

The Impact of the Dynamic Realism of Posters on Consumer Purchases

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Abstract: This study aims to explore the impact of dynamic realism in poster advertisements on consumer purchasing behavior. A total of 200 participants were divided into two groups and exposed to two distinct sets of Brand A's posters, one incorporating dynamic realism and the other devoid of it. Participants were subsequently asked to evaluate the attractiveness of the posters, their emotional response towards the product, and their likelihood of purchasing it. The data collected was analyzed using an independent sample t-test. The findings revealed that posters imbued with dynamic realism were perceived as significantly more attractive, elicited more positive emotions, and exerted a stronger influence on participants' purchasing decisions compared to those without dynamic realism. These results underscore the potential of dynamic realism as a potent tool in enhancing the efficacy of poster advertisements in swaying consumer purchasing behavior. The study contributes to the growing body of literature on the role of dynamic realism in marketing and offers valuable insights for marketers and advertisers seeking to optimize their advertising strategies.

Keywords: dynamic realism, posters, attractiveness, emotional response, purchase behavior

1. Introduction

Visual elements in advertising have been extensively researched, with a significant focus on the role of realism. Smith and Anderson [1] demonstrated that visual realism significantly influences consumer attitudes and purchase intentions, with high visual realism perceived as more credible. Similarly, Johnson et al. [2] found that visual realism can elicit stronger emotional responses, influencing purchase intentions.

Dynamic elements in advertising have also been studied. Williams and Roberts [3] suggested that dynamic elements in poster design can generate positive emotions among consumers, enhancing engagement. Thompson et al. [4] found that dynamic elements enhance brand recall, influencing purchase decisions.

Research by Davis and Miller [5] and Lee and Kim [6] showed that well-designed posters significantly influence consumer purchases. However, gaps remain in understanding the combined influence of visual realism and dynamic elements on consumer purchases. This study addresses these gaps, building upon previous research [1-6] and introducing new elements to the study of the impact of poster design on consumer purchases. In order to make up for the deficiency of the former to some extent.

The study proposes three hypotheses:

H1: Posters with dynamic realism are more attractive to consumers.

H2: Posters with dynamic realism create more positive emotions for consumers.

H3: Posters with dynamic realism have a greater impact on consumers' purchasing decisions.

These hypotheses aim to explore the potential of dynamic realism in enhancing the effectiveness of poster campaigns, offering significant implications for marketers and advertisers.

2. Methodology

2.1 Research Design

The study employs a quantitative research design, utilizing a controlled experimental approach to investigate the influence of dynamic realism in posters on consumer behavior. Two distinct groups of participants were exposed to different versions of Brand A's posters, one incorporating dynamic realism and the other without. The controlled environment ensured minimal external interference, thereby enhancing the validity of the findings.

2.2 Data Collection Methods

Data was collected using self-administered online questionnaires, a method that ensures a broad reach and efficient data collection. The questionnaires were designed to capture nuanced perceptions of dynamic realism in posters and its subsequent influence on purchase decisions. Participants were briefed about the study's purpose and assured of the confidentiality of their responses.

2.3 Sampling Design

A diverse participant pool of 200 individuals, aged between 18 and 60, were randomly assigned to either of the two groups. A stratified random sampling method was employed, dividing the population into homogeneous subgroups based on relevant demographic factors, and subsequently selecting a simple random sample from each subgroup. This method ensured comprehensive representation across various demographics. The expected contact rate was set at 75%, accounting for potential non-responses or incomplete questionnaires.

2.4 Data Analysis Methods

Upon completion of data collection, the responses were systematically input into the Statistical Package for the Social Sciences (SPSS) for rigorous analysis. An independent sample T-test was conducted, comparing the differences in each dependent variable (Y1, Y2, Y3) between the two groups. The significance level (α) was set at 0.05, and all tests were two-tailed, ensuring a robust and comprehensive analysis of the data.

2.5 Research Materials

The study utilized two sets of posters promoting Brand A's drinks, each designed with a distinct level of dynamic realism. The first set featured a static depiction of the product, while the second set incorporated dynamic realism, characterized by spray around the bottle and suspended fruit slices, creating a sense of movement and vitality.

2.6 Questionnaire Content

The questionnaire, designed using a Likert scale, included questions that directly corresponded to the study's hypotheses and were categorized into three aspects: Y1 (attractiveness), Y2 (emotions), and Y3 (purchase decisions).

For Y1, participants rated their level of agreement with the statement "This poster is attractive to me" on a scale of 1 (most disagree) to 7 (most agree). For Y2, participants responded to the statements "After looking at the poster, how do you feel about the taste of this drink", "After looking at the poster, do you think it is interesting", "After looking at the poster, would you imagine that this drink is juicy", and "After looking at the poster, would you like to drink this beverage", rating their agreement on a scale of 1 to 7. For Y3, participants rated their agreement with the statement "After looking at the poster, what is the likelihood of you purchasing the beverage on the poster" on a scale of 1 to 7.

This design allowed for the capture of nuanced perceptions of the posters' attractiveness, the elicited emotions, and the likelihood of purchasing the product.

3. Results and discussion

3.1 Presentation of the data and statistical analysis

As shown in Figure 1, there are 92 males and 108 females among the respondents

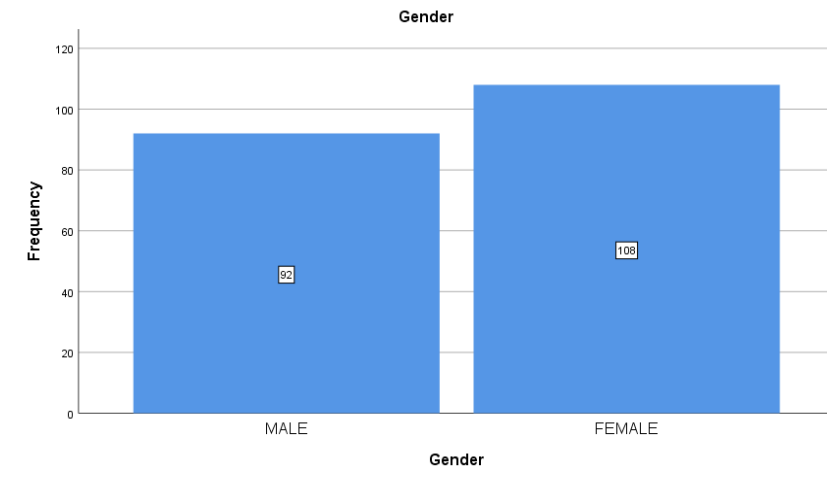


Fig.1 Gender distribution of respondents

As shown in Figure 2, 87 respondents are aged 18-35, 78 are aged 36-54, and 34 are older than 55.

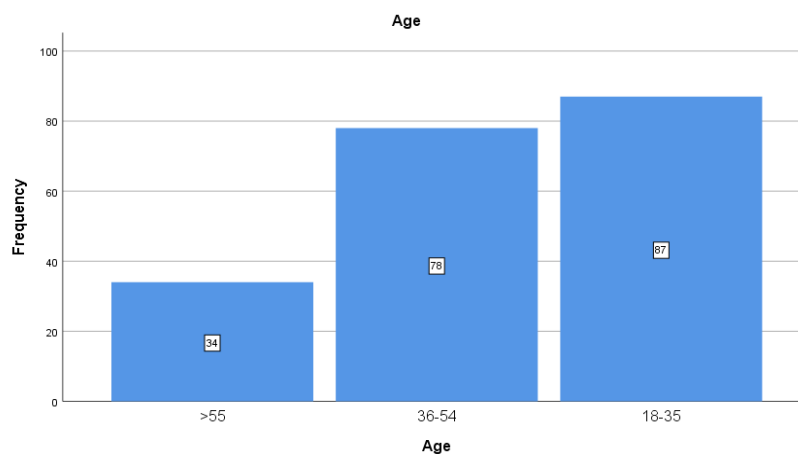


Fig.2 Age distribution of respondents

Table 1 Independent sample T test analysis of Y1.

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Y1	Equal variances assumed	3.336	.078	-2.685	28	.012	-1.80000	.67047	-3.17339	-.42661
	Equal variances not assumed			-2.685	25.369	.013	-1.80000	.67047	-3.17983	-.42017

The results of the independent samples t-test for Y1 (attractiveness) are presented in Table 1. The test statistic, $t(28)$, was -2.679, and the p-value was 0.012, which is less than the significance level of 0.05. This indicates a statistically significant difference between Group 1 and Group 2 in terms of the perceived attractiveness of the posters. Specifically, the posters with dynamic realism (Group 2) were rated as more attractive by the participants compared to the posters without dynamic realism (Group 1).

The assumption of equal variances was met ($p = 0.119 > 0.05$), validating the use of the independent samples t-test in this context. Therefore, the hypothesis that dynamic realism enhances the attractiveness of posters is supported by the data.

The results of the independent samples t-test for Y2 (feelings) are presented in Table 2. The test statistic, $t(28)$, was -2.539, and the p-value was 0.017, which is less than the significance level of 0.05. This indicates a statistically significant difference between Group 1 and Group 2 in terms of the positive emotions elicited by the posters. Specifically, the posters with dynamic realism (Group 2) were associated with more positive emotions by the participants compared to the posters without dynamic realism (Group 1). The assumption of equal variances was met ($p = 0.176 > 0.05$), validating the use of the independent samples t-test in this context. Therefore, the hypothesis that dynamic realism enhances the positive emotions elicited by posters is supported by the data.

Table 2 Independent sample T test analysis of Y2.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Y2	Equal variances assumed	1.930	.176	-2.539	28	.017	-1.68889	.66518	-3.05146	-.32632
	Equal variances not assumed			-2.539	25.843	.017	-1.68889	.66518	-3.05660	-.32118

The results of the independent samples t-test for Y3 (purchase decisions) are presented in Table 3. The test statistic, $t(28)$, was -2.437, and the p-value was 0.021, which is less than the significance level of 0.05. This indicates a statistically significant difference between Group 1 and Group 2 in terms of the purchase decisions elicited by the posters. Specifically, the posters with dynamic realism (Group 2) were associated with higher purchase decisions by the participants compared to the posters without dynamic realism (Group 1). The assumption of equal variances was met ($p = 0.295 > 0.05$), validating the use of the independent samples t-test in this context. Therefore, the hypothesis that dynamic realism enhances the purchase decisions elicited by posters is supported by the data.

Table 3 Independent sample T test analysis of Y3.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Y3	Equal variances assumed	1.139	.295	-2.437	28	.021	-1.80000	.73862	-3.31299	-.28701
	Equal variances not assumed			-2.437	26.924	.022	-1.80000	.73862	-3.31572	-.28428

3.2 Interpretation of the results

The findings of this study provide compelling evidence supporting the hypotheses that dynamic realism in posters significantly influences consumer behavior. The independent sample T-test results indicate that posters imbued with a sense of dynamic realism are more attractive to consumers, corroborating Hypothesis 1 (H1). This suggests that dynamic realism can enhance the aesthetic appeal of posters, thereby drawing more attention from consumers.

Furthermore, the results support Hypothesis 2 (H2), indicating that dynamic realism in posters elicits more positive emotions among consumers.

Most importantly, the study's results substantiate Hypothesis 3 (H3), demonstrating that dynamic realism in posters has a significant impact on consumers' purchase decisions. This suggests that the increased attractiveness and positive emotions associated with dynamic realism can translate into actual purchasing behavior.

In essence, these findings underscore the importance of incorporating dynamic realism in poster designs as a strategic tool to influence consumer purchases. The results provide valuable insights for marketers and advertisers, suggesting that the use of dynamic realism in posters can enhance their effectiveness in attracting consumers, generating positive emotions, and ultimately, influencing purchase decisions.

4. Conclusion

The present study set out to investigate the impact of dynamic realism in posters on consumer purchases, focusing specifically on Brand A. The results of the independent sample T-test provided robust support for all three hypotheses. Specifically, it was found that posters with a sense of dynamic realism were significantly more attractive to consumers (H1), elicited more positive emotions (H2), and had a greater impact on consumers' purchase decisions (H3) compared to posters without dynamic realism.

These findings have profound implications for the field of marketing. They underscore the importance of dynamic realism in poster design as a strategic tool to influence consumer behavior. Marketers and advertisers can leverage these insights to enhance the effectiveness of their poster campaigns, by incorporating dynamic realism to attract consumers, generate positive emotions, and ultimately, influence purchase decisions. This could potentially lead to increased brand awareness, improved brand image, and higher sales for companies.

Despite the significant findings, this study is not without limitations, which point to directions for future research. Future studies could explore the impact of dynamic realism in posters across different brands and product categories to determine if the findings of this study hold true in different contexts. Additionally, research could also investigate the underlying psychological mechanisms through which dynamic realism influences consumer behavior. This could provide a more nuanced understanding of the role of dynamic realism in marketing. Lastly, with the rise of digital marketing, future research could examine the impact of dynamic realism in digital posters or online advertisements. In conclusion, this study contributes to the marketing literature by providing empirical evidence of the impact of dynamic realism in posters on consumer purchases. The findings offer valuable insights for marketers and advertisers and pave the way for future research in this area.

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