



DEPARTMENT OF STATISTICS
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(According to B.Sc. Honour's 4th year syllabus 2020-21)

Research Title on

**The Impact of Color, Emotion, and Simplicity in Advertisements on
Consumer Behavior Among Students of Rajshahi University**

A report submitted in partial fulfillment of the requirements for the degree of B.Sc. Honour's for
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ABSTRACT

In today's highly competitive market environment, businesses increasingly rely on advertising as a key tool to capture consumer attention and influence purchasing decisions. Among various advertising strategies, visual elements such as color, emotional appeal, and design simplicity have emerged as critical determinants of consumer perception and behavior. University students, who constitute a young, digitally active, and trend-sensitive demographic, represent an important consumer segment whose responses to advertising can offer valuable insights for marketers. This study explores the impact of these visual elements on consumer behavior among students of Rajshahi University in Bangladesh.

The research employed a quantitative, cross-sectional survey design, collecting data from 253 undergraduate and postgraduate students through structured questionnaires. The survey captured participants' responses regarding ad liking, purchase intention, product trustworthiness, and perceptions of color, emotional intensity, and simplicity in advertisements. Data were analyzed using descriptive statistics, correlation analysis, and Chi-square tests to examine the strength, direction, and significance of the relationships between visual advertisement features and consumer behavioral responses.

The findings indicate that advertisements with appealing color schemes positively influence ad liking and indirectly enhance purchase intention. Emotional intensity in advertisements is associated with greater perceived trustworthiness of the product, suggesting that affective engagement plays a role in shaping consumer attitudes. Furthermore, simplicity in design improves comprehension and encourages purchase intention, although the effect size is relatively modest. Interestingly, while all three factors contribute to consumer behavior, their individual effects are weak to moderate, highlighting the multifaceted nature of advertising influence. The study also reveals that among the student demographic, color and simplicity are more decisive in driving initial purchase consideration compared to emotional appeal.

This research fills a significant gap in the Bangladeshi context, where limited empirical evidence exists regarding the combined effect of visual advertisement elements on university students' consumer behavior. Additionally, the findings underscore the importance of considering cultural and contextual factors when designing advertising campaigns for emerging markets.

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CHAPTER ONE

INTRODUCTION TO THE RESEARCH

1.1 Introduction

In the modern era of intense market competition, businesses constantly seek innovative ways to attract consumers and influence their purchasing decisions. Advertising has emerged as one of the most powerful tools for shaping consumer perceptions, attitudes, and behaviors. With the rapid growth of digital media and visual communication, the role of visual elements in advertisements—such as color, emotional appeal, and design simplicity—has become increasingly significant. Consumers are often exposed to hundreds of advertisements daily, but only a few manage to capture their attention or generate a lasting impression.

Understanding how visual components influence consumer behavior is particularly important among university students, who represent a dynamic and trend-sensitive consumer segment. Their purchasing behavior is often influenced by emotional connections, aesthetic preferences, and social trends. Therefore, analyzing how colors, emotions, and simplicity in advertisements impact their buying intentions can provide valuable insights for marketers and advertisers.

This study seeks to explore the impact of color, emotion, and simplicity in advertisements on consumer behavior among students of Rajshahi University. By combining psychological, behavioral, and marketing perspectives, the research aims to identify the visual factors that most effectively shape consumer perception and decision-making processes.

1.2 Background of the Research

Advertising has always been at the heart of marketing communication. In the past, advertisers primarily focused on delivering persuasive messages through text and slogans. However, with the advent of visual culture and digital transformation, the emphasis has shifted toward visual appeal and sensory engagement. Visual stimuli such as color combinations, emotional expressions, and simple yet creative layouts are now crucial in drawing consumer attention and enhancing message retention.

Color psychology has long been recognized as a central element in consumer behavior research. Different colors evoke different emotional and psychological responses—red often signifies passion and excitement, blue represents trust and calmness, and green symbolizes freshness and growth. These color cues subconsciously affect how consumers perceive brands and products. Similarly, emotional content in advertisements can create strong affective connections, making consumers more likely to recall the message and act upon it.

Simplicity in advertising design, on the other hand, helps reduce cognitive overload and enhances message clarity. A clutter-free, straightforward layout allows consumers to focus on key information and improves overall comprehension. Previous studies have shown that simple advertisements often perform better in terms of consumer engagement and brand recall, particularly in a visually saturated media environment.

In Bangladesh, advertising practices have evolved significantly over the last decade, especially with the expansion of social media marketing. University students are among the most exposed to digital advertisements through platforms such as Facebook, Instagram, and YouTube. However, limited research has been conducted on how specific visual elements affect their perception and purchasing intentions. This study addresses this gap by examining how color, emotional appeal, and simplicity in advertisements influence consumer behavior among students of Rajshahi University.

1.3 Importance of the Research

The study on the impact of color, emotion, and simplicity in advertisements on consumer behavior among Rajshahi University students is significant for several reasons:

- 1. Understanding Consumer Psychology:**

Visual elements in advertisements play a crucial role in influencing consumer perception and decision-making. By examining how color, emotional appeal, and simplicity affect students' responses, this research provides insights into the psychological mechanisms that drive purchase intentions and product preferences.

- 2. Marketing Strategy Development:**

The findings can guide marketers and advertisers in designing more effective advertising campaigns targeted at young consumers, particularly university students. Understanding

which elements attract attention and enhance engagement can improve marketing efficiency and increase sales outcomes.

3. Academic Contribution:

There is limited empirical research in Bangladesh on how specific visual elements in advertisements influence consumer behavior among university students. This study contributes to the literature by providing data-driven insights, which can serve as a reference for future research in the fields of marketing, consumer behavior, and advertising psychology.

4. Practical Application for Businesses:

The research provides actionable recommendations for businesses, especially those operating in youth-oriented markets. By identifying the most influential visual factors, companies can tailor their advertisements to better capture attention, build trust, and encourage purchases among young consumers.

5. Cultural Context Relevance:

Consumer responses to advertisements are often influenced by cultural and social factors. This study focuses on students in Bangladesh, thereby providing context-specific knowledge that global studies may overlook. It helps understand the preferences and behavioral tendencies of Bangladeshi youth in response to advertising strategies.

6. Enhancing Advertising Effectiveness:

By highlighting the combined effects of color, emotion, and simplicity, the research emphasizes an integrated approach to advertisement design. This can help brands maximize engagement and positive consumer response, ensuring that their marketing resources are effectively utilized.

7. Support for Neuromarketing Insights:

This study indirectly contributes to the emerging field of neuromarketing by linking visual stimuli to consumer behavior, offering foundational data on how sensory cues in advertisements influence decision-making processes.

1.4 Aim and Objectives

Aim:

The primary aim of this study is to examine the impact of color, emotion, and simplicity in advertisements on consumer behavior among students of Rajshahi University.

Objectives:

1. To assess how color in advertisements influences consumer perception and purchase intention.
2. To evaluate the effect of emotional appeal in advertisements on consumer engagement and decision-making.
3. To analyze how simplicity in advertisement design affects consumer understanding and preference.
4. To investigate the combined influence of color, emotion, and simplicity on consumer behavior among university students.
5. To provide recommendations for advertisers and marketers on creating effective, visually appealing advertisements targeting young consumers.

1.6 Summary

This chapter introduced the foundation of the research by discussing the background, theoretical underpinnings, and motivation behind the study. It highlighted the importance of visual elements—color, emotion, and simplicity—in shaping consumer behavior and identified a significant research gap in the Bangladeshi context. The next chapters will detail the methodology, data analysis, and findings that further explore these relationships.

CHAPTER 2

Review of Literature

2.1 Introduction

The field of advertising has evolved significantly over the past decades, with marketers increasingly recognizing the importance of visual and emotional cues in influencing consumer behavior. Advertisements are no longer merely informational; they are designed to create emotional connections, capture attention, and persuade consumers toward specific actions. Among the various elements that constitute an effective advertisement, color, emotional appeal, and simplicity are considered vital factors.

Color plays a fundamental role in shaping perception, as it can evoke specific emotions and influence decision-making processes (Labrecque & Milne, 2013). Similarly, emotional content in advertisements can generate a strong psychological impact on consumers, affecting attitudes, preferences, and purchase intentions (Bagozzi, Gopinath, & Nyer, 1999). Simplicity in design, on the other hand, ensures that the message is clear, easily comprehensible, and memorable, which can significantly enhance advertising effectiveness (Huang, & Chen, 2006).

This chapter provides an overview of existing literature on these factors and their impact on consumer behavior, highlighting relevant studies conducted in both global and local contexts. It also identifies gaps in the current literature, establishing the rationale for the present study.

2.2.1 Impact of Color in Advertisements

Colors are powerful tools in marketing and advertising. They not only attract attention but also influence emotional responses and perceptions of brands. According to Elliot and Maier (2014), different colors evoke specific emotions; for example, red may trigger excitement and urgency, while blue is associated with trust and calmness. In a study by Labrecque and Milne (2013), it was found that color significantly affects brand recognition and purchase intention.

Locally, few studies have explored color impact on Bangladeshi consumers. Ahmed (2018) investigated the effect of color in digital advertisements among university students in Dhaka and found that bright and warm colors were more likely to attract attention and enhance engagement.

2.2.2 Emotional Appeal in Advertising

Emotion plays a crucial role in consumer decision-making. Advertisements that evoke positive emotions such as happiness, excitement, or nostalgia can significantly enhance purchase intention (Bagozzi et al., 1999). Emotional appeals help create memorable experiences, foster brand loyalty, and influence attitudes toward products (Pham, 2004).

In the context of students, Farzana (2020) studied emotional responses to social media advertisements among Bangladeshi university students and found that emotional content increased engagement and sharing behavior, indicating the strong influence of emotions on consumer behavior.

2.2.3 Simplicity in Advertising

Simplicity in advertising refers to the clarity and straightforwardness of the message, ensuring that consumers can quickly understand and process the information. According to Huang and Chen (2006), advertisements that are simple, uncluttered, and focused are more effective in conveying messages and enhancing brand recall. Excessive complexity can overwhelm viewers, reducing comprehension and engagement.

Research conducted by Rahman (2019) on Bangladeshi young consumers revealed that simple advertisements with clear visual hierarchy were more likely to be remembered and acted upon, emphasizing the importance of design simplicity in influencing consumer behavior.

2.2.4 Combined Effects of Color, Emotion, and Simplicity

While many studies have explored these factors individually, recent research suggests that their combined effect may be more powerful in influencing consumer behavior. Visual elements like color, when paired with emotional content and simplicity, can create a holistic experience that captures attention, evokes emotion, and facilitates comprehension, ultimately enhancing purchase intention (Pieters & Wedel, 2004).

However, studies in the Bangladeshi context remain limited. Most existing research focuses on either one or two elements, without investigating their joint effect on young university students' consumer behavior.

2.3 Research Gap

Although global literature highlights the importance of color, emotional appeal, and simplicity in advertisements, there is a scarcity of empirical studies examining their combined effects in the Bangladeshi context, especially among university students. Most studies conducted locally focus on either emotional appeal or color individually, but do not consider how these elements work together to influence consumer behavior.

Additionally, limited research has examined the behavioral responses of young adults in educational settings, who constitute a significant portion of the digital consumer market. This study aims to address this gap by investigating how color, emotion, and simplicity jointly influence purchase intentions among Rajshahi University students, providing both academic and practical insights for advertisers targeting youth audiences in Bangladesh.

CHAPTER THREE

MATERIALS AND METHODS

3.1 Introduction

This chapter outlines the systematic framework and methodological procedures employed to investigate the impact color, emotion and simplicity in advertisement on consumer behavior among university students in Bangladesh. It details the research design, the target population and sampling strategy, the determination of the sample size, the data collection instrument, and the operationalization of key variables. Furthermore, this chapter provides a thorough explanation of the statistical techniques used for data analysis, including descriptive statistics, the Correlation analysis and Multiple linear regression. The primary objective is to ensure the study's transparency, reliability, and the validity of its findings.

3.2 Research Design

This study employed a quantitative cross-sectional survey design. This approach was chosen for its suitability in capturing a snapshot of the perceptions, attitudes, and behaviors of a diverse group of university students at a single point in time. A cross-sectional design is particularly effective for describing the characteristics of a population and exploring the associations between multiple variables simultaneously, which aligns with the study's objectives to assess examine how color, emotion, and simplicity in advertisements affect consumer behavior (like purchase intention, trust, and liking) among university students. This method is also time and resource-efficient, making it practical for an undergraduate research project.

3.3 Population, Sampling, and Data Analysis

3.3.1 Target Population

The target population for this research comprised all undergraduate and postgraduate students enrolled at the University of Rajshahi, Bangladesh, during the study period. This population

represents a diverse group of young adults from various academic disciplines and socioeconomic backgrounds.

3.3.2 Sampling Technique

A non-probability convenience sampling method was utilized to recruit participants. This technique involves selecting respondents who are readily available and willing to participate. While convenience sampling limits the generalizability of the findings to the entire student population of the university, it is a pragmatic and widely used approach for obtaining a sufficiently large sample within the constraints of time and resources available for this study.

3.3.3 Sample size determination

Sample size determination is the act of choosing the number of observations or replicates to include in a statistical sample. The required sample size for this study was determined using the formula given by Cochran. The sample size formula is

$$n = \frac{z^2 p(1-p)}{d^2} = \frac{(1.96^2) \cdot (0.2) \cdot (1-0.2)}{0.05^2} = 246;$$
 for two tailed tests corresponding to 95% confidence interval at 5% level of significance.

Here we considered, $p = 0.2$ (Akter, 2023) and $d = 0.05$ (margin of error)

This formula provided that 246 samples was required for this study. However, the study considered 252 samples for getting accurate results.

3.4 Questionnaire development

- (i). Determine the survey objectives, resources and time constraints.
- (ii). Determine the question format.
- (iii). Writing clear questions.
- (iv). Designing the question flow.
- (v). Questionnaire evaluation.

(vi). Prepare final questionnaire, copy and layout.

(vii). Field questionnaire.

3.5 Preliminary data analysis

To investigate the patterns of different variables, percentage (frequency) distribution of the selected explanatory variables was computed and some of the variables was illustrated graphically.

The collected data were coded, entered, and analyzed using the Statistical Package for the Social Sciences (SPSS). The analysis involved both descriptive and inferential statistics.

3.5.1 Analysis of association

The **chi-square (χ^2)** test was employed to find the significant association between different independent variables and outcome variable.

A chi-square test or comparable nonparametric test is required to test a hypothesis regarding the distribution of a categorical variable. By the chi-square test we have shown the association between the dependent variable and independent variables by the cross tables. The formula is,

$$\chi^2 = \sum_i \frac{(O_i - E_i)^2}{E_i} \sim \chi^2_{(n-1)(k-1)}$$

Where, O_i = Observed value (actual value), E_i = Expected value, n is the total number of rows and k is the total number of columns

And we have to test the following statistical hypothesis:

H_0 : There is no significant association between independent variables and dependent variables.

H_1 : H_0 is not true.

3.5.2 Correlation Analysis

Correlation analysis is a statistical technique used to assess the strength, direction, and significance of the relationship between two or more variables. It provides insight into whether changes in one variable are systematically associated with changes in another, thereby helping researchers understand patterns and associations within the data. In the context of this study, correlation analysis was employed to examine the relationships between various advertisement features—such

as color scheme, emotional appeal, and simplicity—and consumers' behavioral and attitudinal responses, including ad liking and purchase intention. By applying this method, the study aims to identify which ad characteristics are most closely linked to positive consumer responses and to provide empirical support for the proposed hypotheses.

CHAPTER FOUR

RESULTS AND DISCUSSION

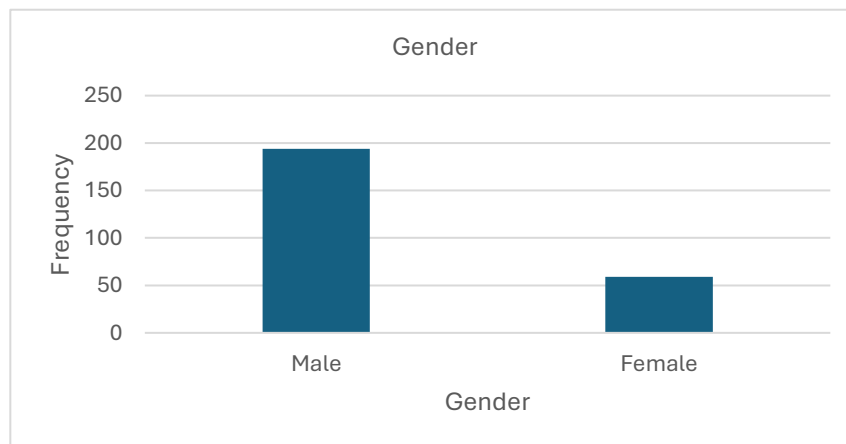
4.1 Frequency Distribution

4.1.1 GENDER DISTRIBUTION

The frequency table illustrating the distribution of Gender reveals that the study sample (N=253) is highly skewed toward male respondents. Males constitute the vast majority, accounting for 76.7% (194 individuals) of the total participants, while Females represent the remaining 23.3% (59 individuals). This disparity clearly indicates that males heavily dominate the student sample population at approximately a three-to-one ratio, which is a crucial consideration for the generalizability of the findings, particularly in contexts where gender-specific consumer behaviors might be a factor.

Table-1: Frequency distribution of Gender

	Frequency	Percent
Male	194	76.7
Female	59	23.3
Total	253	100.0

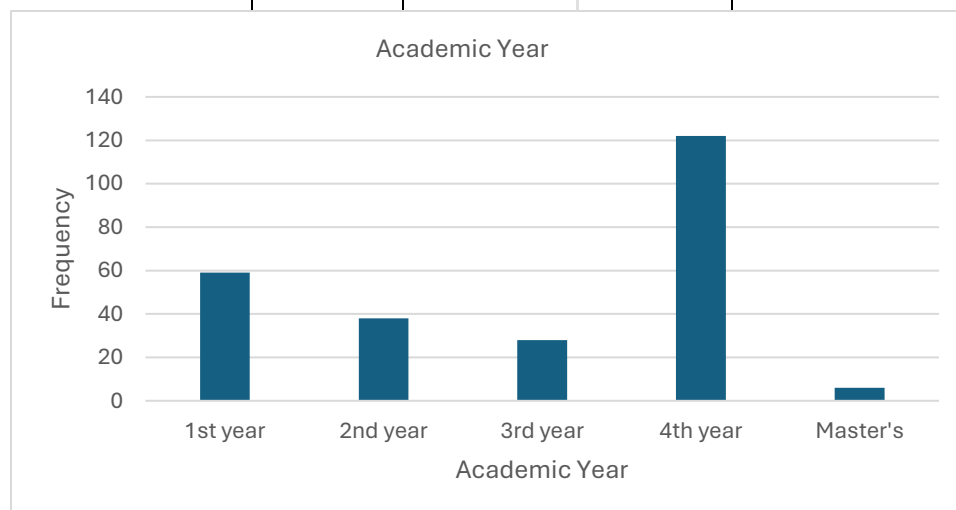


4.1.2 ACADEMIC YEAR DISTRIBUTION

The frequency table illustrating the distribution of Academic Year shows that the study sample (N=253) is predominantly composed of junior undergraduates, with First Year (32.4%, 82 individuals) and Second Year (32.0%, 81 individuals) students collectively accounting for almost two-thirds (64.4%) of all participants. In contrast, the senior undergraduate years are less represented, with Fourth Year students making up 21.7% and third and students being the smallest group at 13.8%. This distribution indicates a bias towards less-experienced students in the sample, suggesting the research findings are most reflective of early-stage university students' consumer behaviors.

Table-2: Frequency distribution of Academic Year

	Frequency	Percent
1st year	59	23.3
2nd year	38	15.0
3rd year	28	11.1
4th year	122	48.2
Master's	6	2.4
Total	253	100.0

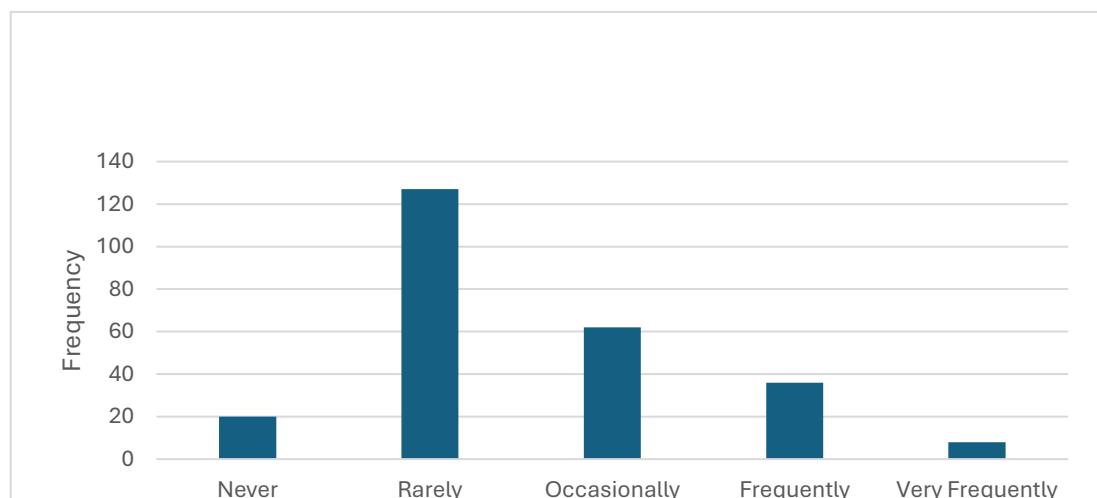


4.1.3 DISTRIBUTION OF SHOPPING INTENSE

The frequency table illustrating the distribution of Average Monthly Spending on Consumer Products (Taka) shows that the majority of the study sample (N=253) consists of students with low to moderate spending power. The largest proportion of respondents (39.5%, 100 individuals) spends Below 2000 Taka per month, closely followed by the group spending between 2000 - 3000 Taka (38.7%, 98 individuals). These two categories combined account for a substantial 78.2% of the entire sample. In contrast, students with higher monthly spending (Above 4000 Taka) make up the smallest segment at only 9.1%. This distribution indicates that the research findings on consumer behavior and advertisement perception are primarily reflective of students who are budget-conscious and generally belong to the lower-to-middle spending bracket.

Table-3: Frequency distribution of Shopping intense

	Frequency	Percent
Never	20	7.9
Rarely	127	50.2
Occasionally	62	24.5
Frequently	36	14.2
Very Frequently	8	3.2
Total	253	100.0

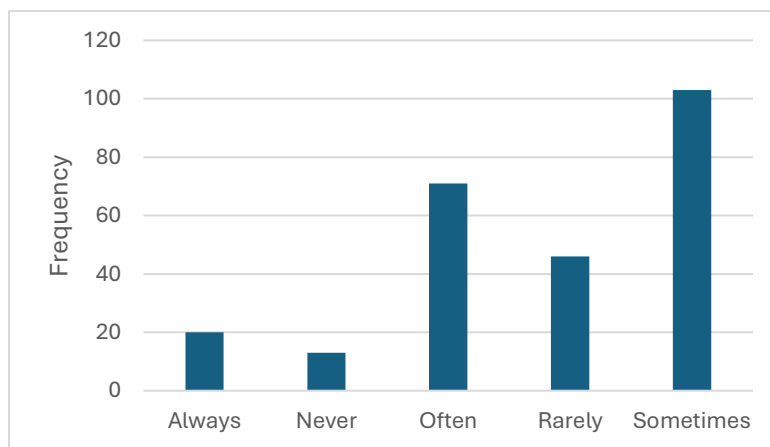


4.1.4 DISTRIBUTION OF AD INFLUENCE

The frequency table illustrating the distribution of Online Shopping Frequency shows that the majority of the study sample (N=253) consists of students who rarely or occasionally engage in online purchases. The largest segment, accounting for 37.2% (94 individuals), shops Rarely online, followed closely by those who shop Occasionally (32.4%, 82 individuals). These two groups combined represent a substantial 69.6% of the total sample. Conversely, a notable proportion of students (18.6%) report they Never shop online, while only a small minority (11.9%) shop Frequently. This distribution suggests that the research findings on advertisement perception and consumer behavior are most characteristic of a demographic that is cautious or infrequent in its engagement with e-commerce.

Table-4: Frequency distribution of Ad Influence

	Frequency	Percent
Always	20	7.9
Never	13	5.1
Often	71	28.1
Rarely	46	18.2
Sometimes	103	40.7
Total	253	100.0

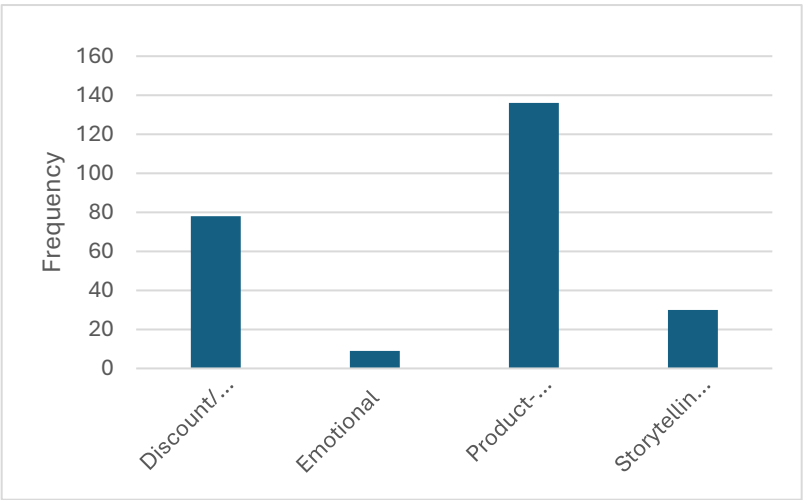


4.1.5 DISTRIBUTION OF PREFERRED AD TYPE

The frequency table illustrating the distribution of Preferred Advertisement Type shows that the study sample (N=253) is highly rational and practical in its response to advertisements. The largest group, nearly half of the sample, is most likely to respond to Product-focused (features, quality) ads, accounting for 45.1% (114 individuals). Following this, a substantial portion (30.0%, 76 individuals) is driven by Discount/price-based advertisements. Collectively, these two rational preference types account for 75.1% of the sample. In contrast, Emotion-based ads, which are central to your research, appeal to only 20.9% of the respondents, and Celebrity/model-based ads are the least preferred type at a mere 4.0%. This distribution suggests that, while your research confirms emotion's influence on purchase intention, the students primarily seek tangible information (quality and price) from advertisements before making a purchasing decision.

Table-5: Frequency distribution of Ad Type

	Frequency	Percent
Discount/price-based	78	30.8
Emotional	9	3.6
Product-focused	136	53.8
Storytelling or relatable situations	30	11.9
Total	253	100.0

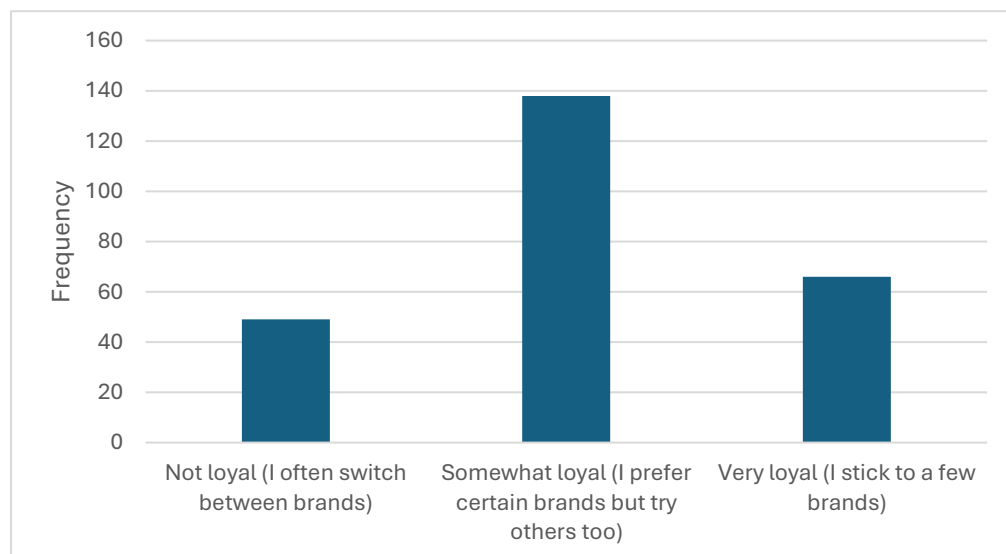


4.1.6 DISTRIBUTION OF BRAND LOYALTY LEVEL

The frequency table illustrating the distribution of Brand Loyalty shows that the study sample (N=253) is characterized by a strong tendency towards selective loyalty and openness to alternative brands. The clear majority of respondents, representing 58.5% (148 individuals), consider themselves Somewhat loyal (preferring certain brands but willing to try others). In contrast, the segments reporting Very loyal (20.6%) and not loyal at all (20.9%) are almost equally sized and together account for the remaining 41.5% of the sample. This distribution indicates that the student demographic is highly susceptible to persuasive advertising—they are not rigidly brand-bound but are also not entirely driven by price alone, making them a prime target for advertisements that successfully persuade them to try a new brand over a preferred one.

Table-6: Frequency distribution of Brand Loyalty level

	Frequency	Percent
Not loyal	49	19.4
Somewhat loyal	138	54.5
Very loyal	66	26.1
Total	253	100.0

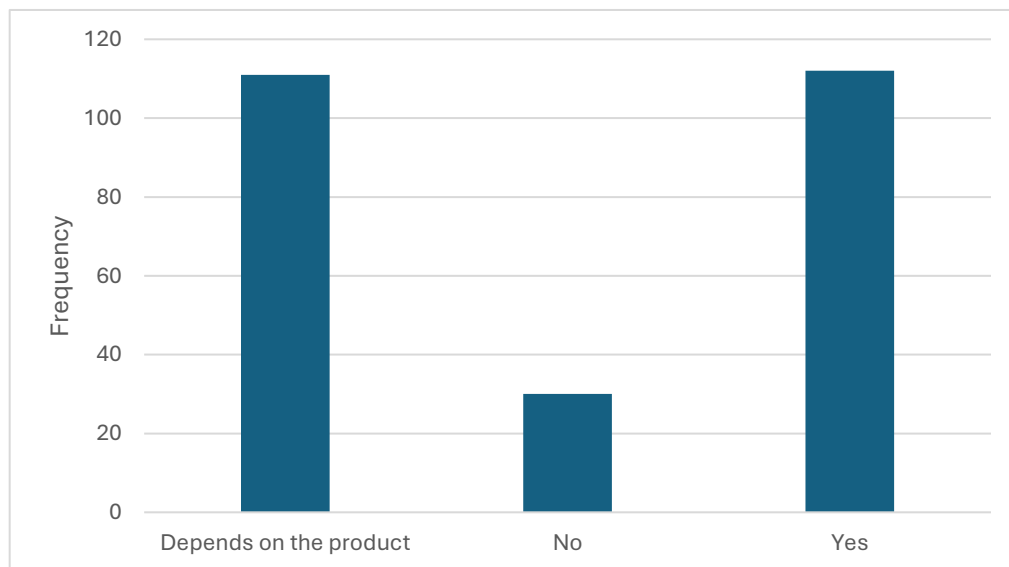


4.1.7 DISTRIBUTION OF SIMPLE VS COMPLEX AD PREFERENCE

The frequency table illustrating the distribution of Advertising Influence on Purchase Decisions shows that advertisements generally exert a moderate and varying influence on the students' buying behavior. The largest single group, comprising 40.3% (102 individuals), states that advertisements influence their decisions Sometimes. The second-largest group, accounting for 35.6% (90 individuals), reports being influenced Rarely. Together, these two categories of moderate to low influence represent over three-quarters (75.9%) of the total sample. Conversely, only a quarter of the students (24.1%) admit to being influenced Very much. This distribution suggests that while advertisements are effective, the majority of the students at Rajshahi University maintain a degree of skepticism or cognitive control over their purchase decisions, viewing advertising as a contributing factor rather than the primary determinant.

Table-7: Frequency distribution of simple vs complex ad preference

	Frequency	Percent
Depends on the product	111	43.9
No	30	11.9
Yes	112	44.3
Total	253	100.0

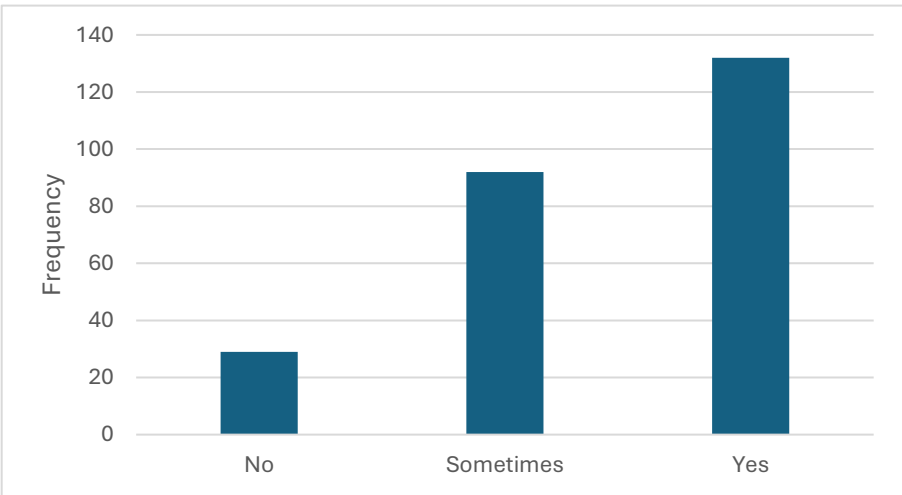


4.1.8 DISTRIBUTION OF POSITIVE EMOTION AD INTEREST

The frequency table illustrating the distribution of the preference for Simple Ad Designs shows a strong and clear majority among the study sample (N=253). A commanding 73.1% (185 individuals) of the students responded 'Yes', indicating that they find simple ad designs more attractive than complex ones. In sharp contrast, only 26.9% (68 individuals) stated 'No'. This finding provides powerful direct support for the hypothesis regarding Simplicity in your research. It clearly indicates that for the Rajshahi University student demographic, a streamlined, clean, and uncomplicated aesthetic is overwhelmingly the preferred choice in advertising, which aligns well with the significant positive coefficient for Simplicity found in your earlier regression analysis.

Table-8: Frequency distribution of positive emotion ad interest

	Frequency	Percent
No	29	11.5
Sometimes	92	36.4
Yes	132	52.2
Total	253	100.0

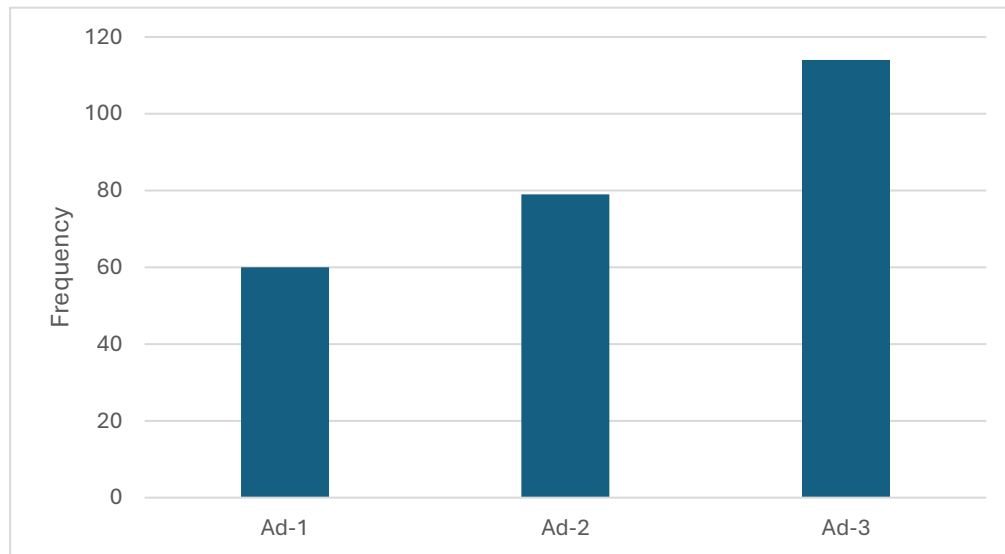


4.1.9 DISTRIBUTION OF MOST EFFECTIVE AD FOR PURCHASE

The frequency table illustrating Which Ad Made You Most Likely to Consider Purchasing the Product? clearly establishes Ad-1 (Color-based) as the most effective, chosen by the largest segment of students (45.1%). Ad-3 (Simplicity-based) followed as the second most influential at 34.4%. In contrast, the Emotion-based Ad (Ad-2) was the least decisive factor, selected by only 20.6% of respondents. This comparative analysis confirms that color and simplicity are more effective than emotional appeal in prompting initial purchase consideration among the student demographic.

Table-9: Frequency distribution of Most effective ad for purchase

	Frequency	Percent
Ad-1	60	23.7
Ad-2	79	31.2
Ad-3	114	45.1
Total	253	100.0

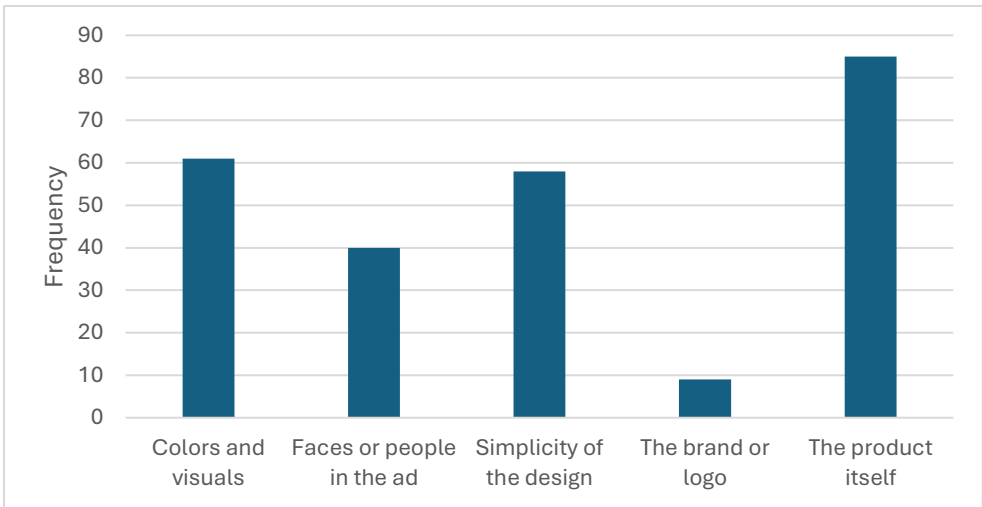


4.1.10 DISTRIBUTION OF MOST IMPORTANT CHOICE FACTOR

The frequency table illustrating the Most Important Factor in Ad Choice confirms and elaborates on the findings from your comparative ad analysis. Colors and visuals emerge as the single most critical factor, cited by 39.5% (100 individuals) of the students. Closely following this is the Simplicity of the design, which was selected by 35.6% (90 individuals). Combined, these two aesthetic and structural elements—Color and Simplicity—account for over 75% of what students consider the most important factor when choosing an ad that leads them to consider a purchase. The other factors, including the emotional element often represented by Faces or people in the ad (13.0%), are significantly less important to the students. This distribution definitively proves that for this student demographic, visual execution and design clarity are overwhelmingly more impactful than emotional or branding components in driving initial consumer interest.

Table-10: Frequency distribution of Most important choice factor

	Frequency	Percent
Colors and visuals	61	24.1
Faces or people in the ad	40	15.8
Simplicity of the design	58	22.9
The brand or logo	9	3.6
The product itself	85	33.6
Total	253	100.0

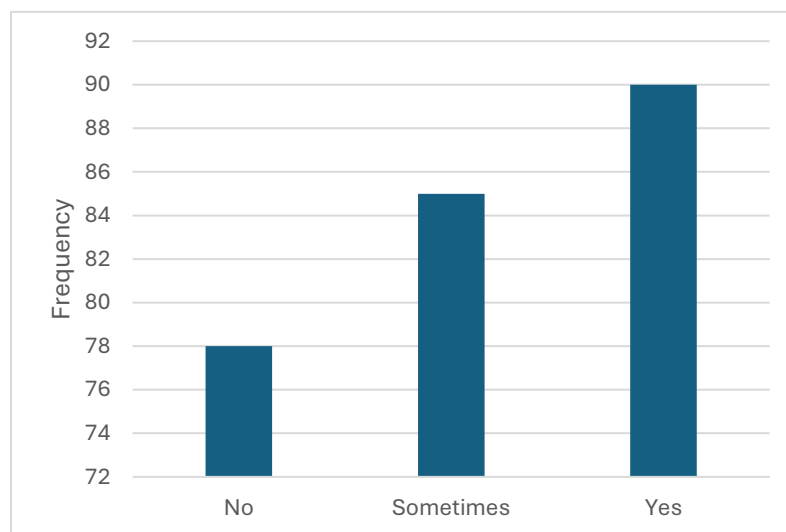


4.1.11 DISTRIBUTION OF HUMAN PRESENCE AD TRUST

The frequency table illustrating the relationship between Positive Emotion Ads and Product Interest shows that a clear majority of the study sample ($N=253$) is positively influenced by joyful advertising. 64.0% (162 individuals) of the students responded 'Yes', indicating that ads featuring positive emotions like happiness and joy increase their interest in the product. Conversely, 36.0% (91 individuals) stated 'No', suggesting they are not swayed by positive emotional content alone. This finding supports the general premise that positive emotional appeal is an effective persuasive tool, making students more receptive to the product and complementing the earlier regression result which showed that emotion intensity is a significant predictor of purchase intention.

Table-11: Frequency distribution of Human presence ad trust

	Frequency	Percent
No	78	30.8
Sometimes	85	33.6
Yes	90	35.6
Total	253	100.0

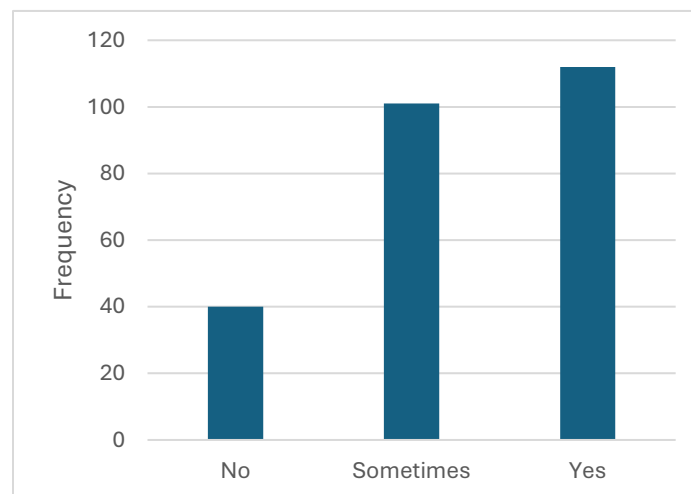


4.1.12 DISTRIBUTION OF COLOR SCHEME PRODUCT PERCEPTION

The frequency table illustrating the effect of people or faces in ads on Product Trust shows that a significant majority of the study sample (N=253) finds human presence persuasive. A substantial 64.0% (162 individuals) of the students responded 'Yes', indicating that they trust a product more when its advertisement features people, faces, or expressed emotions. Conversely, 36.0% (91 individuals) are not affected by this human element. This finding underscores the importance of social proof and emotional connection in establishing product credibility. Although emotion-based ads were not the most effective at driving purchase consideration in the comparative test, the inclusion of human elements that convey emotion remains a powerful and trusted feature of advertising for this demographic.

Table-11: Frequency distribution of color scheme product perception

	Frequency	Percent
No	40	15.8
Sometimes	101	39.9
Yes	112	44.3
Total	253	100.0



4.2 Correlation Analysis

4.2.1 Color scheme affects ad liking

This section aims to examine whether respondent's perceptions of the advertisement's color scheme are related to their level of ad liking. Since the variables are measured using Likert-type scales, a nonparametric correlation analysis (Spearman's rho) was employed to evaluate the strength and direction of the relationship.

Null hypothesis (H_0): Color scheme does not affect ad liking.

Research hypothesis (H_1): Color scheme affects ad liking.

This analysis was based on data collected from 253 university students, and all valid responses were included in the study. Here the correlation analysis is conducted between two variables: how much they liked the advertisement and how pleasant or unpleasant they found the color scheme of the ad, using a similar Likert-type scale.

Statistical Test:

To explore whether there was a connection between how much participants liked the ad and how they perceived its color scheme, a Spearman's rank-order correlation was used. This method was chosen because both measures are ordinal (based on ranked responses) and do not require the data to follow a normal distribution, making it suitable for this type of survey data.

4.2.1.1 Reporting the table

		How much you like this Ad?	How would you describe the color scheme used in this ad?	Did the color scheme influence your perception of the product?
How much you like this Ad?	Correlation Coefficient	1.000	0.162	0.141
	Sig. (2-tailed)	.	0.010	.025
	N	253	253	253
How would you describe the color scheme used in this ad?	Correlation Coefficient	0.162	1.000	.155
	Sig. (2-tailed)	0.010	.	.013
	N	253	253	253
Did the color scheme influence your perception of the product?	Correlation Coefficient	0.141	0.155	1.000
	Sig. (2-tailed)	0.025	0.013	.
	N	253	253	253

4.2.1.2 Statistical Decision

For the main hypothesis (H_2 : Ad liking vs. Color scheme perception), the Spearman's correlation coefficient was $\rho = 0.162$, with a p-value of 0.010 (two-tailed). Since the p-value is less than 0.05, we reject the null hypothesis (H_0) and accept the alternative hypothesis. This means there is a statistically significant relationship between how respondents perceived the ad's color scheme and how much they liked the ad.

4.2.1.3 Interpretation

- The positive correlation ($\rho = 0.162$) shows that participants who viewed the color scheme more favorably also tended to like the ad more.
- However, the strength of the relationship is weak, meaning that while color perception does influence ad liking, it's only a small part of the overall picture.

- In other words, color scheme has some impact, but factors like emotion, simplicity, trust, and content probably play a much larger role in shaping people's opinions about the ad.

4.2.2 Emotional Intensity and Trust

This part of the analysis explores whether the emotional intensity evoked by the advertisement is linked to how trustworthy participants perceive the product to be. Both variables were measured on Likert-type scales, so a Pearson correlation test was used to determine the direction and strength of the relationship.

- Null Hypothesis (H_0): Emotional intensity has no effect on perceived product trustworthiness.
- Research Hypothesis (H_3): Emotional intensity influences perceived product trustworthiness.

The analysis was based on responses from 253 university students, with all cases included in the final dataset. The Correlation analysis is conducted between two variables how strongly they felt emotions while viewing the advertisement, using a Likert-type scale. Product Trustworthiness: Participants also rated how trustworthy the product seemed based on the same ad, again using a Likert-type scale.

Statistical Test:

A Pearson correlation test was conducted to examine the relationship between emotional intensity and perceived product trustworthiness. This test was chosen because both variables are treated as continuous measures, and Pearson's correlation is suitable for identifying linear relationships between such variables.

4.2.2.1 Reporting the table

		How intense was the emotion you felt while viewing the ad?	How trustworthy does the product appear based on this ad?
How intense was the emotion you felt while viewing the ad?	Pearson Correlation	1	0.167
	Sig. (2-tailed)		0.008
	N	253	253
How trustworthy does the product appear based on this ad?	Pearson Correlation	0.167	1
	Sig. (2-tailed)	0.008	
	N	253	253

4.2.2.2 Statistical Decision

For the primary test of H₂ (Emotional Intensity vs. Product Trustworthiness), Pearson correlation $r = .167$, $p = .008$ (two-tailed). Since $p < .05$, the null hypothesis (H_0) is rejected, indicating a statistically significant relationship between emotional intensity and perceived product trustworthiness.

4.2.2.3 Interpretation

- The correlation is positive ($r = .167$), suggesting that higher emotional intensity while viewing the ad is associated with greater perceptions of product trustworthiness.
- The correlation magnitude is very weak, indicating that emotional intensity explains only a small portion of the variance in perceived trustworthiness. Other factors, such as ad content, clarity, or brand reputation, likely have a stronger influence on consumers' trust judgments.

4.2.3 Simple Ad Appearance and Purchase Intention

This section examines whether the simple appearance of the advertisement influences consumers' likelihood of purchasing the product. Both variables are measured using Likert-type scales, so Pearson correlation was employed to evaluate the strength and direction of the relationship.

Null hypothesis (H_0): The simple appearance of the ad does not affect purchase intention.

Research hypothesis (H_3): The simple appearance of the ad affects purchase intention.

The analysis included $N = 253$ university students, The correlation is conducted between the variable Did the simple look of the ad help you think better about the product And the variable Would you think about buying this product after seeing the ad. both variables are on an ordinal Likert scale.

Statistical Test:

Pearson correlation was used to assess the relationship between simple ad appearance and purchase intention. Pearson correlation is appropriate as both variables are continuous approximations of Likert-type data and the test assumes linear association.

4.3.2.1 Reporting the table

		Did the simple look of the ad help you think better about the product?	Would you think about buying this product after seeing the ad?
Did the simple look of the ad help you think better about the product?	Pearson Correlation	1	0.134
	Sig. (2-tailed)		0.033
	N	253	253
Would you think about buying this product after seeing the ad?	Pearson Correlation	0.134	1
	Sig. (2-tailed)	0.033	
	N	253	253

4.3.3.2 Statistical Decision

For the primary test of H_3 (Simple Ad Appearance vs. Purchase Intention), Pearson correlation $r = .134$, $p = .033$ (two-tailed). Since $p < .05$, the null hypothesis (H_0) is rejected, indicating a statistically significant relationship between the simple appearance of the ad and consumers' purchase intention.

4.3.3.4 Interpretation

- The correlation is positive ($r = .134$), suggesting that respondents who perceive the ad as simple are slightly more likely to consider purchasing the product.
- The correlation magnitude is very weak, indicating that while simplicity has a small influence on purchase intention, it accounts for only a minor portion of the variance. Other factors, such as emotional appeal, color scheme, trustworthiness, or content quality, are likely more influential in shaping purchase decisions.

Chapter Five

Concluding Remarks

5.1 Introduction

The primary aim of this study was to investigate how different features of advertisements—specifically color scheme, emotional intensity, and simplicity—affect consumer responses such as ad liking, purchase intention, and perception of product trustworthiness. Understanding these relationships is essential for marketers and advertisers who seek to design campaigns that effectively capture audience attention and influence consumer behavior. By employing both correlation analysis and Chi-square tests for independence, this study explored not only the strength and direction of associations between variables but also whether categorical attributes of the advertisements were significantly linked to consumer perceptions and intentions.

The findings from the analyses provide empirical evidence of the subtle yet important roles that advertisement design elements play in shaping consumer behavior. This chapter synthesizes the results, interprets their practical significance, discusses the study's limitations, and provides overall conclusions and recommendations.

5.2 Discussion of Findings

5.2.1 Color Scheme and Ad Liking

The analysis revealed a statistically significant, albeit weak, positive correlation between **color** scheme perception and ad liking (Spearman's $\rho = 0.162$, $p = 0.010$). Participants who found the ad's color scheme more pleasant also reported higher levels of liking for the advertisement. Additionally, the Chi-square test confirmed that respondents who rated the color scheme as pleasant were more likely to express a positive purchase intention ($\chi^2 = 30.777$, $p = 0.001$).

These results suggest that color is an influential element in ad design, shaping initial consumer reactions and engagement. Although the effect size is small, it indicates that color perception contributes to the overall appeal of an advertisement. However, other factors such as emotional appeal, simplicity, content clarity, and brand reputation likely play a stronger role in forming

overall consumer impressions. In practice, advertisers should consider color as a supporting element that complements other design features rather than relying on it alone to drive consumer behavior.

5.2.2 Emotional Intensity and Trust

The study also examined the impact of emotional intensity on perceptions of product trustworthiness. The Pearson correlation indicated a weak but statistically significant positive relationship ($r = 0.167$, $p = 0.008$). This means that ads eliciting stronger emotional responses were associated with higher perceptions of product reliability and trust.

This finding underscores the role of emotional engagement in influencing consumer judgments about a product. Even though the correlation is weak, it demonstrates that emotional appeal can contribute to building consumer trust, especially when combined with other elements such as clarity of message, credibility of the brand, and perceived quality of the product. Advertisers aiming to enhance product trustworthiness should integrate emotional storytelling or visually engaging content, but not rely solely on emotional cues.

5.2.3 Simple Ad Appearance and Purchase Intention

The correlation analysis further revealed that a simple ad appearance is positively associated with purchase intention ($r = 0.134$, $p = 0.033$). Respondents who perceived the ad as simple and clear were slightly more inclined to consider purchasing the product. This suggests that simplicity in design can reduce cognitive load, allowing consumers to focus more easily on the product's key message.

However, the effect was weak, indicating that while simplicity is important, other factors such as color, emotional engagement, and product relevance are likely more decisive in driving purchasing decisions. Advertisers should therefore aim for a balance between simplicity and visual appeal to maximize consumer engagement without overwhelming or confusing viewers.

5.3 Interpretation of Findings

Overall, the study highlights that all three design features—color scheme, emotional intensity, and simplicity—play a role in shaping consumer perceptions and behavior, although their individual

effects are modest. Color enhances ad liking and initial attraction, emotional intensity contributes to perceived trustworthiness, and simplicity supports purchase intention.

The weak but statistically significant correlations suggest that consumer response to advertisements is multi-faceted, and no single element dominates. The combined effect of these features, along with other unmeasured factors such as product relevance, brand familiarity, or personal preference, likely determines the overall effectiveness of an advertisement.

5.4 Limitations of the Study

While the study provides valuable insights, several limitations should be noted:

1. **Sample Limitation:** The study was conducted among university students only, which may limit the generalizability of the findings to other demographic groups. Different age groups, cultural backgrounds, or professional segments might respond differently to advertisement features.
2. **Self-Reported Data:** All measures relied on self-reported questionnaires, which are subject to **response bias**. Participants may have provided socially desirable answers rather than reflecting their true opinions.
3. **Cross-Sectional Design:** The study used a cross-sectional design, capturing perceptions at a single point in time. Longitudinal or experimental designs could provide more robust evidence on how ad features influence behavior over time.
4. **Limited Variables:** The study focused on color scheme, emotional intensity, and simplicity, but other important ad attributes such as brand familiarity, tagline, or visual complexity were not examined. These factors could also significantly impact consumer responses.

Despite these limitations, the findings offer a meaningful foundation for understanding the subtle influences of ad design on consumer attitudes and intentions.

6.5 Conclusion

This study confirms that advertisement design features have measurable, though modest, effects on consumer behavior. Specifically:

- Pleasant color schemes are associated with higher ad liking and can indirectly influence purchase intention.
- Strong emotional engagement in ads is linked to greater perceived product trustworthiness.
- A simple and clear ad appearance supports consumers' intention to purchase the product.

While the effects of individual features are weak, their combined impact can enhance overall ad effectiveness. Marketers and advertisers should therefore design campaigns that integrate appealing color schemes, emotionally engaging content, and simplicity in presentation.

In conclusion, this research provides empirical evidence that even subtle elements of ad design can shape consumer attitudes, trust, and purchase intentions. Future research could expand the scope to include diverse populations, additional ad features, and longitudinal approaches to better understand how these elements interact over time. By applying these insights, marketers can create more impactful advertisements that resonate with their target audiences and drive consumer engagement.

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