



Consumers' Attitude toward Mobile Advertising: Basis for Mobile Marketing Plan

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Abstract:

Introduction: Mobile advertising is one of the key factors determining consumer purchases to generate profit. This study aimed to describe the consumers' attitudes toward mobile advertising, exploring the four dimensions of *Entertainment*, *Credibility*, *Irritation*, and *Personalization*. **Methodology:** This study utilized a quantitative descriptive design. It determined a total of 129 teaching and non-teaching personnel of one of the private schools in Qatar as respondents through simple stratified random sampling. Results: The findings of this study indicate that the consumers' attitude towards mobile advertising, when taken collectively, was negative; the highest dimension was *Entertainment*, while the lowest was *Irritation*. **Discussion:** The results found that there are no significant differences on the consumers attitude towards mobile advertising when grouped according to age and sex. **Recommendations:** Based on the results of this study, the researchers recommend that marketers must improve the credibility of their mobile advertising, as well as personalize them to consumer preference, all while reducing irritating factors in order to receive a positive attitude from consumers and ensure consumer purchase.

Index Terms - Consumer Attitude, Marketing, Mobile Advertising, Mobile Devices, SMS

I. Introduction

1.1. Background of the Study

The marketing environment has changed drastically, transitioning from traditional printed posters to digital mobile advertising. In today's digital age, people are rapidly increasing their use of mobile phones. According to a statistical forecast, the global number of smartphone users is growing and is estimated to be 1.5 billion from 2024 to 2029. In 2029, the smartphone user base is estimated to reach 6.4 billion users (Degenhard, 2024). With the increase in mobile use, people have welcomed mobile advertisements for products and services. However, studies show negative factors that hinder the advertisements to be successful. For instance, greenwashing pertains to advertising a product, wherein the advertisers claim that their product or service is green, sustainable, and environment-friendly, whereas, in reality, it is not (Lim et al., 2019). This misleading statement builds mistrust and suspicion between consumers and marketers. Through this study, the researchers sought answers to questions about consumers' attitudes toward mobile advertising that will be used as the basis for creating a mobile marketing plan.

In business, one of the key factors determining consumer purchase and profit is advertising. Mobile advertising is a way of promoting products and services through mobile devices. This includes all kinds of advertisements that appear on mobile devices, smartphones, etc. (Panjiyar, 2021). These advertisements come in different forms, such as short message service (SMS), banner advertisements, and other display ads. However, this study focused on the SMS messages received by the consumers. Mobile marketing is used to communicate directly with consumers. It plays a crucial role in expanding global market access, building brand awareness, influencing consumer behavior, and enhancing marketing competence (Binrany et al., 2024). Moreover, mobile advertising allows businesses to target consumers efficiently and in real-time. Its importance comes from its ability to personalize content, improve customer engagement, and improve brand awareness (Grewal & Stephen, 2019). However, mobile advertising faced several challenges, including consumer privacy concerns and excessive ad frequency, which reduced engagement and effectiveness (Taylor et al., 2020). Ineffective mobile advertising strategies contributed to consumer annoyance and distrust, negatively impacting purchase behavior (Zhang & Mao, 2022). There are various factors that influence consumers' attitudes toward mobile advertising, such as entertainment, credibility, irritation, and personalization, as explained in a study by Okoe and Boateng (2015).

Although the use of mobile phones and mobile advertisements has become increasingly prevalent, there remains a significant lack of comprehensive research on consumer attitude toward mobile advertising across diverse demographic profiles, specifically in terms of age and sex. Existing studies have explored the consumer attitude of consumers in Pakistan (Hadi & Aslam,

2023). However, there is limited research on consumers' attitude when based in Qatar. This gap underscores the need for research that examines the factors that may influence consumer attitude toward mobile advertising, specifically within Qatar's context. Further research is needed to explore this gap and examine consumer attitudes in Qatar (Al-Khalaf & Choe, 2020). This study focused on educational staff, specifically the teaching and non-teaching personnel of one of the Philippine private schools in Qatar. Educational staff, as consumers, are frequently exposed to mobile advertising, making their attitudes a relevant and important area of study. Their insights provide valuable data on the effectiveness of mobile advertising (Hadi & Aslam, 2023). Furthermore, understanding their attitudes can inform the development of effective mobile marketing strategies within the education sector and beyond.

To ensure the effectiveness of mobile advertising in influencing consumer purchase decisions, marketers needed to adopt strategies that prioritized personalization, credibility, and entertainment value. Personalized and relevant advertisements have been found to increase consumer engagement, while credibility ensured consumer trust in the advertised products (Bleier & Eisenbeiss, 2015). Additionally, integrating entertainment elements into mobile advertisements improved consumer perception and interaction with the advertisements (Ha & McCann, 2020).

The researchers conducted this study to gain a deeper understanding of consumer attitudes toward mobile advertising. The study aimed to provide insights that could help marketers develop more effective mobile advertising strategies that enhance consumer trust, engagement, and purchase intention by analyzing these factors. The findings of this study helped marketers who seek ways to maximize their mobile advertising strategies in an increasingly digital environment. To ensure efficiency and success in advertisements, the said marketers can implement an advertisement assessment. This assessment will be vital in order to guarantee the consumers' acceptance of the advertisement and, more so, become a basis for creating a mobile marketing plan.

1.2. Theoretical Framework

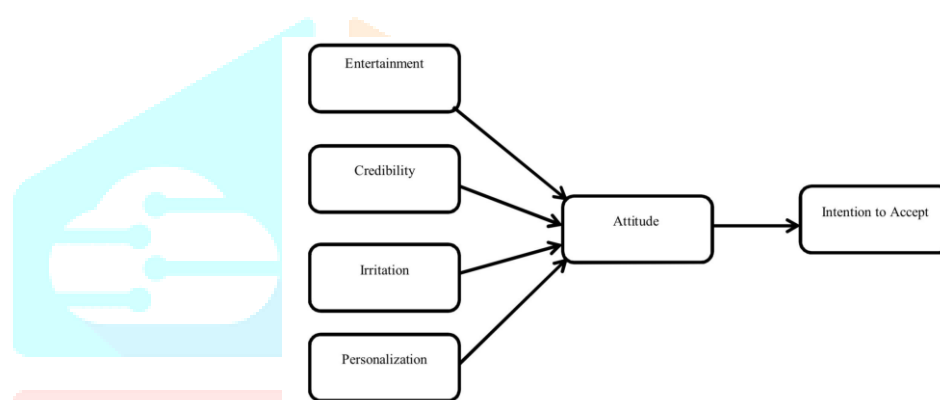


Figure 1: Consumer attitudes toward and intentions to accept mobile advertising (Okoe and Boateng, 2015)

This study was anchored in the study of Okoe and Boateng (2015) which determined the consumers' attitude toward mobile advertising and their intentions to accept them. The model outlines the four factors that influence consumer attitude: entertainment, credibility, irritation, and personalization.

Entertainment

Entertainment is one of the most crucial elements of mobile marketing. It is imperative; therefore, the message must be amusing and concise in order to grab customers' attention immediately. The entertaining element of message content can enhance the consumer's acceptability in general. Due to the innate playful nature of many consumers, offering games and prizes via portable electronic devices—particularly those running Android or iOS—results in increased participation rates.

Credibility

Credibility is defined as how consumers perceive the truthfulness and believability of an advertisement and the associated brand (Murillo-Zegarra et al., 2020). This involves the consumers' trust in the advertisers and the advertised content. If the marketer for the brand is credible enough, then the ad given by the marketer is also credible (Sadasivan, 2019). Two factors can influence how consumers perceive the advertisement's credibility: its truthfulness and the level of trust (Lin & Bautista, 2018).

Irritation

Irritation refers to the extent to which the advertising is messy and irritating to users (Ko et al., 2019). Mobile advertising could present a wide range of information that can confuse, distract, and overwhelm the recipient. Thus, customers respond negatively because they feel misinformed about the message that is being delivered. Customers are more likely to view an advertisement as an unwelcome and bothersome influence when it uses an irritating, rude, insulting, or manipulative method.

Personalization

Personalization is defined as customizing advertisements according to consumers' data, preferences, and context (Gaber et al., 2019). Personalization is important to keep advertisements relevant to the audience. This will prevent consumers from finding advertisements irritating. Studies have shown that the use of personalization in mobile advertising has a positive outcome. The results show that it greatly improves customers' experience and brings a mass increase in sellers' revenue (Huang et al., 2023).

1.3. Research Questions

The objective of this study was to describe the consumers' attitude toward mobile advertising. Specifically, this research sought answers to the following questions:

1. What is the demographic profile of the respondents in terms of:

1.1. age; and

1.2. sex?

2. What are the respondents' perceptions of consumers' attitude toward mobile advertising in terms of *entertainment*, *credibility*, *irritation*, and *personalization* in terms of:

2.1. age in *entertainment*;

2.2. age in *credibility*;

2.3. age in *irritation*;

2.4. age in *personalization*;

2.5. age when taken collectively;

2.6. sex in *entertainment*;

2.7. sex in *credibility*;

2.8. sex in *irritation*;

2.9. sex in *personalization*; and

2.10. sex when taken collectively?

3. Is there a significant difference in the consumers' attitude toward mobile advertising in terms of *entertainment*, *credibility*, *irritation*, and *personalization* when grouped according to:

3.1. age; and

3.2. sex?

1.4. Hypothesis

H0: There is no significant difference in the consumers' attitude toward mobile advertising in terms of *Entertainment*, *Credibility*, *Irritation*, and *Personalization* when grouped according to their demographic profile.

II. Methodology

2.1. Research Design

This study used the descriptive-comparative research design with a quantitative approach. A descriptive-comparative research design describes variables and determines the differences in the said variables in two or more groups within a natural setting (Themes, 2017). As this research aimed to know the difference in the consumers' attitude toward mobile advertising when grouped according to age and sex, the descriptive-comparative research design was the most appropriate to use. Furthermore, the objective of this study was to identify characteristics, frequencies, and trends. Thus, a quantitative methodology was used. The quantitative data collected from the survey questionnaires were analyzed using statistical methods to identify the difference in the consumers' attitude toward mobile advertising.

2.2. Research Locus and Sample

This study's respondents were the teaching and non-teaching personnel of one of the Philippine private schools in Qatar. As educational staff often receive mobile ads, studying their attitude toward mobile advertising is crucial to creating better mobile marketing strategies. This study employed simple stratified random sampling techniques, wherein the population of educational staff was divided into strata. Random sampling was then performed to determine the selection of respondents. This allowed the

researchers to understand the diverse perspectives of the educational staff. From the population of the teaching and non-teaching personnel, a sample size of 129 was attained. The researchers incorporated a 5% margin of error and a 95% confidence level to ensure a statistically sound representation. To attain these results, Raosoft Online Calculator was used.

Table 1: Total Population and Sample Size of the Respondents

	N (Total Population)	n (Sample)
Teaching Personnel		
Preschool	16	11
Primary	29	19
Intermediate	26	18
Junior High School	40	26
Senior High School	19	13
Sub-total	130	87
Non-Teaching Personnel		
Principal's Council	13	8
Admin	2	2
Office of Student Affairs	4	4
QAAD	5	2
Guidance Office	3	2
Finance Office	15	11
Records	4	2
SMSD	11	6
First Aid Unit	6	5
Sub-total	63	42
Total	193	129

2.3. Research Instrument

This study utilized a standardized instrument taken from the study of Okoe and Boateng (2015). The questionnaire was a valuable tool to determine the consumers' attitude toward mobile advertising and assess how well consumers respond to mobile advertisements. The questionnaire was composed of 24 consumer attitude items with six specific subscales to measure **entertainment** (4 items), **credibility** (4 items), **irritation** (4 items), **personalization** (4 items), **consumers' attitudes toward mobile advertising** (4 items), and **intention to accept** (4 items). All questions were answered using a 4-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (4), with negative-worded questions being scored in reverse.

The following scales were used to interpret the scores that were obtained in the survey:

Table 2: Table of Mean Range and its Description in the Instrument and Verbal Interpretation

Mean Range	Description in the Instrument	Verbal Interpretation
3.26 - 4.00	Strongly Agree	Very Positive Attitude
2.51 - 3.25	Agree	Positive Attitude
1.76 - 2.50	Disagree	Negative Attitude
1.00 - 1.75	Strongly Disagree	Very Negative Attitude

2.4. Validity and Reliability

The research instrument was submitted to and checked by eight (8) experts in the field. The experts examined and evaluated the validity of the instruments. They assessed the instrument as either essential, useful but not essential, or not essential. The indicators in the four dimensions underwent a content validity ratio by Lawshe. Items with a critical value of 0.750 and above were retained. Based on the results, two items were removed. The Content Validity Index then had a value of 0.943.

The research instrument was tested for reliability. The reliability test was administered to thirty (30) selected respondents who were not part of the sample size. To measure reliability, Cronbach's Alpha was utilized. The computed alpha using the pilot-tested data for internal consistency was 0.763, which was interpreted as acceptable.

Below is the scale used in interpreting the alpha):

Cronbach's Alpha Value	Reliability Coefficient
$\alpha > 0.9$	Excellent
$\alpha > 0.8$	Good
$\alpha > 0.7$	Acceptable
$\alpha > 0.6$	Questionable
$\alpha \geq 0.5$	Poor

Figure 2: Cronbach's Alpha Level of Reliability (Ayre & Scally, 2013)

2.5. Data Collection Procedure

The data were collected in the following manner: First, the researchers sought the school's permission, specifically from the acting principal and the vice principal of the Human Resources department, to conduct the study and to get the total population of the teaching and non-teaching personnel. Second, the number of respondents was determined through simple stratified random sampling. Third, the researchers sent a letter to the respective vice principals and sought permission to conduct the survey among the chosen respondents. Fourth, the survey questionnaire was administered to the 129 respondents using pen and paper. The retrieval of the questionnaires then followed. The fifth and final step included data analysis and interpretation of results.

2.6. Data Analysis Procedure

To determine the demographic profile of the respondents in terms of age and sex, frequency count and percentage distribution were used.

Frequency count (f) = Number of occurrences of a specific value in the data set

$$\text{Percentage Distribution} = \left(\frac{\text{Frequency count of a specific value}}{\text{Total number of observations}} \right) \times 100$$

To determine respondents' perceptions of consumers' attitudes toward mobile advertising when the data is grouped according to age and sex, in terms of the following entertainment, credibility, irritation, and personalization, mean and standard deviation were used.

$$\bar{x} = \frac{\sum x}{n}$$

Where:

is $\bar{x}$ mean

is $\sum x$ sum of all values

n is the total number of values

$$s = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$$

Where:

is the s standard deviation

is the x value in the data set

is the $\bar{x}$ sample mean

is the n number of values

To determine if there is a significant difference in the consumers' attitude toward mobile advertising in terms of entertainment, credibility, irritation, and personalization when grouped according to age and sex, t-test was used depending on the normality of the data sets and the homogeneity of the variances.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

Where:

$\bar{X}_1$ and $\bar{X}_2$ ample means of the two groups being compared

s_1^2 and s_2^2 are the sample variances of the two groups

n_1 and n_2 are the sample sizes of the two groups

III. Result

This chapter presents the data, analysis, and interpretation of findings. The study explored consumers' attitude toward mobile advertising when grouped according to age and sex along the four dimensions of *Entertainment*, *Credibility*, *Irritation*, and *Personalization*. Understanding the respondents' attitude toward mobile advertising is crucial for marketers to develop effective strategies that enhance consumer trust, engagement, and purchase intention. To interpret the results, the following tables and discussion are arranged according to the order of the research questions.

1. The demographic profile of the respondents

Table 1.1. The Demographic Profile of the Respondents in terms of Age (n=129)

Profile	Frequency (n)	Percentage (%)
Age		
Younger	59	45.74
Older	70	54.26
Total	129	100

Table 1.1 presents the demographic profile of the respondents based on their age. In this study, the respondents' ages ranged from 27 to 64 years. The mean age of all participants was calculated and used as the basis for classification. Respondents aged 42 years and below were categorized as the younger group, while those aged 43 years and above were classified as the older group. In alignment with the methodology of Anaraky et al. (2023), the respondents were divided into two age categories: younger and older. Their study examined the influence of age on privacy-related decision-making. To facilitate analysis and enable clearer comparisons in this study, participants were dichotomized into younger and older groups based on the average age. This dichotomization streamlined the analysis and enhanced the comparability between the two age groups. Of the 129 total respondents, 59 (45.74%) were in the younger group, whereas 70 (54.26%) belonged to the older group, indicating a higher representation of older participants.

Table 1.2. The Demographic Profile of the Respondents in terms of Sex (n=129)

Profile	Frequency (n)	Percentage (%)
Sex		
Male	46	35.66
Female	83	64.34
Total	129	100

Table 1.2 presents the demographic profile of the respondents according to their sex. To mitigate gender bias in the selection process, a stratified sampling technique was employed to ensure equal chance of participating in the study, regardless of

their sex classification. This approach contributed to the inclusivity of the study's respondents. Out of 129 respondents, 46 of them, or 35.66%, were male respondents. On the other hand, 83 of them, or 64.34%, were female respondents. In this study, there were more female respondents than male respondents in this study. This reflects a broader trend in the education sector, where the field is predominantly occupied by women, largely due to the traditionally feminine role associated with teaching and the low socioeconomic status of the profession (Kundu et al, 2022). This supports the reason why there were more female respondents than male respondents in this study.

2. The respondents' perceptions of consumers' attitude toward mobile advertising in terms of *entertainment, credibility, irritation, and personalization*

Table 2.1. Mean Perception of the Respondents' Attitudes toward Mobile Advertising when grouped according to Age along Entertainment (n=129)

Dimension	Younger (n=59)		Older (n=70)	
	$\bar{x}$	VI	$\bar{x}$	VI
Entertainment				
I feel that receiving mobile advertisements is enjoyable.	2.42	NA	2.64	PA
I feel that receiving mobile advertisements is entertaining.	2.42	NA	2.70	PA
I feel that receiving mobile advertisements is pleasant.	2.46	NA	2.63	PA
Mean of means	2.44	NA	2.66	PA

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.1 displays the mean perception of consumers' attitude toward mobile advertising in terms of *Entertainment* when grouped according to age. Based on the results, the older respondents had a positive attitude, with an overall mean score of 2.66. On the other hand, the younger respondents expressed a negative attitude with an overall mean score of 2.44.

Among the statements under *Entertainment*, the older respondents rated the statement "*I feel that getting mobile advertisements is entertaining*" the highest, with a mean score of 2.70. This indicates that they perceive mobile advertising as fun, amusing, or engaging. The statement "*I feel that getting mobile advertising is pleasant*" recorded the lowest mean score of 2.63. Although it received the lowest mean, the findings still imply that older consumers find satisfaction in mobile advertisements. The study by Roth-Cohen et al. (2022) explained that older consumers appreciate fun ads and tend to have more positive reactions. On the other hand, younger respondents rated all three statements lower, rating the statement "*I feel that receiving mobile advertising is pleasant*" the highest among the three statements. Both statements, "*I feel that receiving mobile advertisements is entertaining*" and "*I feel that receiving mobile advertising is enjoyable*" were rated with a mean score of 2.42. Their low rating for "enjoyable" indicates that they do not feel gratification, contentment, or personal benefit from the ads. Narayan et al. (2022) stated that younger consumers were more likely to be critical and less likely to appreciate receiving SMS messages than older consumers.

In conclusion, the table shows that older respondents had a positive perception of mobile advertisements in terms of *Entertainment*. Their consistently higher mean scores across all the statements suggest that they find mobile advertising more enjoyable, pleasant, and entertaining. The younger respondents had lower values, which portray a negative attitude towards mobile ads. This implies a lack of entertainment value among young consumers.

Table 2.2. Mean Perception of the Respondents' Attitudes toward Mobile Advertising when grouped according to Age along Credibility (n=129)

Dimension	Younger (n=59)		Older (n=70)	
	$\bar{x}$	VI	$\bar{x}$	VI
Credibility				
I feel that mobile advertisements have no risk.	2.20	NA	2.24	NA
I trust mobile advertisements.	2.27	NA	2.44	NA
I use mobile advertising as a reference for purchasing.	2.64	PA	2.84	PA
I believe that mobile advertising is credible.	2.29	NA	2.39	NA
Mean of means	2.35	NA	2.48	NA

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.2 displays the mean perception of consumers' attitude toward mobile advertising in terms of *Credibility* when grouped according to age. Based on the findings presented above, both the younger and the older respondents had a negative attitude toward mobile advertising, with an overall mean score of 2.35 and 2.48 respectively.

Among the statements under *Credibility*, both the younger and the older respondents expressed a negative attitude toward the statement "*I feel that mobile advertisements have no risk*", which garnered the least mean scores of 2.20 and 2.24 respectively. This suggests that the respondents perceive mobile advertisements as potentially risky, indicating a lack of trust within its content. This negative attitude from the respondents remains a barrier from accepting or engaging with mobile advertisements. However, when it came to statement three, both age groups expressed a positive attitude. The statement "*I use mobile advertising as a reference for purchasing*" garnered a mean of 2.64 from the younger group and a mean of 2.84 from the older group, both indicating a positive attitude. This statement garnered the highest score from both the younger and the older respondents. According to Khalufi et al. (2019), the presence of mobile advertisements has made consumers more informed about brands. This helps consumers when they make purchasing decisions. These results imply that the respondents find mobile advertising somewhat credible and reliable as they utilize it for purchasing decisions, but not enough for the respondents to have an overall positive attitude regarding *Credibility*. Among all statements, older respondents showed slightly higher mean scores compared to the younger respondents, indicating a potentially stronger perception of *Credibility*. A study by Cabeza-Ramírez, et al. (2022) found similar results wherein older respondents are more conditioned by message trustworthiness than younger respondents. However, this still implies an overall negative attitude toward mobile advertising across both age groups.

The findings in table 2.2 imply that both younger and older respondents have a negative attitude towards mobile advertising in terms of *Credibility*. Although the younger and the older respondents expressed a positive attitude when it comes to using mobile advertisements as a reference for purchasing, the overall mean score still reveals that both age groups perceive mobile advertising negatively when it comes to this dimension. These findings show that negative responses to mobile advertising are common across demographics.

Table 2.3. Mean Perception of the Respondents' Attitudes toward Mobile Advertising when grouped according to Age along Irritation (n=129)

Dimension	Younger (n=59)		Older (n=70)	
	$\bar{x}$	VI	$\bar{x}$	VI
Irritation				
I feel that mobile advertising is irritating.	2.24	NA	2.44	NA
Contents in mobile advertising are often annoying.	2.27	NA	2.44	NA
Mobile advertisements disturb my use of the mobile devices.	2.08	NA	2.17	NA
Mobile advertising disturbs me.	2.20	NA	2.29	NA
Mean of means	2.20	NA	2.34	NA

Note: Reverse scoring was used for Dimension 3: Irritation

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.3 presents the mean perception of respondents' attitudes toward mobile advertising when grouped according to age, specifically focusing on the *Irritation* dimension. Based on the findings presented on the table, both the younger and the older respondents generally hold a negative attitude toward mobile advertising. The younger respondents had an overall mean score of 2.20, while the older respondents had an overall mean score of 2.34.

Older respondents reported the highest mean scores for the statement "*Contents in mobile advertising are often annoying*" and "*I feel that mobile advertising is irritating*", both with a mean of 2.44. From these statements, the older respondents expressed a negative attitude, indicating that they perceive mobile advertising as annoying and irritating. On the contrary, the older respondents expressed the lowest mean score of 2.17 to the statement "*Mobile advertisements disturb my use of mobile devices*". This statement also received a negative attitude from the respondents, indicating that mobile advertisements are disturbing to them. On the other hand, the younger respondents scored the highest on the statement "*Contents in mobile advertising are often annoying*", with a mean score of 2.27. This implies that younger respondents also do find mobile advertising as annoying. Similarly to the older group, the younger respondents also scored lowest on the statement "*Mobile advertisements disturb my use of mobile devices*". However, previous studies contradict the findings presented above. A study by Al-alak and Alnawas (2023) discovered that younger people express a stronger aversion towards unsolicited mobile messages than older people. Meanwhile, Rus-Arias et al. (2021) found that younger people are more likely to feel overwhelmed or irritated by digital advertising, causing them to install ad-blockers. However, in this study, the findings suggest that both age groups find mobile advertising irritating overall, with only slight differences in their mean scores.

The findings in table 2.3 imply that the both younger and older respondents have a negative attitude towards mobile advertising in terms of *Irritation*. Older respondents showed slightly higher mean scores across all the statements compared to younger respondents, indicating a stronger perception of *Irritation*. However, the results still show that both age groups hold a generally negative perception about mobile advertising. These findings show that negative responses to mobile advertising are common across age groups.

Table 2.4. Mean Perception of the Respondents' Attitudes toward Mobile Advertising when grouped according to Age along Personalization (n=129)

Dimension	Younger (n=59)		Older (n=70)	
	$\bar{x}$	VI	$\bar{x}$	VI
Personalization				
I feel that mobile advertisements I receive are relevant to my job and activities.	2.42	NA	2.33	NA
I feel that mobile advertising displays personalized message.	2.36	NA	2.40	NA
I feel that mobile advertisements I receive are relevant to my needs.	2.53	PA	2.29	NA
Overall, the mobile advertising I receive is customized to my needs.	2.41	NA	2.17	NA
Mean of means	2.43	NA	2.30	NA

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.4 presents the mean perception of respondents' attitudes toward mobile advertising in terms of *Personalization* when grouped according to age. Based on the results presented above, both the younger and the older respondents generally hold a negative attitude toward mobile advertising. The younger respondents garnered an overall mean score of 2.43, while older respondents garnered an overall mean score of 2.30.

Among the four statements under *Personalization*, only the younger respondents expressed a positive attitude toward one statement. The statement "*I feel that mobile advertisements I receive are relevant to my needs*" received a mean score of 2.53, indicating a positive attitude. This finding implies that the younger respondents perceive mobile advertisements they receive as relevant and applicable to their needs. On the contrary, their lowest rated statement "*I feel that mobile advertising displays personalized message*" garnered a mean score of 2.36, indicating a negative attitude. However, the same statement scored the highest for the older respondents, indicating a negative attitude with a mean score of 2.40. This implies that older respondents do not receive mobile advertising that displays personalized messages. Their lowest rated statement, on the other hand, garnered a mean score of 2.17, stating "*Overall, the mobile advertising I receive is customized to my needs*". This suggests that older respondents rarely receive mobile advertising that is customized to their needs. Despite the slight differences in the mean scores of the younger and older respondents, their overall mean remains to hold a negative attitude in terms of *Personalization*.

The findings in table 2.4 imply that both younger and older respondents have a negative attitude towards mobile advertising in terms of *Personalization*. Younger respondents showed slightly higher mean scores across all the statements compared to older respondents, specifically when it comes to the relevance of mobile advertising to their needs. This indicates that younger respondents find mobile advertisements relevant and tailored to their needs and that they are more likely to purchase products that they feel are useful to them (Rea, 2024). However, the results still show that both age groups hold a generally negative perception

about mobile advertising. These findings show that negative responses to mobile advertising are common across age groups. With an overall negative attitude, it is important to provide personalized information that will send more appropriate messages and increase mobile marketing efficiency.

Table 2.5. Mean Perception of the Respondents' Attitudes toward Mobile Advertising when grouped according to Age along the Four Dimensions (n=129)

Dimensions	Younger (n=59)		Older (n=70)	
	$\bar{x}$	VI	$\bar{x}$	VI
1. Entertainment	2.44	NA	2.66	PA
2. Credibility	2.35	NA	2.48	NA
3. Irritation	2.20	NA	2.34	NA
4. Personalization	2.43	NA	2.30	NA
Overall mean	2.35	NA	2.44	NA

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.5 presents the mean perception of respondents' attitudes toward mobile advertising when grouped according to age across four dimensions: *Entertainment*, *Credibility*, *Irritation*, and *Personalization*. Overall, the older respondents showed a negative attitude toward mobile advertising with a mean score of 2.44. All dimensions, except *Entertainment*, received a negative attitude from the respondents. On the other hand, the younger group showed a negative attitude to all four dimensions, with an overall mean of 2.35.

Entertainment garnered the highest mean score of 2.66 from the older group, suggesting a positive attitude towards the dimension. On the other hand, the younger group scored lower, with a mean score of 2.44, indicating that they have a negative attitude toward *Entertainment*. As to *Credibility*, both the younger and older group have a negative attitude, with the younger group having a mean score of 2.35 and the older group having a mean score of 2.48. Regarding *Irritation*, both groups have the same negative attitude. The younger group scored a mean of 2.20, while the older group scored 2.34. Regarding *Personalization*, the mean score of both groups was not entirely different. The younger group garnered a higher mean score of 2.43, while the older group garnered 2.30. These results suggest that both groups have a negative attitude when it comes to *Personalization*.

Overall, the findings reveal that the younger and older groups had a negative attitude towards mobile advertising. Among the four dimensions, only *Entertainment* from the older group received a positive attitude. This suggests that older respondents are more inclined to find advertisements enjoyable. This aligns with the idea that entertaining advertisements provide inherently satisfying experiences, such as mood regulation and focused engagement, that audiences benefit from. The findings above also imply that the younger respondents perceive mobile advertisements negatively. Young consumers are likely to be exposed to mobile advertisements content due to the evolution of society, but their intention to accept will be based on its relevance to them. Although several studies have revealed differences in the acceptability of mobile advertising across various age groups, this study reveals that age might not necessarily affect consumer attitudes towards mobile advertising (Munawar et al., 2022). This further emphasizes that factors beyond age play a significant role in shaping consumer attitudes towards mobile advertising.

Table 2.6. Mean Perception of the Respondents' Attitudes toward Mobile Advertising when grouped according to Sex along Entertainment (n=129)

Dimension	Male (n=46)		Female (n=83)	
	$\bar{x}$	VI	$\bar{x}$	VI
Entertainment				
I feel that receiving mobile advertisements is enjoyable.	2.43	NA	2.60	PA
I feel that receiving mobile advertisements is entertaining.	2.43	NA	2.65	PA
I feel that receiving mobile advertisements is pleasant.	2.46	NA	2.60	PA
Mean of means	2.44	NA	2.62	PA

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.6 presents the mean perception of respondents' attitudes toward mobile advertising when grouped according to sex, focusing on *Entertainment*. Based on the results presented, the male respondents reported a mean score of 2.44, indicating a negative attitude. On the other hand, female respondents showed a higher mean score of 2.62, reflecting a positive attitude.

Within the *Entertainment* dimension, the statement reported the highest by the female respondents was "*I feel that receiving mobile advertisements is entertaining*" with a mean score of 2.65, indicating a positive attitude. The other two statements "*I feel that receiving mobile advertisements is enjoyable*" and "*I feel that receiving mobile advertisements is pleasant*" received the lowest mean scores of 2.60, which still indicates a positive attitude nonetheless. These findings imply that female respondents perceive mobile advertising positively when the mobile ads are enjoyable, entertaining, and pleasant. Female consumers see the entertaining mobile ads as a genuine effort on the brand's part to communicate with them in a fun way rather than an exploitative or sales-driven effort (Lee et al., 2023). Male respondents, on the other hand, reported the statement "*I feel that receiving mobile advertising is pleasant*" the highest with a mean score of 2.46, which indicates a negative attitude. Male respondents also expressed a negative attitude to the statements "*I feel that receiving mobile advertisements is enjoyable*" and "*I feel that receiving mobile advertisements is entertaining*," with a mean score of 2.43. A study by Hadi and Aslam (2023) determined that male consumers have a more negative attitude towards unwanted mobile marketing messages than females. They are unlikely to see any entertainment or engagement value in them, further contributing to their negative attitude.

Table 2.6 shows how male and female respondents perceive mobile advertising in terms of *Entertainment*.

Overall, female respondents have a positive attitude, seeing mobile ads as entertaining and engaging. While male respondents hold a generally negative attitude, indicating that they are unlikely to perceive entertainment value in mobile ads. These findings suggest that marketers need to differentiate mobile advertising strategies based on gender.

Table 2.7. Mean Perception of the Respondents' Attitudes toward Mobile Advertising when grouped according to Sex along Credibility (n=129)

Dimensions	Male (n=46)		Female (n=83)	
	$\bar{x}$	VI	$\bar{x}$	VI
Credibility				
I feel that mobile advertisements have no risk.	2.22	NA	2.23	NA
I trust mobile advertisements.	2.35	NA	2.37	NA
I use mobile advertising as a reference for purchasing.	2.67	PA	2.80	PA
I believe that mobile advertising is credible.	2.35	NA	2.34	NA
Mean of means	2.40	NA	2.43	NA

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.7 displays the mean perception of respondents' attitudes toward mobile advertising when grouped according to sex, specifically focusing on the *Credibility* dimension. Based on the findings presented in the table, both male and female respondents show a negative attitude toward mobile advertising, with an overall mean of 2.40 and 2.43 respectively.

Among the statements under *Credibility*, both the male and female respondents rated the same statement as their highest. The statement "*I use mobile advertising as a reference for purchasing*" garnered a score of 2.67 and 2.80 from the male and female respondents respectively. Additionally, it is also the only statement that received a positive attitude among all other three statements. This indicates that male and female consumers use mobile advertising as their reference for purchasing decisions. According to Sharma & Kumar (2024), male and female consumers use mobile ads, particularly those featuring celebrity endorsements, as a reference for purchasing decisions. The findings suggest that consumers are influenced by the likeability, attractiveness, and credibility of celebrities in advertisements. On the other hand, both male and female respondents rated the same statement as their lowest. The statement "*I feel that mobile advertisements have no risk*" received a mean score of 2.22 and 2.23 from the male and females respectively, indicating a negative attitude. This suggests that both sex groups feel that mobile advertisements come with risks. This perception from the respondents is one of the key factors that hinders the effectiveness of mobile advertising.

The findings in table 2.7 imply that the both male and female respondents have a negative attitude towards mobile advertising in terms of *Credibility*. male respondents showed slightly lower mean scores across all the statements except "*I feel that mobile advertisements have no risk*" with a slightly higher difference compared to female respondents, indicating a bigger perception of *Credibility*. These findings show that negative responses to mobile advertising are very common across the groups of sex.

Table 2.8. Mean Perception of the Respondents' Attitudes toward Mobile Advertising when grouped according to Sex along Irritation (n=129)

Dimension	Male (n=46)		Female (n=83)	
	$\bar{x}$	VI	$\bar{x}$	VI
Irritation				
I feel that mobile advertising is irritating.	2.24	NA	2.41	NA
Contents in mobile advertising are often annoying.	2.26	NA	2.42	NA
Mobile advertisements disturb my use of the mobile devices.	2.00	NA	2.20	NA
Mobile advertising disturbs me.	2.15	NA	2.30	NA
Mean of means	2.16	NA	2.33	NA

Note: Reverse scoring was used for Dimension 3: Irritation

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.8 presents the mean perception of consumers' attitudes toward mobile advertising when grouped according to sex, specifically focusing on the *Irritation* dimension. Based on the findings presented in the table, both male and female respondents expressed a negative attitude toward mobile advertising, with an overall mean of 2.16 and 2.33 respectively.

Both male and female respondents reported the highest mean scores for the statement "*Contents in mobile advertising are often annoying*" with a mean of 2.26 and 2.42 respectively. On the other hand both male and female respondents reported the lowest mean scores for the statement "*Mobile advertisements disturb my use of the mobile devices*" presented with a mean of 2.00 and 2.20 respectively. All statements received a negative attitude from both groups. These findings suggest that mobile advertisements often irritate both male and females to their usage of experiences. Although mobile advertising has become prevalent, it can negatively impact user experience, which in other words ruins their usage of mobile devices or hinders them (Nguyen et al., 2020). Moreover, the results also imply that both male and female respondents perceive mobile advertisements the same way as they both have the same highest and lowest-rated statements.

The findings in table 2.8 shows that both male and female respondents have a negative attitude towards mobile advertising in terms of *Irritation*. Male respondents showed slightly lower mean scores across all the statements compared to female respondents, indicating a stronger perception of *Irritation*. However, the results still show that both sex groups hold a generally negative perception about mobile advertising. These findings show that negative responses to mobile advertising are common across sex groups.

Table 2.9. Mean Perception of the Respondents' Attitudes toward Mobile Advertising when grouped according to Sex along Personalization (n=129)

Dimension	Male (n=46)		Female (n=83)	
	$\bar{x}$	VI	$\bar{x}$	VI
Personalization				
I feel that mobile advertisements I receive are relevant to my job and activities.	2.39	NA	2.36	NA
I feel that mobile advertising displays personalized message.	2.35	NA	2.40	NA
I feel that mobile advertisements I receive are relevant to my needs.	2.39	NA	2.40	NA
Overall, the mobile advertising I receive is customized to my needs.	2.28	NA	2.28	NA
Mean of means	2.35	NA	2.36	NA

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.9 displays the mean perception of consumers' attitudes toward mobile advertising in terms of *Personalization* when grouped according to sex. Based on the results, both male and female respondents generally hold a negative attitude toward mobile advertising. The male respondents garnered an overall mean score of 2.35, while the female respondents garnered an overall mean score of 2.36.

Male respondents expressed a negative attitude to the statements "*I feel that mobile advertisements I receive are relevant to my job and activities*" and "*I feel that mobile advertisements I receive are relevant to my needs*", with a mean score of 2.39, the highest rating for their group. The female respondents expressed a negative attitude to the statements "*I feel that mobile advertising displays personalized message*" and "*I feel that mobile advertisements I receive are relevant to my needs*", with a mean score of 2.40, the highest rating for their group. In contrast, both male and female respondents rated the statement "*Overall, the mobile advertising I*

receive is customized to my needs” the lowest with a mean score of 2.28, indicating a negative attitude as well. According to Chandra et al. (2022), Content and products that are personalized by customers preferences can make them feel more relevant and engaging, which can often give them higher expectations that they would receive what they want.

The findings in table 2.9 imply that both male and female respondents have a negative attitude towards mobile advertising in terms of *Personalization*. Male respondents showed less than little to no difference of the mean of means score compared to female respondents, specifically when it comes to the relevance of mobile advertising to their needs. According to Geng et al. (2021), personal relevance and needs has primary and deterministic impacts on attitudes and feedback towards advertisements. The results show that both sex groups hold a generally negative perception about mobile advertising. These findings show that negative responses to mobile advertising are common across sex groups. With an overall negative attitude, it is important to provide personalized information that will send more appropriate messages and increase mobile marketing efficiency.

Table 2.10. Mean Perception of the Respondents’ Attitudes toward Mobile Advertising when grouped according to Sex along the Four Dimensions (n=129)

Dimensions	Male (n=46)		Female (n=83)	
	$\bar{x}$	VI	$\bar{x}$	VI
1. Entertainment	2.44	NA	2.62	PA
2. Credibility	2.40	NA	2.43	NA
3. Irritation	2.16	NA	2.33	NA
4. Personalization	2.35	NA	2.36	NA
Overall mean	2.34	NA	2.35	NA

$\bar{x}$ (Mean Score); SD (Standard Deviation); VI (Verbal Interpretation)

3.26 - 4.00 (Very Positive Attitude/VPA);

2.51 - 3.25 (Positive Attitude/PA);

1.76 - 2.50 (Negative Attitude/NA);

1.00 - 1.75 (Very Negative Attitude/VNA)

Table 2.10 presents the mean perceptions of respondents’ attitudes toward mobile advertising when grouped according to sex across the four dimensions: *Entertainment*, *Credibility*, *Irritation*, and *Personalization*. The findings reveal that both male and female respondents hold an overall negative attitude towards mobile advertising. The difference between the overall mean of both sex groups was 0.01, with male respondents scoring an overall mean of 2.34 and the female respondents scoring an overall mean of 2.35

Entertainment garnered the highest mean score of 2.62 from the female group, suggesting a relatively more positive attitude toward the dimension. On the other hand, the male group scored lower, with a mean score of 2.44, indicating that they have a more negative attitude toward *Entertainment*. This supports the findings of Dirin et al. (2019), who stated that female consumers are more responsive to emotionally engaging digital content, which may influence their perception of mobile advertising as being entertaining.

As to *Credibility*, both the male and female groups had a negative attitude, with the male group having a mean score of 2.40 and the female group having a slightly higher score of 2.43. The slightly higher mean score from the female respondents implies a marginally more favorable trust toward mobile advertisements. Al-Khalaf and Choe (2020) explained that among different consumer segments in Qatar, including the finding that female consumers tend to trust mobile advertising more when it is clear, trustworthy, and familiar. Nonetheless, both male and female respondents remained to have a negative perception in terms of *Credibility*.

Regarding *Irritation*, both groups also expressed a negative attitude. The male group scored a mean of 2.16, while the female group scored 2.33. These findings suggest that male respondents are more likely to feel irritated or disturbed by mobile advertisements compared to female respondents. A study by Spasova and Taneva (2021) supports this, reporting that male users are more sensitive to unsolicited advertising and experience stronger disruption in mobile interaction when exposed to such ads.

For *Personalization*, the mean scores of both groups were relatively close. The male group garnered a mean score of 2.35, while the female group garnered 2.36. Both scores indicate a negative attitude, suggesting that respondents feel that mobile advertising is not effectively personalized to meet their needs. However, the slightly higher score from the female respondents may indicate a greater appreciation for personalized advertising when it is present. Spasova and Taneva (2021) noted that female consumers are more likely to respond positively to mobile ads that reflect their interests and daily routines.

Overall, the findings reveal that both the male and female groups had a negative attitude toward mobile advertising. Among the four dimensions, only *Entertainment* from the female group received a positive perception, though still within the negative range. These results indicate that female consumers are more inclined to mobile advertisements when they are entertaining. At the same time, male consumers are more likely to disregard entertaining mobile advertisements. With these findings, marketers are encouraged to develop less intrusive, more relevant, and emotionally engaging mobile advertisements to improve consumer perception across different sex groups, particularly from the education sector.

3. The significant difference in the consumers' attitude toward mobile advertising in terms of *Entertainment, Credibility, Irritation, and Personalization* when grouped according to age and sex

Table 3.1. Significant Difference in the Consumers' Attitude Toward Mobile Advertising When Grouped According to Age (n=129)

Dimensions	Computed t	P-value	Sig. 0.05	Status of Hypothesis
Entertainment	-1.881	0.063	Not Significant	Accepted
Credibility	-1.236	0.219	Not Significant	Accepted
Irritation	-1.346	0.181	Not Significant	Accepted
Personalization	1.563	0.121	Not significant	Accepted

Table 5 shows the results indicating no significant difference in consumers' attitudes toward mobile advertising when grouped according to age. For all four dimensions, all the P-values have scores greater than 0.05. Among them, **Credibility** recorded the highest P-value 0.219 (Computed t = 1.236), while **Entertainment** had the lowest P-value 0.063 (Computed t = -1.881). Therefore, the hypothesis stating that there is no significant difference in consumers' attitude towards mobile advertising when grouped according to age is accepted. This implies that the age groups do not influence consumers' attitude.

These results suggest that, despite different studies having found differences in mobile advertising acceptance across age groups (Munawar et al., 2022), age may not significantly influence consumers' attitudes toward mobile advertisements. Instead, factors like personal preferences and behavioral traits could have a more significant influence. According to Kim (2019), young consumers' regulatory focus affects their perceptions of the significance and effectiveness of mobile advertisements. This shows that when developing mobile advertisements, marketers should prioritize psychological and behavioral aspects rather than targeting based on age.

Table 3.2. Significant Difference in the Consumers' Attitude Toward Mobile Advertising When Grouped According to Sex (n=129)

Dimensions	Computed t	P-value	Sig. 0.05	Status of Hypothesis
Entertainment	-1.378	0.172	Not Significant	Accepted
Credibility	-1.342	0.733	Not Significant	Accepted
Irritation	-1.580	0.118	Not Significant	Accepted
Personalization	-0.054	0.957	Not significant	Accepted

Table 6 exhibits the significant difference in the consumers' attitude toward mobile advertising when grouped according to sex. For all four dimensions, all the P-values have scores greater than 0.05. **Personalization** had the highest P-value 0.957 (Computed t = -0.054), while **Irritation** had the lowest P-value 0.118 (Computed t = -1.580). The results indicate that there is no significant difference in consumers' attitude when grouped according to sex. Therefore, the hypothesis stating that there is no significant difference in consumers' attitude towards mobile advertising when grouped according to sex is accepted.

These results imply that sex does not influence consumers' attitude. The study of Almasri et al. (2024) examined the impact of personalization, informativeness, entertainment, credibility, and irritation on consumer attitudes toward mobile advertising. The results showed that sex does not influence consumers' attitudes towards mobile advertising in Kuwait. However, a study conducted by Spasova and Taneva (2021) contradicted the findings presented above. The study revealed that men and women process advertising information differently, with men focusing more on the objective attributes of the product and its functionality, while women are more influenced by the entertainment nature of advertisements. This suggests that sex can play a role in how advertising content is perceived and evaluated.

Hypothesis

The null hypothesis which states that *there is no significant difference in the consumers' attitude toward mobile advertising in terms of entertainment, credibility, irritation, and personalization when grouped according to age* is accepted. This means that age does not significantly affect consumers' attitude toward mobile advertising. Moreover, the results also show a similar consumer attitude between male and female respondents, indicating that the hypothesis *there is no significant difference in the consumers' attitude when grouped according to sex* holds true. Overall, the findings imply that consumer attitude is not influenced by age and sex.

IV. Discussion

This study determined consumers' attitude towards mobile advertising. It measured the respondents' attitude based on four dimensions adopted from the study of Okoe and Boateng (2015): *Entertainment*, *Credibility*, *Irritation*, and *Personalization*. This study utilized 129 respondents, who were grouped according to their age and sex. The results gathered from this study found that consumers have a negative attitude towards mobile advertising. Among the four dimensions, only *Entertainment* received a positive attitude from the older and female respondents. The other three dimensions: *Credibility*, *Irritation*, and *Personalization*, received a negative attitude from both demographics, regardless of age group and sex classification.

In terms of *Entertainment*, the findings highlight the crucial role of entertaining, enjoyable, and pleasing mobile advertisements in shaping consumer attitudes. As *Entertainment* rated the highest mean among the respondents, it became a major influence on how positively consumers react to mobile ads, particularly older and female respondents. Lin and Bautista (2018) support this idea, stating that entertainment has the strongest effect on mobile advertising, making it the second most important factor in advertising. Similarly, Aramendia-Muneta and Olarte-Pascual (2019) found that Entertainment substantially affects consumer attitudes toward mobile advertising. This positive attitude from the consumers can significantly increase consumer purchases. With these findings, marketers should incorporate entertaining elements into mobile advertising to effectively receive a positive attitude from their consumers, especially if they are from the field of education.

When it comes to *Credibility*, respondents generally had a negative attitude toward the credibility of mobile advertising, regardless of age or gender. According to Nieuwenhuis (2020), people do not engage in mobile advertising because they do not perceive the advertisements as credible. However, the statement "*I use mobile advertising as a reference for purchasing*" received a positive attitude from the respondents, suggesting that they use mobile advertisements as a basis for purchasing decisions. A study by Hashim et al. (2018) supports this statement, indicating that advertising message content has a significant impact on purchase intentions. Although one statement received a slightly more positive response, which is using mobile ads as a reference for purchasing, the overall perception remained negative. This suggests that many consumers view mobile ads as untrustworthy. Past research supports this view and highlights the importance of improving ad credibility to positively influence consumer attitudes and boost engagement.

Regarding *Irritation*, respondents viewed mobile advertisements as irritating, with negative attitudes seen across all age and gender groups. Similar results from other studies also indicate that irritation was negatively related to attitudes toward mobile advertising. Both younger and older individuals, as well as male and female respondents, found ads to be bothersome. Additionally, advertising irritation acts as a strong negative moderator, significantly reducing overall advertising effectiveness (Sharma et al., 2022). With these results, marketers should focus on removing intrusive and annoying elements within their mobile ads to improve the overall perception of their consumers.

In terms of *Personalization*, respondents showed a negative attitude toward mobile advertising. Both age and gender groups reflected similar views, suggesting that many consumers are not receptive to ads that do not feel tailored to their needs. However, the younger group expressed a positive attitude to one statement, which is feeling that mobile advertisements are relative to their needs. This suggests that younger consumers receive relevant advertisements but remain to have a negative attitude in terms of *Personalization*. According to Zaheer et al. (2024), consumers expect more personalized mobile ads and are less likely to accept those that are not tailored to their preferences. In order for mobile advertisements to be more effective, they need to genuinely align with what consumers find relevant.

The study also found that consumers' attitudes toward mobile advertising did not significantly differ based on age or gender. This supports the researchers' hypothesis, suggesting that demographic factors like age and sex do not strongly influence how people feel about mobile advertisements. Furthermore, limitations were also identified in this study. First, this study utilized respondents coming from the academic field, thus, limiting the results to the perspectives and attitudes of the teaching and non-teaching personnel only. Second, the researchers utilized the traditional way of gathering data. Printed survey questionnaires were used to administer the data collection process. This made it difficult for the researchers to track the status of responses. Moreover, it also required manual entry and transcription of data, limiting the efficiency of data collection.

The findings of this study suggest that marketers should focus on improving the credibility and personalization of their advertising while also reducing irritating factors that could negatively affect consumer purchase.

V. Conclusion

This study explored consumers' attitudes toward mobile advertising using four dimensions: *Entertainment*, *Credibility*, *Irritation*, and *Personalization*. Based on responses from 129 participants grouped by age and sex, the findings revealed an overall negative attitude toward mobile advertising. Among the four dimensions, only *Entertainment* received a positive response, particularly from older and female respondents. This underscores the significant role of engaging and enjoyable content in shaping favorable consumer attitudes.

In contrast, *Credibility*, *Irritation*, and *Personalization* were consistently rated negatively across all demographics. While some consumers indicated they use mobile ads as a reference for purchasing, overall trust in such advertisements remains low. Irritation emerged as a strong deterrent, with many finding mobile ads intrusive and bothersome. Although younger respondents acknowledged some relevance in ad content, *Personalization* still received negative attitudes.

Furthermore, the study found no significant differences in attitudes based on age or gender. This indicates that these demographic factors have minimal influence on perceptions of mobile advertising. With these results, the researchers recommend

marketers to draw their attention to creating mobile advertisements that offer a pleasing experience to the consumers while simultaneously personalizing these advertisements according to the needs of the consumers. Additionally, remaining credible and keeping a good public reputation can create positive consumer feedback.

As a recommendation, this study can be used by marketers as a basis in creating a mobile marketing plan, wherein the credibility and personalization of the advertisements are enhanced and the irritation factors are reduced. Moreover, future researchers may conduct similar studies but with respondents from various professional fields to gain and expand the knowledge about consumer attitudes from different types of consumers.

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