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Attitudes towards Mobile Advertising – A Research to Determine the Differences between the Attitudes of Youth and Adults

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Abstract

The aim of this study is to determine whether there is a difference between the attitudes of youth and adults towards mobile advertising. As it is known, youth and adults are two quite different consumer groups in terms of their consumption styles and patterns. The differences show themselves in various aspects such as product, brand, advertising message, and media preference. From this point of view, it was aimed in the study to investigate the attitudes of youth and adults towards mobile advertising and whether there was a difference between their acceptance-rejection behaviors regarding mobile advertising. In the direction of the purpose of the study, a questionnaire is administered to the youth and adults living in Erzurum/Turkey. In the study, primarily the variables having roles in creating an attitude towards mobile advertisements, and the relationships between intention and acceptance-rejection behavior towards mobile advertisements were investigated. According to the results, an advertisement's being entertaining, informative, reliable, personalized, and its being sent with permission has a positive effect on creating attitudes towards mobile advertisements. There is also a difference between the attitudes, intentions and behaviors of Youth and adults towards mobile advertisements.

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Keywords; Consumer Behavior, Mobil Advertising

1. Introduction

Advances in communication technology directly affect marketing tools and methods [1]. Rapid developments in mobile means of communication have brought out new communication channels for marketers to reach their customers [2], [3]. Particularly young generation uses mobile phones as a

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multipurpose means of communication by receiving and sending text messages, graphics, data, music, video etc. These stated features of mobile phones make mobile phones one of the most important means of communication [4]. When considered in terms of marketing, mobile phones are direct marketing tools that enable communication with target groups in any place and at any time [5]. In communication by means of mobile advertisements sent depending on the consumer information, accessibility, frequency and speed are increased [2].

According to the information obtained from the Global Mobile Suppliers Association as of March 2011, 543 GSM/EDGE networks operate commercially in 198 countries in the world. Again, according to the same report, total number of mobile communication subscribers in the world is 4 billion 916 million [6]. While this figure was 1,14 billion in 2004, it was 3,3 billion in 2007 [1]. When considered in terms of Turkey, Institute of Information Technologies and Communication (BTK) announced that there are 136 million mobile phones and 66 million mobile subscribers in Turkey as of June 2010 [7]. While the number of mobile subscribers was 40 million in 2004, it reached 60 million as of the end of 2007 [1].

Along with mobile phone ownership and rapid increase in its use, mobile advertising has emerged as an important communication channel and enabled the rapid adaptation of wireless technologies in marketing strategies [8]; [9]. The reasons why mobile phones have gained importance in marketing can be stated as follows: customers' having their mobile phones at any time and in any place, their always being open to communication, one-to-one communication that attracts more attention, responding the messages later by recording them, the opportunity to have one-to-one audiovisual communication, and providing suitability for customers and efficiency for marketing managers [5]. In this field, particularly short messaging service (SMS) has been very successful [3]. Mobile SMS advertising has becoming increasingly important among marketers since it can personalize messages and it is interactive [9].

Rapid spread of SMS advertising and its having an important place among promotional tools was a determinant in carrying out this study. As in every new application put into practice, there is a need to direct strategies in the direction of market reactions and expectations in SMS advertising as well. Determining attitudes and opinions of consumers will be helpful to use this promotional tool more effectively. Large masses are reached by SMS advertising. However, as it is known, consumers have different characteristics and expectations. Therefore, promotional activities to be carried out considering these differences will be more target-focused. In this direction, in the study, it was aimed to determine whether there is a difference between the attitudes of youth and adults towards mobile advertising. As it is known, youth and adults are two quite different consumer groups in terms of their consumption styles and patterns. The differences show themselves in various aspects such as products, brands, advertising messages, and media preferences. It was aimed in the study to investigate the attitudes of youth and adults towards mobile advertising and whether there was a difference between their acceptance-rejection behaviors regarding mobile advertising. In the direction of the purpose of the study, a questionnaire was administered to the youth and adults living in Erzurum/Turkey. The study included three parts. In the first part, mobile advertising and mobile marketing were dealt with in conceptual terms. In the second part, information about the survey conducted in order to determine the attitudes of consumers towards mobile advertising was explained and in the last part, results and suggestions were presented.

2. Mobile Advertising

In general terms, mobile advertising is the transmission of advertising via a mobile device [10]. Mobile advertising is the transmission of a message related to products, services and opinions for promotional purposes via mobile devices [11]. In another definition, mobile advertising is expressed as the presentation of a product, service or ideas with personalized information to the target group by using mobile means of communication [5].

In fact, mobile advertising is a dimension of mobile marketing and mostly focuses on advertising [12]. Pull- and push-oriented advertisements are used in mobile advertising. In push-oriented advertisements,

written and video messages are sent to target customer groups after getting permission from mobile phone users. On the contrary, in the pull-oriented advertisements, free information such as traffic reports or weather condition is sent by adding them to the information asked for by mobile phone users [5]. Mobile advertising has become attractive due to its low cost and high spread [8]. The leading companies of the world such as Procter & Gamble, Microsoft, Disney, Coca-Cola, Sony Pictures and McDonalds adopted mobile advertising and included mobile advertising in their marketing budgets. Since the first mobile advertisement message was sent in Scandinavia in 1997, mobile advertising has been rapidly growing [13].

The first form of mobile advertising was short message advertising sent to the mobile phones of eager consumers determined before in order to participate in mobile advertisement campaigns. Short message advertisements are limited in terms of creativity since only text messages up to 160 characters can be sent through short messages. In the following years, especially in Asia and Europe, multimedia messaging service (MMS) was used during mobile campaigns. Multimedia message advertisements are made up of drawings and audio clips and they can convey more creative and effective messages [11]. Along with this, short message advertising is applied mostly through mobile phones [1]. Short messaging service has gained great popularity in interpersonal communication since it provides message exchange for users of any age group in their social and business relations [14].

Mobile advertising is different from traditional media advertising in various ways. The two most important different features of mobile advertising are stated as follows: it is interactive and individual [15]. Rapid, easy, cheap and effective interaction is provided among consumers and companies in mobile advertising. Messages generally individualized without making any time and place differences can be conveyed to the intended consumers. Thus, consumers can easily get information they are interested in. Mobile advertising is in conformity with the understanding of modern marketing with these features. Companies accept mobile advertising as a part of integrative marketing communication strategy [1].

As a result of rapid spread of mobile advertisements, some rules and regulations were issued towards these advertisements. In some countries, it is necessary to get the approval of consumers before sending messages for mobile advertising applications [13].

2.1. Theoretical Framework

As stated before, today, short messaging method is generally used in mobile advertising applications. Therefore, the studies about short messaging advertising are mostly found in the literature. Most of these studies were carried out in order to determine consumers' attitudes towards SMS advertising. At the same time, acceptance (reading) or rejection (deleting) behaviors of SMS advertisements were investigated. Moreover, factors that were effective in developing positive and negative attitudes towards SMS advertisements were tried to be determined.

Barwise and Strong (2002), in a study they carried out in England, determined that consumers' attitudes towards mobile advertisements sent by getting permission were positive and that 81% of consumers read messages [16]. In a study conducted by Xu (2007) in China, it was determined that there was a direct relationship between consumer attitudes and their intentions and that one of the most important factors affecting consumers', particularly women's, attitudes towards mobile advertising was personalization. In addition, it was also determined that the factors including entertainment and reliability were effective on consumer attitudes [17]. Chowdhury et al., (2006), in a study they carried out in Bangladesh, determined that out of the factors affecting the attitudes of the consumers towards mobile advertising, there was a significant relationship only between the credibility factor and attitude. No relationship was determined between the factors including entertainment, informativeness, irritation, and attitude [15]. According to the research conducted by Enpocket, a Mobile Marketing Research Company, on 1200 American, European and Indian mobile internet users, consumers accept mobile advertisements

they are interested in more. 78% of consumers are satisfied by getting mobile advertisements when their interests fully correspond [1].

As a result of a study conducted by Okozaki, Katsura and Nishiyama (2007), it was determined that the reliability in mobile advertisements directly and positively affected the attitudes towards mobile advertisements [18]. As a result of a study carried out by Carol et al. (2007) on university students in New Zealand, it was determined that the factors including permission, message content, service providers' control on message, and frequency of sending messages had significant effect on the acceptance of mobile advertisements [14]. According to the research conducted by Muk (2007) on American and Korean university students, a positive relationship was found between consumer attitudes and beliefs and their intention to prefer to participate in mobile advertising. Additionally, the attitudes of Korean youth towards mobile advertising were more positive than American youth [2].

In a study conducted by Wong and Tang (2008) it was determined that the attitude and intention towards mobile advertising were generally negative. Along with this, it was also determined that the entertainment factor had the strongest effect on attitude and there was no important relationship between permission factor and attitude [9]. As a result of a study conducted by Altuna and Konuk (2009), in which the attitudes of Turkish and American consumers towards mobile advertising were compared, it was determined that the attitudes of Turkish consumers towards mobile advertising were more positive than the American consumers [13]. In a research conducted by İspir and Suher on 400 university students in Turkey, it was determined that the consumers had a negative attitude towards the acceptance of SMS advertisements. The most important factor affecting the attitudes of the consumers towards SMS advertisements was determined to be entertainment. It was followed by disturbance, reliability and informativeness, respectively [19].

Tsang, Ho and Liang (2004) combined the models developed by Ducoffe (1996) and Brackett and Carr (2001) to determine attitudes towards internet advertising and the Theory of Reasoned Action by Fishbein and Ajzen (1975), and adapted them to mobile advertising. Factors including entertainment, informativeness, irritation and reliability among the variables used in the study were obtained from the studies of Ducoffe (1996) and Brackette and Carr (2001), variables including attitude, intention and behavior from the Theory of Reasoned Action developed by Fishbein and Ajzen (1975). The contribution of Tsang, Ho and Liang (2004) to the model formed can be stated as the addition of variables including permission and incentive. As a result of the study conducted by the researchers in Taiwan, it was determined that consumers were generally in a negative attitude towards mobile advertisements but developed positive attitudes when they were asked for permission. A negative relationship was determined between entertainment, informativeness and reliability, and attitude. Along with this, it was determined that incentives offered to consumers increased their tendency to accept mobile advertising messages [3].

When the studies about the attitudes of consumers towards mobile advertising messages are considered, it is seen that the factors including entertainment, informativeness, irritation, credibility, permission, incentives and personalization are the variables affecting consumers' attitudes towards mobile advertising.

2.1.1. Entertainment

Entertainment is one of the important factors of mobile advertising. It is important for a message to be short, succinct and entertaining [17]. Entertainment expresses consumers' sense of pleasure related to messages. In this respect, there are games, music, and visual applications in many of mobile advertising applications [13]. Messages perceived as succinct and funny by consumers arouse interest and consumer loyalty is provided. There is a desire of playing a game in human nature, particularly in children and youth. Therefore, consumers provide high participation levels to the messages comprising entertaining games [1]. Games and rewards sent to mobile phones of target groups are considered to be a successful method applied to retain customers and their loyalties [15]. Bauer and Greyer (1968), Pollay and Mittal

(1993), in their studies, found out that hedonic pleasure had positive effects on attitudes towards advertisements. The perceived entertainment value of mobile advertisements is accepted to be one of the most important factors affecting attitudes of consumers towards advertisements [9].

The hypothesis determined in this direction is stated as follows:

H_1: The perception of mobile advertising as entertaining is effective on the attitude towards mobile advertisements.

2.1.2. Informativeness

Informativeness feature of advertisements can affect consumer satisfaction and their buying decisions [20]. The informativeness dimension is the ability of advertisements to provide updated, timely, and easily accessible information [13]. Quality of information of a company in a mobile advertisement has a direct effect on the consumers' perceptions related to the company and its products [1]. Therefore, information that is sent to consumers via mobile devices should be correct, sent on time, and provide benefits to consumers [17]. Informativeness can be seen as a basic factor for the advertisement to be accepted by consumers [9]. Rotzoll, Haefner and Sandage (1989) stated that informing role of advertising increase the rate of accepting advertisements [20]. The hypothesis determined in this direction is determined as follows:

H_2: The perception of mobile advertising as informative is effective on the attitude towards mobile advertisements.

2.1.3. Irritation

Irritation comprises the only negative dimension of consumer attitudes towards mobile advertising [13]. One of the most important reasons for people to criticize advertisements is irritation. The Theory of Psychological Reactance argues that people react negatively when they perceive their freedom to choose is threatened [9]. Due to relatively low cost of advertising via short messaging service (SMS) and multimedia messaging service (MMS), companies send collective SMS without considering personal information of receivers. As a consequence of this, most people are irritated and disturbed because of these wrong marketing tactics [21]. In other words, irritating, offending, insulting or manipulative advertising techniques cause consumers to perceive advertisements as undesirable and irritating [20]. A number of misleading and diverting information can take place in mobile advertisement messages sent to affect consumers. Consumers who feel they are misled in this respect show negative attitude towards advertisement [17], [1]. To sum up, when people feel that advertisements are irritating or disturbing, their attitudes towards the product advertised change in a negative way [9]. The hypothesis determined in this direction is determined as follows:

H_3: The perception of mobile advertising as annoying is effective on the attitude towards mobile advertisements.

2.1.4. Credibility

Credibility of advertising is generally the perception related to correctness and credibility of an advertisement by consumers [22]. The credibility of messages sent via mobile devices has a positive effect on the attitudes of consumers towards advertisements [15]. The hypothesis determined in this direction is determined as follows:

H_4: The perception of mobile advertising as reliable is effective on the attitude towards mobile advertisements.

2.1.5. Personalization

Mobile advertising has gathered interest due to its unique characteristic such as personalization. Personalization can provide marketers to reach their potential customers individually thus enhancing their relationships with consumers [17]. Personalized mobile advertisements expresses sending of advertising

messages via mobile devices through wireless networks based on factors such as demographic information of consumers [17]. Ho and Kwok (2003) stated that the number of messages sent to consumers by personalization could reduce and thus users would no longer receive irrelevant messages [23].

Mobile advertisements can easily be personalized depending on the time, geographical location and priorities of consumers as written, audio and visual. For example, mobile advertisement messages can be sent with different contents, e.g. movies on at the nearest cinema according to the age, education and location of the mobile phone user; rental flats and dorms according to the location of the campus of university students; and course and/or reading books according to the department of the students. At the same time, according to the signals from base stations, advertisements related to a hotel for those traveling between cities, a gas station and road side restaurants for those traveling by car can be sent and even discount coupons can be offered besides informative mobile advertisements to increase efficiency of mobile advertisements [5]. The hypothesis determined in this direction is determined as follows:

H_5: The personalization of mobile advertisements is effective on the attitude towards mobile advertisements.

2.1.6. Permission-based advertising

Getting permission beforehand is an important factor that affects attitudes of consumers towards advertisements. In permission-based advertising, consumers give permission to marketers regarding the products about which they get information [9]. Permission-based advertising is different from the traditional advertising that disturbs consumers. In this kind of advertising, information about specific products and services are sent to consumers who have given permission for sending messages. From this point of view, permission-based advertising enables to reduce the effect of disturbance by getting permission of the target group [19]. In permission-based advertising, consumers voluntarily participate in the marketing activities by making an agreement between message senders and consumers. According to the researches conducted, while the rate of feedback of the traditional posting campaign is 3%, the rate of return of the messages sent in permission-based advertising is around 30%. This result shows that an important amount of permission-based advertisements do not go for waste [1]. In conclusion, getting information from consumers before sending advertisement messages is an important issue. The risk of consumers can be minimized by reducing the possibility of exploiting personal information of the consumers [9]. The hypothesis determined in this direction is determined as follows:

H_6: The permission-based sending of mobile advertisements is effective on the attitude towards mobile advertisements.

2.1.7. Incentive-based advertising

Another element to be used in order to enhance the efficiency of mobile advertising is incentive-based advertising [1]. In incentive-based advertising, consumers who accept to receive advertisement messages related to a specific promotion or campaign are given specific financial rewards. For example, some GSM operators reward free speaking minutes to their customers since they listen to their voice advertisement messages [15]. Consumers show positive attitudes towards SMS advertisements supported by rewards. The hypothesis determined in this direction is determined as follows:

H_7: The incentives towards mobile advertising are effective on the intention to use mobile advertisements in consumption.

2.1.8. Attitude, Intention and Behavior

The concepts of attitude, intention and behavior constitute three keystones of the Theory of Reasoned action developed by Fishbein and Ajzen (1975) [3]. Fishbein and Ajzen (1975), in their study, argue that attitude affects behavior through intention [9]. Tsang, Ho and Liang (2004), by using this theory, claimed that there was a positive relationship between attitude and intention for consumers to accept mobile

advertisements and that intention affects consumer behaviors significantly [3]. Bagozzi (1981), in his study, states that intention is oriented by attitude [9]. The hypothesis determined in this direction is determined as follows:

H_8: The attitudes in mobile advertising are effective on the intention to use mobile advertisements in consumption

H_9: The intention to use mobile advertisements in consumption is effective on acceptance-rejection behavior.

As it is known, youth and adults are two quite different consumer groups in terms of consumption styles and patterns. The differences show themselves in various aspects such as products, brands, advertisement messages, and media preferences. The hypothesis determined in this direction is determined as follows:

H_{10}: There are differences between mobile advertisements acceptance-rejection behaviors of youth and adults

The study model determined based on the aim of the research was shown in Figure 1.

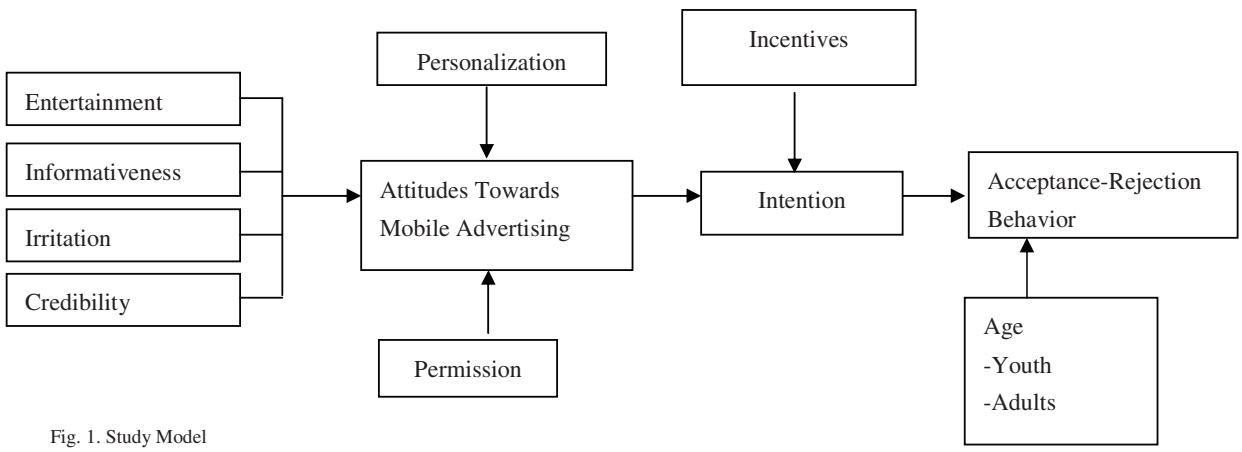


Fig. 1. Study Model

3. Research Design

3.1 Method

The population of the study includes the consumers using mobile phones and living in Erzurum/Turkey. Due to lack of time and financial resources, carrying out the study only in Erzurum is the limitation of the study. As a sampling method, convenience-sampling method was used. A questionnaire was administered to totally 400 consumers, 380 questionnaires were assessed after eliminating the wrongly filled questionnaires. The purpose of the study is to investigate whether there is a difference between the mobile advertisement acceptance-rejection behaviors of youth and adults. Therefore, the questionnaire was administered to the same number of youth and adults(200). In the study, data was be gathered by using the face-to-face survey method. There are 3 groups of questions in the questionnaire. The first group of questions was prepared to determine the demographic characteristics of the respondents; the second group of questions was prepared to determine the experiences of the respondents regarding mobile advertisements (frequency of message receiving, type of advertisement etc). The third group of questions included variables prepared to determine the attitude towards mobile

advertisements, acceptance-rejection behaviors and factors affecting these behaviors. Entertainment, informativeness and irritation included in the study model were prepared from the scales in the studies of Ducoffe (1996), credibility, intention, attitude and personalization from that of Xu (2007); behavior from that of Tsang, Ho and Liang (2004); and permission and incentives from that of Usta (2009). Variables were prepared according to 5-point Likert scale (1= I strongly disagree, 5= I totally agree). The data was analysed by using SPSS and statistics program. In the analysis of the data, t test and structural equation analysis were used.

3.2 Data Analysis and Hypotheses Test Results

3.2.1 Demographic Characteristics

Frequency distributions of the demographic characteristics of the respondents participated in the research was shown in Table 1.

Table 1. Demographic characteristics of respondents

Demographic Characteristics		Frequency	Percent %	Demographic Characteristics		Frequency	Percent %
Gender	Female	202	54.0	Monthly	0-500	155	40.7
	Male	175	46.0	Average	501-1000	66	17.3
Age	18-24	177	46.6	Income Level	1001-1500	34	8.9
	25-32	77	21	of the Family	1501-2000	50	13.1
	33-40	53	14		2001-2500	30	7.8
	41-48	38	10		2500-3000	10	2.6
	49-55	17	4.4		3000-3500	5	1.3
	55 +	15	4	Profession	Civil Servant	58	15.3
Education	Primary Education	19	5		Worker	4	1.1
	Secondary Education	115	29		Self-employed	11	2.9
	University	207	57		Those Working for Private Sector	41	11.5
	Postgraduate	29	9		Housewife	49	12.9
Marital Status	Married	162	43		Industrialist/Businessman	13	3.4
	Single	216	57		Student	180	47.4
					Retired	21	5.5
					TOTAL	382	100.0

54% of the respondents are female, 46.6% are between the ages 18 and 24, 57% are university graduates and 57% are single. 49% are housewives and, 47% are students. The other professional groups showed a close distribution with each other.

The respondents were asked how long they had been using mobile phones, how often they got mobile advertisements, how much of this message they read. The results were shown below.

3.2.2 Buying Behaviour

Table 2. Duration of using mobile phones, number of mobile advertisements they receive, level of reading advertisements

Duration of using mobile phones	Frequency	Percent	What do you do when you are sent a mobile advertisement?	Frequency	Percent
Less than 1 year	9	2.3	I delete without reading	73	19.2
1-5 year	91	23.9	I occasionally read	138	36.3
6-10	218	57.8	I read collectively	7	1.8
11 years and more	61	16	I read when I have time	60	16
Total	379	100	I read at once	101	26.5
Approximate number of monthly mobile advertisements received			Total	379	100
1-10	156	41.5	How much of a mobile advertisement do you read?		
11-20	115	30.2	I never read	58	15
21-30	57	15	I read a quarter of it	45	12
31-40	22	6	I read half of it	76	20
41 and more	28	7.3	I read ¾ of it	15	4
Total	378	100	I read all	181	49
			Total	375	100

The respondents were asked which products-services or brands' advertisements they received most. The responses were shown in Table 3.

Table 3. Types of mobile advertising

	Mean	Standard Deviation
GSM operators	1.2	0.5182
Banks	2.3	0.9951
Health Institutions	4.3	1.5251
Department Stores (clothes, personal care etc.)	2.4	0.9455
Supermarkets	3.2	1.1961
Car Dealers	4.7	1.2504

According to the results, the respondents receive advertisements from GSM operators most. It is followed by banks, department stores, supermarkets and health institutions, respectively. They receive the least advertisements from car dealers.

3.2.3 Test of Research Model

Structural equation analysis was conducted to test the research model. Modifications were carried out since the model did not conform to goodness of fit indexes. With the elimination of 11 out of 34 variables model goodness of fit values reached acceptable limits. The results were shown in Table 4. Complementary statistics of the variables were shown in Appendix A.

Table 4. Model fit values

Fit Index	Before Modification	After Modification	Acceptable Fit
Absolute Fit Index			
Chi-square (X^2)	1400.15	434.81	
Degree of freedom	518	221	
Chi-square/degree of freedom	2.71	2.34	1-5
GFI	0.82	0.90	0,90≤GFI≤0,95
AGFI	0.79	0.88	0,85≤AGFI≤0,90
RMSR		0.075	0,05≤RMSR≤0,08
RMSEA	0.067	0.053	0,05≤RMSEA≤0,08
Incremental Fit Index			
CFI	0.91	0.96	0,95≤CFI≤0,97
NNFI	0.90	0.95	0,95≤NNFI≤0,97
NFI	0.86	0.92	0,95≤NFI≤0,97

Standard coefficients, R^2 values, t values, Cronbach's Alpha coefficients, construct reliability and variances were shown in Table 5.

Table.5. Values belonging to variables of research model

Variables	**Standard Value**	**R^2**	**Error Variance**	**t Value**	Construct Reliability	Explanatory Variance
Entertainment (Cronbach's Alpha=0,89)					0,90	0,75
Mobile advertising is entertaining	0.88	0.77	0.26	8.97		
Mobile advertising is fun to use	0.91	0.82	0.20	7.31		
Mobile advertising is exciting	0.84	0.71	0.30	10.48		
Informativeness(Cronbach's Alpha=0,71)					0,70	0,55
Mobile advertising supplies relevant product information	0.74	0.55	0.45	7.70		
Mobile advertising is a good source of up-to-date product information	0.73	0.54	0.46	8		
Irritation(Cronbach's Alpha=0,69)					0,66	0,49
Mobile advertising is annoying	0.77	0.59	0.41	4.02		
Mobile advertising is deceptive	0.64	0.41	0.59	7.31		
Credibility(Cronbach's					0,81	0,58

Alpha=0,81)						
I use personalized mobile advertising as a reference for purchasing	0.71	0.51	0.49	11.29		
I trust mobile advertising	0.83	0.69	0.31	8.42		
The content provided by mobile advertising is credible	0.77	0.59	0.41	10.27		
Personalization(Cronbach's Alpha=0,88)					0,85	0,66
I feel that mobile advertising displays personalized message to me	0.84	0.70	0.42	9.71		
I feel that mobile advertising is personalized for my usage	0.90	0.80	0.25	7.06		
Contents in mobile advertising are personalized	0.81	0.65	0.43	10.63		
Permission(Cronbach's Alpha=0,85)					0,78	0,66
I trust mobile advertisements sent by getting my permission	0.83	0.70	0.48	6.18		
I am satisfied with mobile advertisements sent by getting my permission.	0.89	0.79	0.33	4.05		
Incentives(Cronbach's Alpha=0,87)					0,81	0,68
I am satisfied to get mobile advertisements offering rewards.	0.89	0.78	0.36	5.18		
I take action to get mobile advertisements offering rewards.	0.88	0.77	0.37	5.62		
Attitudes Towards Mobile Advertising (Cronbach's Alpha=0,85)					0,80	0,67
I like the idea of using mobile advertising	0.89	0.79	0.30	9.57		
Using mobile advertising is a good idea	0.82	0.67	0.43	11.51		
Intention(Cronbach's Alpha=0,79)					0,77	0,63
I will use mobile advertising to consume whenever I have a chance	0.74	0.55	0.45	12.09		
I expect to use mobile advertising to purchase afler receiving it	0.87	0.76	0.33	8.85		
Acceptance-Rejection Behavior(Cronbach's Alpha=0,79)						
What do you do when you receive a mobile advertising message?	0.88	0.77	0.23	3.42	0,83	0,72
How much do you read the mobile advertising messages you receive?	0.80	0.65	0.35	5.90		

The relations between factors were shown in Table 6.

Table.6. Relations among variables of research model

Variables	Standard Value	R^2	Error Variance	t value
Entertainment - Attitudes Towards Mobile Advertising	0.88	0.36	0.64	11.6
Informativeness - Attitudes Towards Mobile Advertising	0.68	0.47	0.53	10.49
Irritation- Attitudes Towards Mobile Advertising	0.45	0.20	0.80	6.73
Credibility- Attitudes Towards Mobile Advertising	0.78	0.61	0.39	12.64
Personalization- Attitudes Towards Mobile Advertising	0.67	0.45	0.55	12.78
Permission- Attitudes Towards Mobile Advertising	0.60	0.36	0.64	10.35
Incentives- Intention	0.67	0.45	0.55	11.38
Attitudes Towards Mobile Advertising- Intention	0.97	0.94	0.06	16.59
Intention- Acceptance-Rejection Behavior	0.53	0.28	0.72	8.76

As shown in Table.6 and Figure.2, Entertainment, Informativeness, Irritation, Credibility, Personalization ve Permission have an impact on Attitudes Towards Mobile Advertising. In this case, H1, H2, H3, H4, H5 and H6 hypotheses were confirmed. Incentives has ımpact on Intention. Attitudes Towards Mobile Advertising has impact on Intention. And Intention has ımpact on Acceptance-Rejection Behavior. In this case, H7, H8 and H9 hypotheses were confirmed.

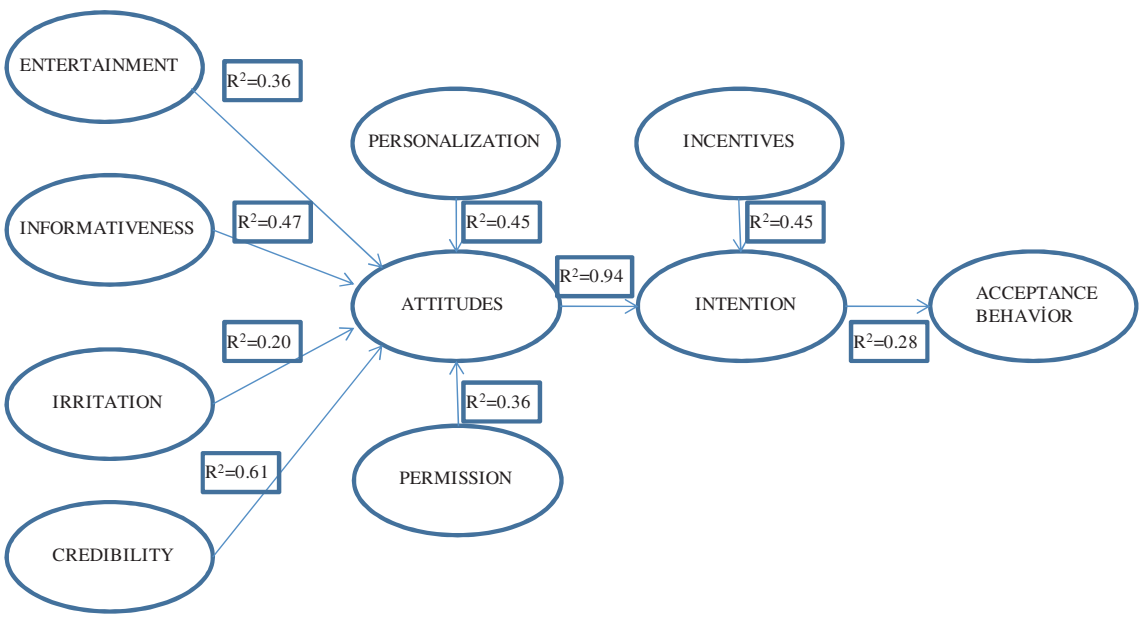


Fig. 2. Research Model

3.2.4 *Differences between Attitudes and Acceptance Behaviours of Youth and Adults towards Mobile Advertising*

t test was carried out in order to see whether there was a difference between the attitudes, intentions and acceptance behaviors of youth and adults towards mobile advertising. The results were shown in Table 7.

Table 7. Differences between attitudes and acceptance behaviours of youth and adults towards mobile advertising

Factors	t	df	Sig.	Means
Entertainment	1.131	378	0.259	
Young				2,1206
Adult				2,0091
Informativeness	0.185	378	0.859	
Young				3,2911
Adult				3,2717
Irritation	2.226	378	0.027	
Young				3,0594
Adult				2,8041
Credibility	1.325	375	0.186	
Young				2,5523
Adult				2,6910
Personalization	4.143	344	0.007	
Young				2,2759
Adult				2,6310
Permission	0.093	378	0.926	
Young				3,0984
Adult				3,1136
Incentives	4.842	378	0.000	
Young				2,3732
Adult				2,9561
Intention	3.505	355	0.001	
Young				2,1060
Adult				2,5101
Attitudes Towards Mobile Advertising	3.107	355	0.002	
Young				
Adult				2,4302
				2,7767
Acceptance-Rejection Behavior	2.122	377	0.034	
Young				
Adult				2,7667
				3,1005

As seen in Table 7, there are differences regarding irritation, personalization, incentives, intentions, attitudes and behaviors between youth and adults. Accordingly, Hypothesis 10 was accepted. Youth think that mobile advertisements are sent more personalized when compared to adults. Adults are of the opinion that mobile advertisements are less personalized. Youth think that mobile advertising has more incentives. Youth are more positive towards these advertisements and tend to benefit from mobile advertising more

than adults do. Similarly, youth accept and consider mobile advertisements more when compared to adults.

4. Conclusion

In this study, it was investigated whether there is a difference between the attitudes and behaviors of youth and adults towards mobile advertising. In the study, primarily the variables having roles in creating an attitude towards mobile advertisements, and the relationships between intention and acceptance-rejection behavior towards mobile advertisements were investigated. According to the results, an advertisement's being entertaining, informative, reliable, personalized, and its being sent with permission has a positive effect on creating attitudes towards mobile advertisements. The advertisements considered as irritating affect attitudes negatively. Similarly, advertisements comprising incentives affect intentions towards advertisements positively. Attitude is effective on intention. Intention affects acceptance behavior of advertisements positively. The results obtained provided similar results to the studies conducted by Barwise and Strong, (2002), Xu (2007), Chowdhury et al., (2006), Usta, (2009), Okozaki, Katsura and Nishiyama, (2007) and Tsang, Ho and Liang (2004). Mobile advertisements acceptance behavior was suitable to the Theory of Reasoned Action (attitude, intention, and behavior) developed by Fishbein and Ajzen (1975).

There is a difference between the attitudes, intentions and behaviors of Youth and adults towards mobile advertisements. Youth see mobile advertisements more irritating than adults do. Youth think that mobile advertisements are sent more personalized and have more incentives when compared to adults. Youth are more positive towards these advertisements and are more intended to use them than adults. Similarly, youth accept and consider mobile advertisements more than adults do. Accordingly, it is seen that youth are more open to mobile advertisements and consider these advertisements in their decisions more than adults do. Therefore, in promotional works towards youth, they can benefit from mobile advertisements more efficiently. However, youth pay more attention to the personalization and non-irritating content of advertisements than adults do. It is useful to pay attention to the personalization and non-annoying content of mobile advertisements towards youth.

4.1 Limitations and Implications

In this study, the Theory of Reasoned Action developed by Fishbein and Ajzen (1975) was considered in the acceptance behavior of mobile advertising. The attitude towards mobile advertising has effect on intention and intention has effect on behavior. The effect of entertainment, information, reliability, non-irritation, personalization and permission was examined on the formation of behavior. Literature on this issue can be expanded by examining the role of other elements in creating an attitude towards mobile advertising in further studies

In the study, the differences between attitudes and behaviors of adults and youth towards mobile advertisements were examined. In order to better determine the features of the target group of mobile advertisements and develop more suitable message strategies, psychographical characteristics such as personality, life styles etc. can be investigated.

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Appendix A. Appendix A. Descriptive Statistics

Variables	Mean	Std.S
Entertainment		
Mobile advertising is entertaining	2.0740	1.077
Mobile advertising is fun to use	2.1143	1.068
Mobile advertising is exciting	1.9973	1.026
Informativeness		
Mobile advertising supplies relevant product information	3.2876	1.172
Mobile advertising is a good source of up-to-date product information	3.2741	1.160
Irritation		
Mobile advertising is annoying	2.8924	1.363
Mobile advertising is deceptive	2.9575	1.256
Credibility		
I use personalized mobile advertising as a reference for purchasing	2.7367	1.278
I trust mobile advertising	2.4894	1.188
The content provided by mobile advertising is credible	2.6498	1.145

Personalization		
I feel that mobile advertising displays personalized message to me	2.5134	1.198
I feel that mobile advertising is personalized for my usage	2.5388	2.437
Contents in mobile advertising are personalized	2.3360	1.121
Permission		
I trust mobile advertisements sent by getting my permission	2.9466	1.256
I am satisfied with mobile advertisements sent by getting my permission.	3.2661	2.492
Incentives		
I am satisfied to get mobile advertisements offering rewards.	2.7920	1.297
I take action to get mobile advertisements offering rewards.	2.5680	1.277
Attitudes Towards Mobile Advertising		
I like the idea of using mobile advertising	2.5611	1.209
Using mobile advertising is a good idea	2.6640	1.153
Intention		
I will use mobile advertising to consume whenever I have a chance	2.1173	1.444
I expect to use mobile advertising to purchase afler receiving it	2.5200	1.185
Acceptance-Rejection Behavior		
What do you do when you receive a mobile advertising message?	2.9419	1.536
How much do you read the mobile advertising messages you receive?	3.5759	1.543