. Businesses will be better informed on when to offer free shipping and when to give out discounts with maximum profitability.

1.6 Scope of the Study

Research topic: Study of consumer behavior in online shopping and e-commerce. Target group: Consumers using online e-commerce platforms like websites or mobile apps. Duration and Extent of the Research: Analysis of customer behavior in Dhaka City, Bangladesh for three months (June 2026-Aug 2026). Independent variables: Type of promotional offer and Barriers . Dependent variables: Purchase Intension .

2. Literature Review

E-commerce has changed how consumers compare products and promotional offers. Two common online promotions are price discounts and free shipping. A price discount directly reduces the product price, while free shipping removes the delivery charge. Although both provide financial benefits, customers may not see them as equally valuable.

A price discount means selling a product below its original price. It gives customers a clear sense of saving. Price is an important factor in Bangladesh because online shoppers often compare prices and promotional offers before purchasing. Free shipping means customers do not pay a separate delivery charge. It can make an offer more attractive because customers often dislike additional costs at checkout. The word “free” may also create a strong positive response.

Perceived savings refer to how much financial benefit a customer feels from an offer. Cart cost is the total amount a customer expects to pay, including relevant delivery costs. A higher final cost may reduce the attractiveness of an offer. Abandonment of purchases is a case when the buyer starts an online purchasing process but does not finish it. The addition of the cost of delivery will affect the buyer's decision. Three theories are relevant to this study: Prospect Theory, Mental Accounting Theory and Transaction Utility Theory. The first theory focuses on the assessment of the gains and losses. Free shipping may look better since the buyer will save on an additional cost, whereas a discount will mean a profit. Mental Accounting Theory presumes that buyers have their mental way of accounting for expenses. That means that buyers will distinguish between the cost of the item and the cost of delivery, thus free delivery and a similar discount will look different to the buyer. The last theory is concerned with the buyer's attitude towards the deal. From past researches, it is evident that price discounts and shipping services have an influence on the shopping behavior of consumers. As per the study of Shampanier et al. (2007), zero pricing offers can prove to be very appealing to consumers. This is similar to the situation of shipping services. Hossain et al. (2026) have found out that price can play an important role while making shopping decisions by Bangladeshi consumers online. Charges for shipping have an impact on the consumer's decision-making at the time of purchase

2.4 Research Gap

There are certain limitations in the current literature. First, free shipping and discounted prices have been separately analyzed without comparison. Second, most of the literature is based on researches carried out outside of Bangladesh such as in China and Indonesia. Third, cart cost, saving perception, age, income and purchase frequency have not been adequately considered in prior studies. This study attempts to address the above-mentioned limitations.

2.5 Research Model

The model contains three independent variables and one dependent variable. Each arrow represents a direct hypothesis relationship.

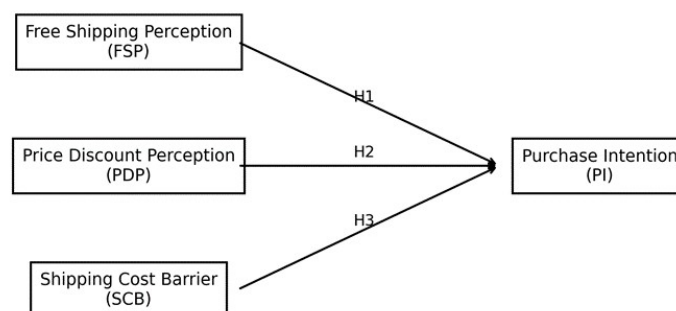


Figure 1: Research Model

2.6 Summary of the Literature Review

From the available literature, it can be seen that free shipping and price discounts can have varied impacts on the behavior of consumers while shopping online. There may be psychological considerations, savings perceptions, and shipping costs that will affect the behavior of the consumers. However, there is no available data to compare the effectiveness of both in the case of Bangladesh.

3. Methodology

3.1 Research Approach and Design

The methodology applied in the current study will be the quantitative approach in research with a survey design that is both explanatory and cross-sectional. The reason for using the quantitative approach is that the main purpose of this study is to determine and examine the correlation between promotional tools such as Free Shipping and Price Discounts, consumer barriers such as Shipping Cost Barrier, and Online Purchase Intention among Bangladeshi e-commerce customers.

3.2 Population and Sample Target Population

In this research, the methodology used in this study is the quantitative approach with the survey design which is explanatory and cross-sectional. The choice of this method stems from the fact that the objective of this research is to find and analyze the relationship between the promotional tools like Free Shipping and Price Discount, the consumer barrier such as the shipping cost barrier, and Online Purchase Intention of Bangladeshi e-commerce consumers. Sample Size & Characteristics: A total of 102 responses were collected. After data cleaning and excluding incomplete submissions, 100 complete cases were utilized for construct-level reliability and hypothesis testing. Demographic profile of the respondents includes: Gender: 50.0% Female (n=51) and 50.0% Male (n=51). Location: 89.2% Inside Dhaka (n=91) and 10.8% Outside Dhaka (n=11).

3.3 Data Collection Data Sources

Primary data was collected through an online structured questionnaire. Secondary data was collected through published literature, research journals, and industry reports (such as DataReportal and Baymard Institute). Data Collection Tool: A structured self-administered questionnaire was prepared using Google Forms, containing 5-point Likert scale questions and scenarios of shopping experience. Data Collection Time: Primary data collection occurred during June 2026 to August 2026.

3.4 Measurement of Variables/Constructs

The survey measured four core constructs adapted from prior empirical research:

Independent Variables: Free Shipping Perception (FSP) (3 items) — Adapted from Shampanier, Mazar and Ariely (2007) and Joshi and Naik (2026). Price Discount Perception (PDP) (3 items) — Adapted from Wu, Zhao and Chen (2021) and Hossain, Yeasmin and Sultana (2026). Shipping Cost Barrier (SCB) (4 items) — Adapted from Baymard Institute (2025) and Koentary, Ghazani and Arbiyah (2026). Dependent Variable: Purchase Intention (PI) (3 items) — Adapted from Wu, Zhao and Chen (2021).

Response Scale: All items were evaluated on a 5-point Likert Scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. 3.5 Data Analysis Statistical processing was conducted using IBM SPSS Statistics.

The following techniques were applied: Descriptive Statistics: Frequency distributions and percentages were used to summarize respondent demographics. Reliability Analysis: Cronbach's Alpha was computed to check internal consistency across scale items. All constructs exceeded the acceptable standard threshold of 0.70: Free Shipping Perception ($\alpha=0.817$) Price Discount Perception ($\alpha=0.923$) Shipping Cost Barrier ($\alpha=0.854$) Purchase Intention ($\alpha=0.821$) Overall Questionnaire Instrument ($\alpha=0.942$) Hypothesis Testing (Regression Analysis): Simple linear regression analyses were conducted to determine the direct impact of each independent variable (FSP, PDP, SCB) on PI. Standardized beta coefficients (β), coefficients of determination (R^2), F-statistics, and p-values ($p<.001$) were calculated to test hypotheses H1, H2, and H3.

4. Data Analysis and Results

This document presents the revised SPSS-based statistical analysis of the submitted questionnaire responses. The item-frequency section has been removed and replaced with a research model and direct hypothesis testing between each independent variable and Purchase Intention.

1. Respondent Profile

Variable	Category	Frequency	Percent
Gender	Female	51	50.0%
	Male	51	50.0%
Location	Inside Dhaka	91	89.2%
	Outside Dhaka	11	10.8%

Source: Authors own contribution

2. Reliability Analysis

Construct reliability was assessed using Cronbach's Alpha. All four constructs exceeded the 0.70 reliability criterion. The overall 16-item questionnaire produced Cronbach's Alpha = 0.942, indicating high internal consistency.

Table 1: Reliability test

Construct	No. of Items	Cronbach's Alpha
Free Shipping Perception (FSP)	3	0.817
Price Discount Perception (PDP)	3	0.923
Purchase Intention (PI)	3	0.821

Shipping Cost Barrier (SCB)	4	0.854
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3. Hypothesis Testing: Relationship Between Variables

To show the relationship of one variable with another, each independent variable was tested directly against Purchase Intention.

H1: There is a significant positive impact of Free Shipping Perception (FSP) on Purchase Intention (PI).

The direct relationship between Free Shipping Perception (FSP) and Purchase

Intention (PI) was positive and statistically significant (Beta = 0.739, R² = 0.546, F =

117.917, t = 10.859, p < .001). Therefore, H1 is supported.

H2: There is a significant positive impact of Price Discount Perception (PDP) on Purchase Intention (PI).

The direct relationship between Price Discount Perception (PDP) and Purchase Intention (PI) was positive and statistically significant (Beta = 0.717, R² = 0.514, F = 103.683, t = 10.182, p < .001). Therefore, H2 is supported.

H3: There is a significant positive impact of Shipping Cost Barrier (SCB) on Purchase Intention (PI).

The direct relationship between Shipping Cost Barrier (SCB) and Purchase Intention (PI) was positive and statistically significant (Beta = 0.700, R² = 0.490, F = 94.157, t = 9.703, p < .001). Therefore, H3 is supported.

Table 2: Path Coefficients Analysis

Hypothesis	Path	Beta	R ²	F	t-value	p-value	Result
H1	FSP → PI	0.739	0.546	117.917	10.859	< .001	Supported
H2	PDP → PI	0.717	0.514	103.683	10.182	< .001	Supported
H3	SCB → PI	0.700	0.490	94.157	9.703	< .001	Supported

All three hypotheses are supported. Free Shipping Perception has the strongest direct relationship with Purchase Intention (Beta = .739), followed by Price Discount Perception (Beta = .717) and Shipping Cost Barrier (Beta = .700).

5. Discussion and Conclusion

5.1 Discussion of Findings

This study examined whether free shipping, price discounts, and shipping costs influence consumers' online purchase intention in Bangladesh. The analysis was based on 100 complete responses from a total of 102 questionnaire submissions. The study tested three independent variables: Free Shipping Perception (FSP), Price Discount Perception (PDP), and Shipping Cost Barrier (SCB), with Purchase Intention (PI) as the dependent variable. All three hypotheses were supported, and Free Shipping Perception showed the strongest relationship with Purchase Intention.

The first hypothesis proposed that Free Shipping Perception has a significant positive impact on Purchase Intention. The results strongly support this hypothesis. FSP had a beta coefficient of 0.739, with $R^2 = 0.546$, $F = 117.917$, $t = 10.859$, and $p < .001$. This indicates that free shipping perception has the strongest direct relationship with purchase intention among the three variables examined.

The findings obtained from this study support the research done previously on how free shipping can positively impact the consumers' intentions of purchasing from online stores. Researches on the topic of threshold free shipping show that the policy of free shipping improves the evaluation of the online offer and increases consumers' intention to purchase. The second hypothesis proposed that Price Discount Perception has a significant positive impact on Purchase Intention. The results also support this hypothesis. PDP produced a beta coefficient of 0.717, $R^2 = 0.514$, $F = 103.683$, $t = 10.182$, and $p < .001$. Therefore, consumers who perceive price discounts positively are more likely to show purchase intention.

This result is consistent with the broader literature on price promotions. Mental accounting theory suggests that consumers evaluate monetary benefits and costs through different mental accounts, meaning that the way a promotion is presented can influence perceived value (Gupta and Kim, 2010). Research on online promotions also shows that both reductions in product prices and reductions in additional charges, such as shipping, can influence consumer responses.

(Wiley Online Library)

The third hypothesis proposed that Shipping Cost Barrier has a significant positive impact on Purchase Intention. The result also supports this hypothesis, with Beta = 0.700, $R^2 = 0.490$, $F = 94.157$, $t = 9.703$, and $p < .001$. Although the relationship is positive in the statistical model, this result should be interpreted carefully because the construct represents consumers' perception of shipping costs as a barrier. The questionnaire responses indicate that unexpected or high shipping costs can make consumers reconsider purchases or abandon their carts.

Overall, the findings indicate that all three factors are important in explaining online purchase intention. However, Free Shipping Perception has the strongest relationship with purchase intention, followed by Price Discount Perception and Shipping Cost Barrier.

The findings are also broadly consistent with research conducted in Bangladesh. Ahmed, Jubaer and Amin (2017), including researchers affiliated with AIUB, found that sales promotions and other online-shopping factors positively affect consumers' intention to shop online in Bangladesh. More recent Bangladesh-focused research also identifies online marketing factors as important influences on consumer intention. (ResearchGate)

However, the findings should not be interpreted as proving that free shipping is always more effective than every price discount. A recent 2026 experimental study found no statistically significant overall difference between free shipping and price promotion types in purchase intention. This difference may be explained by differences in research design, sample characteristics, promotional values, platforms, and country context. (Ejournal Undip)

5.2 Theoretical Implications

The findings have supported the application of consumer value and mental accounting concepts in online promotion decision-making. It is not only the cost of the product, but the consumers consider other charges related to completing the transaction online. Free shipping can thus improve consumer value perception by eliminating one extra cost factor.

The findings have also helped develop a further understanding of how promotion framing affects consumer purchase intention. While price discounts offer a reduction in the product price, free shipping eliminates an extra cost factor. The two methods help increase the appeal of online promotion, though the higher beta coefficient of Free Shipping Perception indicates that shipping cost elimination is especially important for the study population.

This research has further contributed to online shopping studies in the Bangladesh context, through an examination of free shipping, price discount, and shipping cost barriers, rather than general online shopping acceptance alone.

5.3 Practical/Managerial Implications

The findings provide several practical implications for online retailers and e-commerce businesses in Bangladesh.

First, businesses should consider free shipping as an important promotional strategy. Since Free Shipping Perception had the strongest relationship with Purchase Intention ($\text{Beta} = 0.739$), retailers may benefit from clearly communicating free-shipping offers to customers.

Second, price discounts should not be ignored. The positive and significant relationship between Price Discount Perception and Purchase Intention indicates that discounts remain an effective promotional tool. Retailers can use discounts together with free-shipping offers during major campaigns when financially feasible.

Third, businesses should avoid unexpected shipping charges at checkout. The questionnaire specifically measured consumers' reactions to unexpected and high shipping costs, including reconsidering purchases and abandoning carts. Therefore, transparent shipping information before checkout may help reduce customer uncertainty and cart abandonment.

Fourth, retailers should select promotional strategies according to their target customers and product characteristics rather than if one promotion will work in every situation. Previous research shows that the effectiveness of free shipping and discounts can depend on the promotion structure, order value, and consumer characteristics. (ScienceDirect)

5.4 Limitations

This study has several limitations. First, the sample size was relatively small, with 100 complete cases used for the analysis.

Second, the respondents were not evenly distributed geographically. Most respondents were from inside Dhaka (91 respondents, 89.2%), while only 11 respondents (10.8%) were from outside Dhaka. Therefore, the findings may not fully represent consumers across all regions of Bangladesh.

Third, the study used questionnaire-based self-reported responses. Respondents stated purchase intentions may not always correspond to their actual purchasing behaviour.

Fourthly, the analysis looks at the direct relationship of the independent variables with Purchase Intent. Income, age, type of product, platform, trust, brand loyalty, and real shipping distance are among other factors that could have been significant but are absent in the model.

Lastly, the paper fails to demonstrate that free shipping is definitely better than price discount across all cases. The higher beta coefficient of free shipping holds only in this particular case study.

5.5 Future Research

Future studies should employ a large and geographically representative sample consisting of consumers from various parts of Bangladesh. Another avenue for future study would be comparing the promotional preferences of consumers from Dhaka and other cities to see if any variation exists.

Another comparative experiment may involve offering consumers equal-value promotions, such as a certain percentage off or free delivery for the same dollar amount. This experiment will give insight into whether consumers have a preference for free delivery over a discount when the monetary value is the same.

Other marketing techniques such as cash back, coupons, buy-one-get-one, loyalty rewards, and returns without charge might be analyzed for future research. Furthermore, qualitative interviews might be done to learn about the reasons why free shipping or discounts are perceived as more appealing.

Recommendations for online merchants include being upfront about their delivery rates, making clear the free delivery offers and using price discounts wisely. The businesses must keep an eye on conversion and abandoned carts statistics instead of just focusing on customers' preferences..

5.6 Conclusion

In this research, the impact of Free Shipping Perception, Price Discount Perception, and Shipping Cost Barrier on online Purchase Intention in Bangladesh has been explored. From the results it is evident that all the three variables have significantly strong positive associations with Purchase Intention. Free

Shipping Perception was found to have the highest association (Beta = 0.739), followed by Price Discount Perception (Beta = 0.717) and Shipping Cost Barrier (Beta = 0.700).

This finding implies that factors such as promotions and logistics have great impact on the purchasing decisions of consumers on the Internet. Free shipping is one of the effective promotional tactics that have been identified by the participants of this study. Nonetheless, the study findings can be viewed with regard to the limitations

associated with this research study. Nevertheless, this research adds insight into the field of consumer behavior in the online environment in Bangladesh.

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