

Effect of Social Media Advertisement on Purchasing Behavior: A Response from Female University Students and Female Faculty Members

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Abstract

Due to the characteristics like cost-effectiveness and access, Social media has evolved as an effective and popular online marketplace where companies can offer their products and services to a larger audience. Advertisers utilize Scheduling tools, hyper-target audience, and personalized content using data and analytics to maximize the benefits of social media as an advertising platform. In the context of traditional advertising, studies have identified certain factors that significantly influence the effectiveness of ads. This includes, Consumer attitudes towards the medium, Uses, Mood, Involvement, and the extent to which the medium is interactive in nature. The present study intends to seek the effect of social media advertising on the purchasing behavior and the association between consumer's perceptions of social media advertisements and buying behavior in the context of said characteristics. To find the relationship between the effect of social media and study variables, primary data has been collected using questionnaires from 396 female students and faculty members from three public sector universities in Lahore, Pakistan. The effect of advertisement is measured on a four-point Likert scale from high effect to no effect according to the participants' opinions. The extent of social media advertisement's effect has been explored by applying an ordinal logistic regression model. Findings revealed a significant effect of the time spent on social media by a user and buying behavior. Similarly the buying behavior was also reported to be affected by the type of advertisements, attention, perceived positive role of these advertisements in making better decisions, consideration of these ads as helpful in improving standard of living, and kinds of advertisements. The variables family income, education, age, university, status, daily hours, motivation, kinds of advertisement, and source of advertisement, are more likely to move in the higher category of the effect of advertisement on purchasing behavior with an odds ratio >1. The findings reveal that social media advertising influenced the purchasing behavior of female social media users. It is proposed from the study results that companies should focus on publicity elevation activities using social networks as this is a less costly, more effective method and addresses a large target audience. So, it is confidently concluded that the research objective has been fully achieved.

Keywords: Social Media Advertisement, Influence, Consumer Purchasing Behavior, Adverts Exposure

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The material presented by the author(s) does not necessarily portray the view point of the editors and the management of the ILMA University, Pakistan.

(Print) 2707-8906 (online) 2788-8304, published by the ILMA University, Pakistan.

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1. Introduction

The internet has without a doubt altered how people live. It has gained widespread recognition for its ability to make practically every style of life more comfortable. Consumers have a propensity to discover new forms of communication throughout the time that the internet has always filled. The use of the internet has grown along with technological and equipment advancements; today, customers desire more information and feel privileged to provide feedback and opinions on web pages (Sekhon et al., 2014). They also share their knowledge and experiences with other users of the internet. It has also made user more comfortable so that individuals of all ages may readily accept new trends and equipment. They actively participate in the decision to choose a particular web page. The Internet has affected all aspects of life and Business& Marketing is not an exception. Businesses all over the world have rushed to have an online presence since it allows them to be recognized on a worldwide scale. The process of advertising is initiated by this opportunity to be seen. According to this idea, people use social media for socialization, entertainment, self-promotion, information or interaction, demassification, and asynchronies.

As the first step in reaching customers and informing them of what they have to offer, advertising has never lost its significance for businesses (Nuseir, 2019). With technological advancement innovations in creating advertisements and accessing target audiences have undergone rapid changes. The characteristics associated with new media i-e Interactivity and mobility, have supplemented dimensions of media and the role of media in marketing. Among new marketing tools, social media is a significant one that is being used by diversified businesses. Social media has changed many elements of our lives including business practices in just over ten years (Treem& Leonardi, 2013). Quick and vast access are two major attributes of social media. An advertisement often takes very little time to reach its target audience (Lee et al., 2016). This becomes more significant with the fact that advertisers and media planners believe in the ability of media to determine the effectiveness of communication embedded within them (Stewart et al. 2002) thus causing differential levels of effectiveness.

In marketing role of the consumer has always been significant and crucial. However, studies in the field of marketing have focused on stimulus-media characteristics. Advancements in media and communication technologies in general and specifically in the context of marketing, demand a shift of this focus to individual consumers. Keeping in view the goals and functions that media performs to serve individuals, Riaz et al. (2021) have developed a list of consumer characteristics. The five characteristics, according to the scholars are very important while conducting research on consumer behavior. These include Attitude towards media, uses of mass media, (in the context of Uses and gratification theory of Media), Involvement, Mood of consumer, and Interactivity.

The study of consumer behavior has been a source of concern for marketers because they could learn how customers make decisions about the products and services needed to satisfy a variety of demands, as well as the variables influencing those decisions. Additionally, this is also crucial to gauge how much

consumer involvement in choosing the channel and particular content affects buying behavior. The study is mainly concerned with exploring how media affects the buying behavior of individuals who are exposed to, interact with, and respond to marketing communication on social media.

1.1 Social Media and Advertising

Every company owes it to its clients to make them aware of the products and services it provides for them to take advantage of them. Information is provided by advertising, which also enables the development of wants and encourages consumer knowledge acquisition (Gummesson et al., 2014). Advertising offers a window through which one can observe a company's internal atmosphere (Felix et al., 2017).

However, social media generates complex interactions that include spoken, visual, and written information (Lee et al., 2016), which are characteristics that characterize aspects of human ambiance. When employed effectively by companies looking to advertise on social media, these variables are connected to marketing concepts like atmospheric designs. The possibility that customers will use a medium they find usable increases when they may exchange information in a variety of formats (Felix et al., 2017).

1.2 Significance of the Study

This study is designed to examine the variations in the effect of advertisement and all the elements that distinguish between minimal and substantial shoppers in terms of purchasing habits among female faculty members and students at universities. This study will help marketers by identifying all the factors that influence consumer response to social media marketing.

Previous studies have focused on the factors influencing online consumer behavior, particularly the role of social media, technology, and trust in purchasing decisions. They have explored aspects such as social media marketing, technology acceptance, security, convenience, and the impact of influencers on buying intentions. However, consumer-related factors and source-related factors have received less attention from scholars.

Our study fills this gap by analyzing consumer-related and source-related factors, providing a deeper understanding of how demographics like age, education level, area of residence etc., as well as other user-related factors influences shape the buying behavior of students and faculty members from three different universities.

2. LITERATURE REVIEW

Based on systematic Literature Review, the study by Nuseir et al. (2023) attempted to identify the most optimizing digital marketing strategy. The results found that Social Media marketing was the most effective marketing strategy in contemporary marketing. The study also determined the extent to which social media sites like Facebook etc, affected consumers' purchasing decisions through a

quantitative analysis that incorporated a new model of technology acceptance. The results showed that using social networks as a tool for expenditure was heavily influenced by pleasure. This study would assist businesses in comprehending the influence that social media venues had on consumer perception as well as how to effectively use these websites to both attract new clients and keep existing ones.

Tazeen & Mullick (2023) explored that how social media sites like Facebook and Instagram affected customers' propensity to buy green products. Data were collected from the people of Delhi, India. A Structural Equation Model was created for this study. The data analysis showed that social media sites like Instagram and Facebook significantly influenced people's decisions to buy green items. To determine the impact of using social media to promote green products, the study also examined the utilization of social media channels among the study samples. According to the study, social media platforms had an impact on purchasing and consumption behaviors of users of green products.

Al-Sous et al. (2023) revealed the elements that influenced consumers' buying intentions, this study assessed the influence of social media influencers (SMIs) on consumers' purchasing decisions. Facebook users who participated in the study and provided data were surveyed online. SMIs were now a viable marketing strategy for influencing customers' purchasing intentions, however, research on this topic was still limited in Jordan. Therefore, the investigation highlighted several crucial elements related to SMIs that had an impact on customers' purchasing intentions in the Jordanian setting. In light of this, the main variables influencing client purchase intention through SMIs were investigated. Using data from 390 Jordanian Facebook users, a model was constructed, empirically tested, and verified using a Structural Equation Model (SEM). From the findings, it was confirmed that Information Quality (IQ) and Trustworthiness (TRU) had a considerable impact on brand attitudes and, as a result, on customers' purchase intentions.

Based on the Technology Acceptance Model, Study conducted by Chaturvedi et al. (2022) explored the factors that influence the buying behavior of Indian women. This study examined factors influencing women's online purchasing decisions in Tirupati, Andhra Pradesh. Data was collected from 390 respondents. Findings of Correlation, regression, and SEM revealed that buying intentions of women were significantly influenced by factors like technology, convenience, and security, which in turn impacted their purchasing decisions. However, unlike many other studies, social media was found to have minimal effect. The study offered theoretical and practical insights for future marketing research.

Upadhyay et al. (2022) study provided a comprehensive model that mapped the impact of social media marketing (hereafter SMMs) on consumer response via establishing brand equity and brand trust in light of the dearth of research in this field. Customers of the country's top smartphone brands participated in this study.

318 customers who visited the fan sites of the chosen smartphone brands provided the data. The study looked at the interactions between brand equity and brand trust throughout the process. The results of the inquiry suggested that brand equity mediated the impact of SMMEs on consumer response to some extent. Finally, the findings demonstrated that brand trust partially mediated the impact of brand equity on consumer responsiveness.

Singh et al. (2019) investigated women's online buying behavior and identified key influencing factors. Based on data from 400 women in the NCR, the study utilized a structured questionnaire and exploratory factor analysis. The research highlighted eight significant factors related to online shopping behavior: Perceived Services, Ease of Use, Usefulness, Purchase Intention, Expectation, Service Gap, and Repurchase Intention. These findings contributed to the limited empirical research on women's online shopping behavior.

A significant portion of available literature on Social Media Marketing (SMM) has predominantly focused on the factors that mediate the association between SMM Strategies and buying behavior. Users' attitudes towards SMM, Consumption patterns, Content, and Brands & Products have been the major concern. However, few other elements are also at work when a consumer develops an attitude towards a brand / product and actually buy something. These factors have gained little attention. For instance Consumers' purchasing power, that is associated with socio-economic status and other demographic factors. The current study is an attempt to identify the role of these factors and incorporate them in Technology Acceptance Model.

3. METHODOLOGY

3.1 Study Design

The study population includes students and faculty members of different disciplines at LCWU, PU, and GCU. The population size is 44954. Data has been collected from the students who have studied in B.S. (Honors), Master's, and Ph.D. and from faculty members having qualification Master's, and Ph.D. The population consists of female students and female faculty members belonging to three government universities LCWU, GCU, and PU.

3.2 Sample Size Selection

The sample size of the study is obtained by using the formula of (Yamane, 1967). Yamane provides a simplified formula for calculating sample size is:

$$n = \frac{N}{1 + Ne^2} \quad (3.1)$$

Where n is the sample size, N is the size of population, e is the level of precision. At a 95% confidence level and the margins of error $e=0.05$, the computed sample size is given by

$$n = \frac{(44954)}{1 + (44954)(0.05)^2}$$

$$= 396$$

3.3 Sample Size Allocation Table

The sample size for different strata (universities) is obtained by proportional allocation. (Sarmah et al., 2013)

$$n_h = \frac{N_h}{N} * n \quad (3.2)$$

Where:

N_h is the number of students in a university, N is the total population and n is the number of sample size

Table 3.1: Sample Size Allocation Table

Sr.#	University	No. of Students & Faculty members	Sample
1	Lahore College for Women University	15500	137
2	Punjab University	23324	205
3	Government College University	6130	54
	Total	44954	396

3.4 Study Instrument

In this research, to collect the data for analysis, a questionnaire is designed. It comprises eighteen questions regarding age, family income, and area of residence, education, university, status, and online advertisement.

3.5 Data Analysis

Data analysis is performed by using SPSS version 26.0. The questionnaire used in this research covers almost all the major aspects regarding the effect of advertisement. All the variables with their codes are given in Table 4.1.

3.6 Reliability

In the study, the reliability of the questionnaire is verified by using Cronbach's alpha (α), (Hanif & Munir, 2001).

$$\alpha = \frac{k}{k-1} \left[1 - \frac{\sum \sigma_i^2}{\sigma_T^2} \right] \quad (3.3)$$

Where k = Number of items,

σ_i^2 = variance of the scores on a particular question or from a particular person

$\sum \sigma_i^2$ = sum of the rating variances for all persons

σ_T^2 = variance of the sum of the ratings from all the persons

This shows when the number of items increases, Cronbach's alpha rises as well. As a rule of thumb, individuals should have a tool's reliability at 0.70 or greater before using it. By using Cronbach's alpha for the questionnaire reliability, the result of the reliability coefficient obtained is $\alpha = 0.726$.

4. DATA ANALYSIS

4.1 Ordinal Logistic Regression

An ordinal variable is a categorical variable for which there is a clear ordering of the category levels. The response variable in the study is ordinal so the ordinal logistic regression model is appropriate. Ordinal logistic regression is an extension of logistic regression where the logit (i.e., the log odds) of a binary response is linearly related to the independent variables. Ordinal logistic regression is a statistical analysis method that can be used to model the relationship between an ordinal response variable and one or more explanatory variables.

4.2 Descriptive Statistics

A bar chart is a visual way of showing information in which quantities corresponding to particular categories are represented by a rectangular bar of equal width. Figure 4.1 shows that 47.7% of respondents said that advertisements have a high effect on consumer purchasing behavior 41.2% of respondents said that advertisements have a medium effect on consumer purchasing behavior 8.1% of respondents said that advertisements have a low effect on consumer purchasing behavior and 3% respondents said that advertisements have no effect on consumer purchasing behavior.

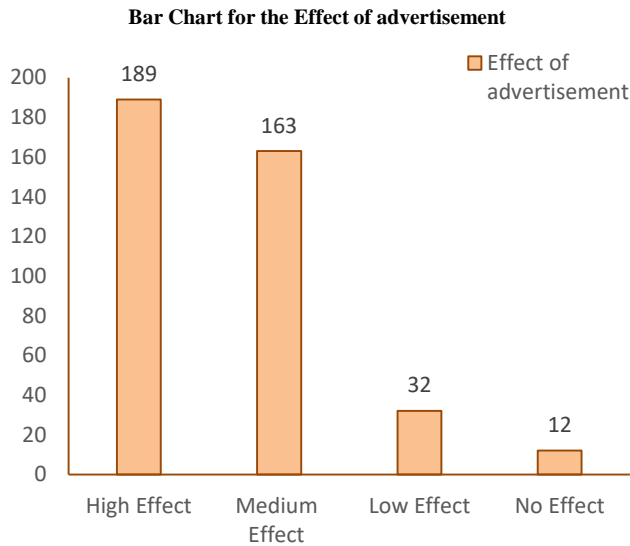


Figure 4.1: Bar Chart for the effect of advertisement

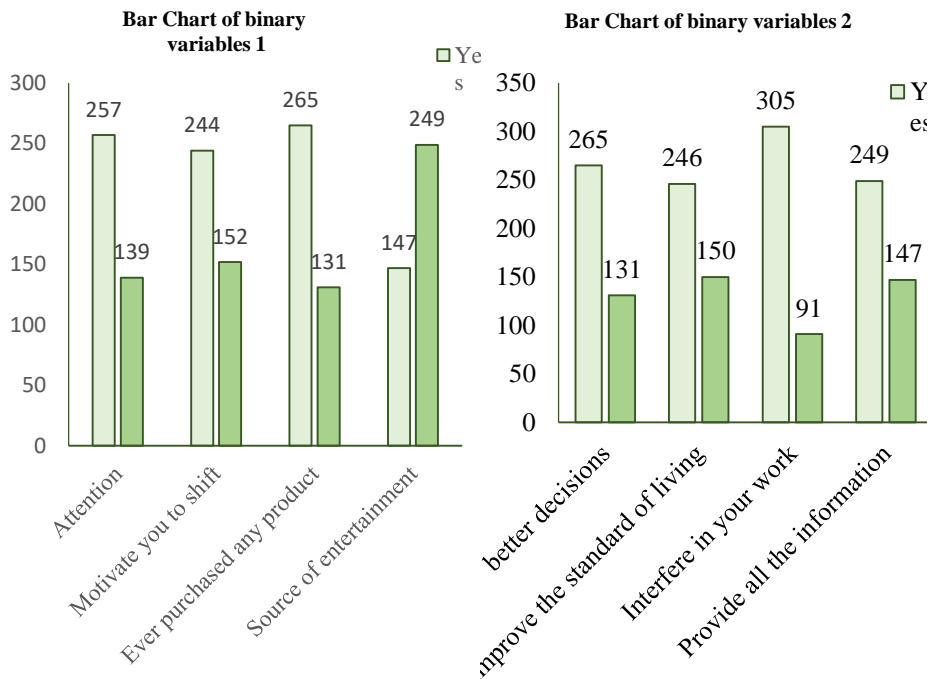


Figure 4.2: Bar Chart of Independent Variables

A. Bar Chart of Binary Variables 1

Figure 4.2 shows that for variable attention 64.9% of respondents said Yes and 35.1% of respondents said No. For the variable motivate you to shift 61.6% of respondents said Yes and 38.4% of respondents said No. For the variable of ever purchasing any product, 66.9% of respondents said Yes and 33.1% of respondents said No. For the variable source of entertainment, 37.1% of respondents said Yes 62.9% of respondents say No.

B. Bar Chart of Binary Variables 2

Figure 4.2 shows that for the variable better decisions 66.9% of respondents said Yes and 33.1% of respondents said No. For the variable improve the standard of living 62.12% of respondents said Yes 37.9% of respondents said No. For the variable interfering in your work, 77.1% of respondents said Yes and 22.9% of respondents said No. And for the variable providing all the information, 62.9% of respondents said Yes and 37.12% of respondents said No.

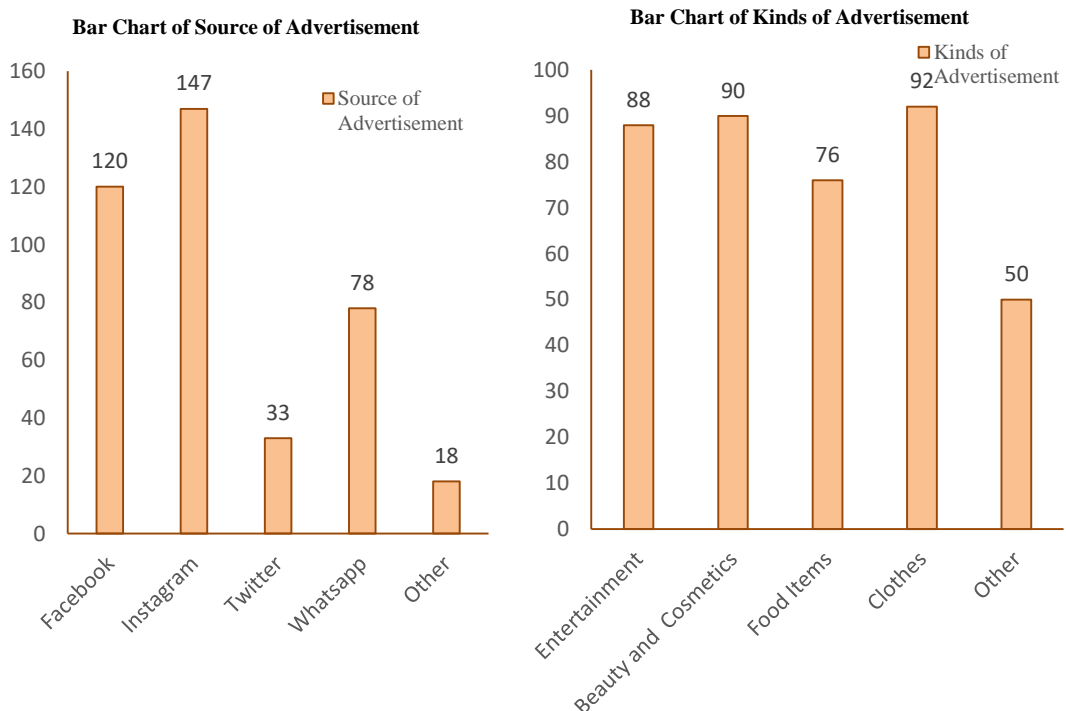


Figure 4.3 Bar Chart of Independent Variables

C. Bar Chart for Source of Advertisement

Figure 4.3 shows that 30.3% of respondents use Facebook 37.1% of respondents use Instagram 8.3% of respondents use Twitter 19.7% of respondents use WhatsApp and 4.5% of respondents use some other apps as a source of advertisements.

D. Bar Chart for Kinds of Advertisement

Figure 4.3 shows that 22.2% of respondents like ads for entertainment 22.7% of respondents like ads for beauty & cosmetics 19.2% of respondents like ads for food items 23.23% of respondents like ads for clothes and 12.6% of respondents like ads for some other things.

4.3 Statistical Model

After the fulfillment of the assumption of ordinal logistic regression, the statistical model of ordinal logistic regression for the above dependent variable and independent variables is fitted and the results are as follows. Table 3.1 shows the factors that affect the dependent variable effect of advertisement. The table summarizes parameter estimates, p-value and odds ratio with 95% confidence interval.

Table 4.1: Parameter estimates of ordinal logistic regression model

Parameter	P-value	Odds Ratio
Threshold [Effect of Advertisement =High] [Effect of Advertisement = Medium] [Effect of Advertisement = Low]	.891	0.86 (0.101, 7.349)
	.028	11.18 (1.290, 96.849)
	.000	52.92 (5.771, 485.321)
[Family Income = >150000]	.271	1.58 (0.699, 3.579)
[Family Income = 100000-150000]	.396	1.35 (0.676, 2.689)
[Family Income = 50000-100000]	.523	1.23 (0.654, 2.304)
[Family Income = <50000]		1
[Area of residence = Urban]	.462	.85 (0.542, 1.321)
[Area of residence = Rural]		1
[Education = PHD]	.510	0.72 (0.270, 1.917)
[Education = MS]	.843	1.08 (0.501, 2.331)
[Education = BS]		1
[University = LCWU]	.303	0.79 (0.498, 1.242)
[University = GCU]	.718	1.12 (0.596, 2.121)
[University = PU]		1

[Status = Faculty]	.414	1.49 (0.574, 3.860)
[Status = Student]		1
[Daily hours = >8 hrs]	.033	0.45 (0.218, 0.937)
[Daily hours = 5-8 hrs]	.169	1.41 (0.865, 2.285)
[Daily hours = 2-5 hrs]		1
[Attention = Yes]	.006	0.49 (0.300, 0.813)
[Attention = No]		1
[Motivate you to shift = Yes]	.934	1.02 (0.632, 1.648)
[Motivate you to shift = No]		1
[Ever purchased any product = Yes]	.289	0.77 (0.467, 1.255)
[Ever purchased any product = No]		1
[Source of entertainment = Yes]	.596	0.89 (0.573, 1.377)
[Source of entertainment = No]		1
[Better decisions = Yes]	.021	0.56 (0.344, 0.917)
[Better decisions = No]		1
[Improve the standard of living = Yes]	.009	0.55 (0.352, 0.864)
[Improve the standard of living = No]		1
[Interfere in your work = Yes]	.961	0.99 (0.599, 1.628)
[Interfere in your work = No]		1
[Provide all the information = Yes]	.087	0.68 (0.433, 1.058)
[Provide all the information = No]		1
[Source of advertisement = Others]	.009	4.05 (1.428, 11.511)
[Source of advertisement = Whatsapp]	.602	1.18 (0.642, 2.150)
[Source of advertisement = Twitter]	.815	0.91 (0.398, 2.063)
[Source of advertisement = Instagram]	.497	0.83 (0.486, 1.420)
[Source of advertisement = Facebook]		1
[Kinds of advertisement = Others]	.007	2.75 (1.321, 5.733)
[Kinds of advertisement = Clothes]	.105	1.70 (0.895, 3.222)
[Kinds of advertisement = Food Items]	.094	1.78 (0.906, 3.486)
[Kinds of advertisement = Beauty & Cosmetics]	.006	2.45 (1.299, 1.000)
[Kinds of advertisement = Entertainment]		1
Age	.272	1.03 (0.976, 1.092)

A. Threshold

This represents the response variable in the ordinal logistic regression. The threshold estimates for [effect of advertisement = High] is the cutoff value between the no effect and the low effect categories. It indicates the specific value of the predictor variable at which an individual is equally likely to be in the no effect or low effect category. The threshold estimates for [effect of advertisement = Medium] is the cutoff value between low effect and medium effect categories. It indicates the specific value of the predictor variable at which an individual is equally likely to be in the low effect or low effect category. The threshold estimates for [effect of advertisement = Low] is the cutoff value between the medium effect and high effect categories. It indicates the specific value of the predictor variable at which an individual is equally likely to be in the medium effect or high effect category. The model's predictors are found below the threshold. The most significant category of the dependent variable is [effect of advertisement = Medium] and [effect of advertisement = Low]. The base category of the dependent variable is [effect of advertisement = No effect].

B. Family Income

The odds ratio for [family income = >150000] is increased by 1.582 times the ratio of those people who have a family income above 150000 have a higher chance to move in the higher category of the effect of advertisement as compared to those people who have a family income below 50000. The odd ratio for [family income = 100000-150000] is increased by 1.348 times is the ratio of those people who have a family income of 100000-150000 have a higher chance to move in the higher category of the effect of advertisement as compared to those people who have a family income below 50000. The odds ratio for [family income = 50000-100000] is increased by 1.228 times the ratio of those people who have a family income of 50000-100000 have a higher chance to move in the higher category of the effect of advertisement as compared to those people who have a family income below 50000. The base category of family income is [family income = >50000].

C. Area of residence

The odds ratio for [area of residence = Urban] is decreased by 0.846 times the ratio of those people who live in urban areas having a higher chance to move in the lower category of the effect of advertisement as compared to those people who live in rural areas.

D. Education

The odds ratio for [education = Ph.D.] is decreased by 0.719 times, the ratio of those people who are doing Ph.D. have a higher chance to move in the lower category of the effect of advertisement as compared to people who are doing BS.

On the other hand, the odds ratio of [education = MS] is increased by 1.081 times, the ratio of those people who are doing MS have a higher chance to move in the higher category of the effect of advertisement as compared to those people who are doing BS.

E. University

The odds ratio for [university = LCWU] is decreased by 0.786 times, the ratio of those people who take education or are teaching in LCWU have a higher chance to move in the lower category of the effect of advertisement as compared to those people who take education or are teaching in PU. On the other hand, the odds ratio of [university = GCU] is increased by 1.124 times the ratio of those who take education or are teaching in GCU have a higher chance to move in the higher category of the effect of advertisement as compared to those who take education or are teaching in PU.

F. Status

The odds ratio for [status = Students] is increased by 1.488 times, the ratio of those people who are students has a higher chance to move in the higher category of the effect of advertisement as compared to those people who are faculty members.

G. Daily hours

Daily hours have a significant impact on the dependent variable. The odds ratio of [daily hours = >8 hrs] is decreased by 0.452 times, and the ratio of those people who are using social media for >8 hrs have a higher chance to move in the lower category of the effect of advertisement as compared to those people who are using social media for 2-5 hrs. On the other hand, the odds ratio of [daily hours = 5-8 hrs] is increased by 1.406 times the ratio of those people who are using social media for 5-8 hrs. Have a higher chance to move in the higher category of the effect of advertisement as compared to those people who have used social media for 2-5 hrs.

H. Attention

Attention has a significant impact on the dependent variable. The odds ratio of [attention = Yes] is decreased by 0.494 times, the ratio of those people who give attention to social media advertisements have a higher chance to move in the lower category of the effect of advertisement as compared to those people who do not give attention to social media advertisements.

I. Motivate you to shift

The odds ratio of [motivate you to shift = Yes] is increased by 1.021 times, the ratio of those people who are motivated by social media advertisements have a higher chance to move in the higher category of the effect of advertisement as compared to those people who aren't motivated by social media advertisements.

J. Ever purchased any product

The odds ratio of [ever purchased any product = Yes] is decreased by 0.766 times the ratio of those people who ever purchase any product have a higher chance to move in the lower category of the effect of advertisement as compared to those people who don't ever purchase any product.

K. Source of entertainment

The odds ratio of [source of entertainment = Yes] is decreased by 0.888 times, the ratio of those people who take advertisements as the source of entertainment has a higher chance to move in the lower category of the effect of advertisement as compared to those people who don't take advertisements as the source of entertainment.

L. Better decisions

Better decisions have a significant impact on the dependent variable. The odds ratio of [better decisions = Yes] is decreased by 0.562 times the ratio of those people who thought that advertisements help us to take better decisions have a higher chance to move in the lower category of the effect of advertisement as compared to those people who aren't thought that advertisements help us to make better decisions.

M. Improve the standard of living

Improving the standard of living has a significant impact on the dependent variable. The odds ratio of [improve the standard of living = Yes] is decreased by 0.551 times the ratio of those people who thought that advertisements play a role to improve the standard of living as compared to those who aren't thought that advertisements play a role to improve the standard of living.

N. Interfere in your routine-work

The odds ratio of [interfere in your work = Yes] is decreased by 0.988 times the ratio of those people who thought that advertisements interfere in our work while browsing have a higher chance to move in the lower category of the effect of advertisement as compared to those who aren't thought that advertisements interfere in our work while browsing.

O. Provide all the information

The odds ratio of [provide all the information=1] is decreased by 0.677 times the ratio of those people who thought that advertisements provide all the information required regarding the product have a higher chance to move in the lower category of the effect of advertisement as compared to those who aren't thought that advertisements provide all the information required regarding the product.

P. Source of advertisement

The Other apps category of the variable source of the advertisement has a significant impact on the dependent variable. The odds ratio of [source of advertisement = Others] is increased by 4.055 times the ratio of those people who are using other apps have a higher chance to move in the higher category of the effect of advertisement as compared to those who are using Facebook. The odds ratio of [source of advertisement = WhatsApp] is increased by 1.175 times the ratio of those people who are using WhatsApp have a higher chance to move in the higher category of the effect of advertisement as compared to those people who are using Facebook. The odds ratio of [source of advertisement = Twitter] is decreased by 0.906 times the ratio of those who are using Twitter have a higher chance to move in the lower category of the effect of advertisement as compared to those who are using Facebook. And the odds ratio of [source of advertisement = Instagram] is decreased by 0.831 times the ratio of those who are using Instagram have a higher chance to move in the lower category of the effect of advertisement as compared to those who are using Facebook.

Q. Kinds of advertisements

Kinds of advertisement have a significant impact on the dependent variable. The odds ratio of [kinds of advertisement = Other] is increased by 2.752 times the ratio of those people who like ads for other things have a higher chance to move in the higher category of the effect of advertisement as compared to those who like ads for entertainment. The odds ratio of [kinds of advertisement = Clothes] is increased by 1.698 times the ratio of those people who like ads for clothes have a higher chance to move in the higher category of the effect of advertisement as compared to those people who like ads for entertainment. The odds ratio of [kinds of advertisement = Food items] is increased by 1.777 times the ratio of those people who like ads for food items have a higher chance to move in the higher category of the effect of advertisement as compared to those who like ads for entertainment. And the odds ratio of [kinds of advertisement = Beauty & Cosmetics] is increased by 2.454 times the ratio of those people who like ads for beauty & cosmetics have a higher chance to move in the higher category of the effect of advertisement as compared to those who like ads for entertainment. The base category of kinds of advertisements is [kinds of advertisements = Entertainment].

R. Age

This is the ordered log-odds estimate for a one-unit increase in age on the expected effect of the advertisement category when the other variables in the model are held constant. If the age of respondents were to increase by one point, then ordered log odds of being in a higher category of the effect of advertisement would increase by 1.032 times.

5. Discussion

Findings reveal that independent variables of daily hours, attention, better decisions, increased standard of living, and types of advertisements significantly impacted the effect of advertisement and moved the log odds to the higher category of the effect of advertisement. Respondents who mostly use digital platforms to buy clothes and food were found to have a significant effect of such advertisements on their buying intentions. As compared to those who watch these advertisements for entertainment. Given that the study's population consists of females, who are generally more inclined towards purchasing these products, the results appear natural. Furthermore, in societies like Pakistan, females are often the primary decision-makers for purchasing, when it comes to purchase necessities like clothing's and food. Similarly, the odds ratio for advertisements related to beauty and cosmetics was found to be significantly higher compared to those who watch ads solely for entertainment. Individuals who engage with beauty and cosmetics advertisements are more likely to experience a stronger influence from these ads, increasing their likelihood of being in a higher category of advertisement impact compared to those who view ads for entertainment purposes. The variables family income, education, university, status, daily hours, motivate you to shift from one brand to another, kinds of advertisement, source of advertisement, and age of respondents are more likely to move in the higher category of the effect of advertisement on purchasing behavior with an odds ratio >1. Thus, the characteristics presented by Stewart et al. (2002) Consumer's attitude towards the medium (helpful in making better decisions and increased standard of living, Involvement (Time spent in hours, Interference) Uses (Information, entertainment, pleasure, Purchase), Mood (Types of advertisement) and Interactivity of the medium have a significant association with Social media as a marketing tool and ultimately influence the consumer behavior. It is proposed from the study results that companies should focus on publicity elevation activities using consumers' characteristics, attitudes, and preferences towards social networks as this is a less costly, more effective method and addresses a large target audience.

6. Conclusion

The findings support previous studies, showing that social media, technology, and advertisements play a key role in online purchasing behavior. In addition to the factors found in literature, related to digital media and buying behavior, our study identified few more factors. Time spent on online shopping (Daily hours), Attention, better decisions, increased standard of living, and types of advertisements significantly impact how ads influence purchases. Our study fills a research gap by focusing on consumer and source-related factors, suggesting that businesses should use social media marketing based on consumers' characteristics, attitudes, and preferences for effective and low-cost advertising.

Limitations

Firstly, researchers could study more people, products, and advertising strategies, and increase the diversity of study participants. They could also consider the most effective social media sites and male and female respondents for different products and explore the impact of social media influencers' roles in shaping consumer buying decisions.

References

- Al-Sous, N., Almajali, D., & Alsokkar, A. (2023). Antecedents of social media influencers on customer purchase intention: Empirical study in Jordan. *International Journal of Data and Network Science*, 7(1), 125–130. <https://doi.org/10.5267/j.ijdns.2022.11.010>
- Chaturvedi, S., Prasad, R. V., & Kumar, M. (2022). Determinants of women's online buying behavior: An extension of the TAM model. In *Sales Management for Improved Organizational Competitiveness and Performance*, 1(6), 247–268. <https://doi.org/10.4018/978-1-6684-3430-7.ch013>
- Felix, R., Rauschnabel, P. A., & Hinsch, C. (2017). Elements of strategic social media marketing: A holistic framework. *Journal of Business Research*, 70, 118–126.
- Gummesson, E., Kuusela, H., & Närvänen, E. (2014). Reinventing marketing strategy by recasting supplier/customer roles. *Journal of Service Management*, 25(2), 228–240.
- Hasan, M., & Sohail, M. S. (2021). The influence of social media marketing on consumers' purchase decision: investigating the effects of local and nonlocal brands. *Journal of International Consumer Marketing*, 33(3), 350–367.
- Lee, S. B., Lee, S. C., & Suh, Y. H. (2016). Technostress from mobile communication and its impact on quality of life and productivity. *Total Quality Management & Business Excellence*, 27(7–8), 775–790.

- Maulid, D. L., Hurriyati, R., & Hendrayati, H. (2022, July). The impact of social media marketing on consumer purchase decisions. In 6th Global Conference on Business, Management, and Entrepreneurship (GCBME 2021) (pp. 231-235). Atlantis Press.
- Nuseir, M. T., Aljumah, A., Urabi, S., Kurdi, B. Al, & Alshurideh, M. (2023). Effects of social media marketing on consumer perception in Liverpool, UK. *The Effect of Information Technology on Business and Marketing Intelligence Systems*, 1056, 45–63. https://doi.org/10.1007/978-3-031-12382-5_3
- Riaz, M. U., Guang, L. X., Zafar, M., Shahzad, F., Shahbaz, M., & Lateef, M. (2021). Consumers' purchase intention and decision-making process through social networking sites: a social commerce construct. *Behaviour & Information Technology*, 40(1), 99-115.
- Sarmah, H. K., Bora Hazarika, B., & Choudhury, & G. (2013). An investigation on effect of bias on determination of sample size on the basis of data related to the students of schools of Guwahati. *International Journal of Applied Mathematics & Statistical Sciences*, 2(1), 33–48.
- Sekhon, H., Ennew, C., Kharouf, H., & Devlin, J. (2014). Trustworthiness and trust: influences and implications. *Journal of Marketing Management*, 30(3–4), 409–430.
- Singh, N., Bhatia, A., & Moolchandani, R. (2019). Factors influencing online buying behavior among women customers. *International Journal of Research in Engineering, IT and Social Sciences*, 9(3), 50–59. <http://indusedu.org>
- Stewart, D. W., & Pavlou, P. A. (2002). From consumer response to active consumer: Measuring the effectiveness of interactive media. *Journal of the academy of marketing science*, 30(4), 376-396.
- Tazeen, F., & Mullick, N. H. (2023). The impact of social media platforms Facebook and Instagram in influencing purchasing behavior of green products. *Vision The Journal of Business Perspective*, 1–18. <https://doi.org/10.1177/09722629221133960>
- Upadhyay, Y., Paul, J., & Baber, R. (2022). Effect of online social media marketing efforts on customer response. *Journal of Consumer Behaviour*, 21(3), 554–571. <https://doi.org/10.1002/cb.2031>
- Yamane, T. (1967). *Statistics: an introductory analysis-3*. New York, NY (USA) Harper and Row.