



“A STUDY OF CONSUMER BEHAVIOUR IN SELECTING MOBILE PHONES FROM CHIDAMBARAM TOWN”**Mr. G. Madhankumar****ME, MBA****Assistant Professor , Department of Management Studies,
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Shree Raghavendra Art & Science College, Keezhamoongiladi, Chidambaram.****ABSTRACT**

The smartphone market offers consumers a wide range of brands, prices, and technological features, making mobile-phone selection an important consumer decision. This study examines selected factors associated with consumer behaviour in selecting mobile phones in Chidambaram town, Tamil Nadu. The paper is developed from a project based on primary data collected from 150 mobile-phone users through a structured questionnaire and a five-point Likert scale. A descriptive research design and convenience sampling method were reported in the project. Three objectives are examined: (1) to test the association between brand image and consumer behaviour, (2) to assess whether perceptions of price differ across monthly-income groups, and (3) to examine whether perceptions of product features differ across age groups. The reported analyses use the Pearson chi-square test and one-way analysis of variance (ANOVA). Brand image was significantly associated with consumer behaviour ($\chi^2 = 26.842$, $df = 16$, $p = .043$). Price perceptions differed significantly across income groups ($F = 4.862$, $p = .003$), while product-feature perceptions differed significantly across age groups ($F = 3.964$, $p = .009$). Product features also recorded the highest overall mean among the five explanatory factors ($M = 4.29$, $SD = 0.58$). The results suggest that smartphone marketers should combine credible brand positioning with competitive pricing and features suited to different consumer needs. As the paper uses results reported in the source project, findings should be interpreted within the limits of its sample and design.



KEYWORDS: Consumer behaviour, mobile phones, brand image, price, product features, Chidambaram, chi-square, ANOVA.

1. INTRODUCTION

Mobile phones have developed from basic communication devices into multifunctional products used for education, business, entertainment, digital payments, online shopping, and social networking. The expanding range of smartphone brands and models gives consumers more choice, but it also makes selection more complex. Consumers may compare brand reputation, affordability, camera quality,

processor performance, battery life, storage, design, and after-sales service before deciding which device to purchase.

Consumer behaviour concerns how people identify needs, search for information, compare alternatives, make purchase decisions, and evaluate products after use. In a competitive smartphone market, understanding these decisions helps manufacturers, retailers, and marketers respond to customer expectations. The project underlying this paper identifies brand image, price, product features, social influence, and after-sales service as key factors related to mobile-phone selection.

The present paper focuses on three selected factors—brand image, price, and product features—and reports three statistical tests already presented in the source project. The geographical focus is Chidambaram town, and the results reflect the responses of the 150 participants included in that project.

2. REVIEW OF LITERATURE

Davis (1989) proposed the Technology Acceptance Model, emphasizing perceived usefulness and ease of use in the acceptance of technology. This perspective is relevant to smartphones because consumers evaluate whether a device's functions are useful and manageable in everyday life.

Venkatesh et al. (2003), through the Unified Theory of Acceptance and Use of Technology, identified performance expectancy, effort expectancy, social influence, and facilitating conditions as important elements of technology adoption. These ideas help explain why technical performance and the opinions of others may be relevant to mobile-phone decisions.

Kotler and Keller (2016) explain that consumer decisions are shaped by cultural, social, personal, and psychological factors. In the smartphone context, brand reputation, price, product quality, innovation, and service can affect how consumers evaluate alternatives.

The literature reviewed in the source project also discusses the roles of brand reputation, price, technical specifications, online reviews, social influence, and after-sales service. Building on these themes, the present paper narrows the empirical analysis to brand image, price differences by income group, and product-feature perceptions across age groups.

3. STATEMENT OF THE PROBLEM

Consumers face many alternatives when selecting a mobile phone. Devices vary in price, reputation, specifications, and service support, while consumers differ in income, age, lifestyle, and personal requirements. Without understanding these differences, businesses may find it difficult to design suitable products and marketing strategies. This study therefore examines whether brand image is associated with consumer behaviour and whether price and product-feature perceptions differ across selected demographic groups.

4. OBJECTIVES OF THE STUDY

1. To examine the association between brand image and consumer behaviour in selecting mobile phones.
2. To analyse whether perceptions of price differ among respondents belonging to different monthly-income groups.
3. To identify whether perceptions of product features differ among respondents belonging to different age groups.

5. RESEARCH METHODOLOGY

5.1 Research design

The source project adopts a descriptive research design to describe consumer behaviour and examine selected relationships between study variables.

5.2 Study area and sample

The study was conducted in Chidambaram town, Tamil Nadu. The project reports a sample of 150 mobile-phone users. Convenience sampling is specified in its methodology section; accordingly, the findings are best treated as evidence about the selected respondents rather than as estimates representative of all mobile-phone consumers.

5.3 Data collection instrument

Primary data were collected using a structured questionnaire. Attitudinal responses were recorded using a five-point Likert scale ranging from Strongly Disagree to Strongly Agree.

5.4 Statistical tools

The source project reports the use of percentage analysis, mean and standard deviation, Pearson chi-square, independent-samples t-test, and one-way ANOVA. For the three objectives selected for this paper, the reported tests are Pearson chi-square for brand image and consumer behaviour, one-way ANOVA for price perceptions across income groups, and one-way ANOVA for product-feature perceptions across age groups. The significance level is 0.05.

5.5 Hypotheses

Objective 1:

H₀₁: There is no significant association between brand image and consumer behaviour in selecting mobile phones.

H₁₁: There is a significant association between brand image and consumer behaviour.

Objective 2:

H₀₂: There is no significant difference in price perceptions among monthly-income groups.

H₁₂: There is a significant difference in price perceptions among monthly-income groups.

Objective 3:

H₀₃: There is no significant difference in product-feature perceptions among age groups.

H₁₃: There is a significant difference in product-feature perceptions among age groups.

6. RESULTS AND ANALYSIS

6.1 Objective 1: Association between brand image and consumer behaviour

Statistical test: Pearson chi-square test.

Statistic	Reported result
Pearson chi-square	26.842
Degrees of freedom	16
p-value	0.043
Decision at $\alpha = 0.05$	Reject H₀₁

Interpretation:

The reported p-value (0.043) is below 0.05. The null hypothesis is rejected, indicating a statistically significant association between brand image and consumer behaviour in selecting mobile phones. The result suggests that respondents' perceptions of a brand's reputation, reliability, and trustworthiness are related to their mobile-phone selection behaviour. The chi-square result establishes an association; it does not, by itself, prove causation.

6.2 Objective 2: Price perceptions across monthly-income groups

Statistical test: One-way ANOVA.

Monthly income	N	Mean	SD
Below ₹20,000	32	3.84	0.62
₹20,001-₹40,000	48	4.02	0.65
₹40,001-₹60,000	38	4.18	0.59
Above ₹60,000	32	4.31	0.56
Total	150	4.05	0.67

ANOVA result: $F(3, 146) = 4.862, p = 0.003$.

Interpretation: Since $p = 0.003$ is below 0.05, the null hypothesis is rejected. Price perceptions differ significantly across the monthly-income groups in this sample. The reported group means increase from 3.84 among respondents earning below ₹20,000 to 4.31 among those earning above ₹60,000. This pattern indicates differences in reported price perceptions across income groups. ANOVA indicates that at least one group mean differs; without a post-hoc comparison, it is not possible to determine which specific pairs of groups differ significantly.

6.3 Objective 3: Product-feature perceptions across age groups

Statistical test: One-way ANOVA.

Age group	N	Mean	SD
Below 20 years	18	4.05	0.61
21-30 years	56	4.36	0.55
31-40 years	42	4.28	0.56
Above 40 years	34	4.17	0.60
Total	150	4.29	0.58

ANOVA result: $F(3, 146) = 3.964, p = 0.009$.

Interpretation:

The p -value (0.009) is below 0.05, so the null hypothesis is rejected. Product-feature perceptions differ significantly among the age groups. The 21-30 age group recorded the highest mean (4.36), followed by the 31-40 age group (4.28). This suggests that respondents' emphasis on features such as camera quality, processor performance, battery life, display, storage, and connectivity varies by age group. Post-hoc testing would be needed to identify which age groups differ from each other.

6.4 Summary of the three hypothesis tests

Objective	Test	Result	Decision
Brand image and consumer behaviour	Pearson chi-square	$\chi^2(16) = 26.842, p = 0.043$	Reject H_{01}
Price across income groups	One-way ANOVA	$F(3,146) = 4.862, p = 0.003$	Reject H_{02}
Product features across age groups	One-way ANOVA	$F(3,146) = 3.964, p = 0.009$	Reject H_{03}

All three reported tests are statistically significant at the 5% level. These results support the alternative hypotheses for the three selected objectives. The tests address different questions: chi-square evaluates association between categorical variables, while ANOVA compares mean scores across more than two groups.

7. DISCUSSION

The findings underline three practical dimensions of smartphone selection. First, brand image is significantly associated with consumer behaviour. A recognisable and trusted brand may help consumers feel more confident when choosing between alternatives. Second, price perceptions vary across income groups, reinforcing the need to understand affordability and perceived value for different customer segments. Third, product-feature perceptions differ across age groups, suggesting that consumers may not place equal emphasis on technical specifications.

Descriptive results in the source project provide further context: product features had the highest overall mean score among the five selected factors ($M = 4.29$, $SD = 0.58$), followed by brand image ($M = 4.18$, $SD = 0.61$), after-sales service ($M = 4.11$, $SD = 0.63$), price ($M = 4.05$, $SD = 0.67$), and social influence ($M = 3.91$, $SD = 0.72$). These means indicate the relative level of agreement recorded in the sample; they should not be interpreted as proof that one factor causally influences purchases more than another.

8. SUGGESTIONS

1. Maintain a consistent brand image through dependable product quality, transparent communication, and responsive customer support.
2. Offer smartphone models across clearly defined price ranges and communicate the features and benefits customers receive at each price point.
3. Segment product communication by consumer needs and age groups, highlighting relevant specifications such as camera, battery, performance, storage, and ease of use.
4. Provide clear comparisons of specifications, warranty terms, and service facilities so consumers can make informed decisions.
5. Conduct larger studies using probability sampling where feasible and include additional regions to assess whether the findings hold beyond Chidambaram town.
6. For future analyses, report full test tables and assumptions; use suitable post-hoc tests after significant ANOVA results to identify specific group differences.

9. CONCLUSION

This paper examined three objectives concerning consumer behaviour in selecting mobile phones in Chidambaram town. The reported chi-square test found a significant association between brand image and consumer behaviour ($\chi^2 = 26.842$, $df = 16$, $p = 0.043$). One-way ANOVA showed significant differences in price perceptions across monthly-income groups ($F = 4.862$, $p = 0.003$) and product-feature perceptions across age groups ($F = 3.964$, $p = 0.009$). Product features recorded the highest overall mean among the five factors reported in the project. Taken together, the findings suggest that smartphone businesses should build credible brands, provide value across price segments, and align product features with varied consumer needs. Because the research is geographically limited and based on convenience sampling, further research with broader and more representative samples is recommended.

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