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The Study of Customer Attitudes towards SMS Advertisements

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Abstract

The use of mobile phones and the Internet has been increasing rapidly with the continuous developments in technology. This increase helps businesses have a more interactive relationship with their customers both increasing the customer satisfaction and the quality of the organizations. Especially, short message services are of importance to maintain the customer relations. The focus of communication has turned to mobile technologies with the availability of the Internet in mobile devices. Thanks to these developments in technology, businesses have begun to focus on mobile marketing in order to reduce the costs and address more people than before. In addition, whether they are positive or negative, the attitudes of customers can have a certain influence the reputation of the companies. This study aims to examine the attitudes of the college students at Trakya University, Kesan Yusuf Capraz School towards the sms marketing advertisements and the differences stemming from their ways of life.

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1. Introduction

Thanks to technology being an important part of olur lives, the number of products used in daily and business life has increased greatly. Therefore, the competence between companies has been gainin pace. Companies making use of technologies intensively and new advertising tools have set their sight on reducing costs and reaching larger masses. Especially, with the use of mobile phones as an advertising tool, text messages sent to consumers have introduced a new advertising concept (Waldt et al, 2009).

Stunning developments in mobile communication technologies have led to changes in forms of communication with consumers creating new platforms for business-consumer interactions (Bauer et al, 2005; Shankar &

* Egemen Tekkanat. Tel.: +905335765806. *E-mail address:* egementekkanat@trakya.edu.tr Malthouse, 2007; Sultan & Rohm, 2005). These platforms are a lot of preferred by consumers. Especially advances in mobile phone technology, for businesses to reach potential customers and developers has created a new communication channel (Muk, 2007a: 177) Mobile phones and other personal and portable digital devices have almost turned into a basic need for young and young-adult consumers especially (Gong and Li, 2008; Sultan et al, 2010) Accordingly, their ads mostly technology companies entered into the action of making it through sms. Compared with the majority of traditional media ads, mobile ads becoming more affordable to the wishes of the consumer and consumer in terms of the development of relations is more superior. (Xu et al 2008: 711). For that reason, by using mobile devices for marketing, companies can reach to their costumers without much difficulty compared to other communication tools.

SMS ads have gained importance as they can be customized according to place, time and interests of consumers (Scharl et al, 2005). While SMS advertising is a fast and effective marketing tool, whether it is regarded positively or not by consumers is also an important factor. Moreover the target audience for advertisers, where they are optional according to the current needs and the tools they use for marketing campaigns has made it possible to be informed about. (Karaca & Atesoglu, 2006) In this study, the attitudes of college students towards sms ads and marketing were examined and the differences by life style were identified. SPSS Data Analysis software was used.

2. Material and Method

2.1. Sample and Assessment Instrument

Students at Trakya Univeristy Kesan Yusuf Capraz School of Applied Disciplines make up the population of the study. The study sample includes 265 undergraduate students. The research model has two subdimensions with questions based on the demographic information and attitudes of the students towards sms ads. The data were collected in 2014.

The scale used was taken from the article Consumer Attitudes and Behaviors towards SMS Ads (Cakır et al, 2010) and modified in compliance with the aims of the study based on expert opinion was applied. The scoring was done as follows; "Definitely disagree=1", "Disagree=2", "Not sure=3", "Agree=4" and "Definitely agree=5".

2.2. Aim of the Study and Research Model

The primary goal of this study is to determine whether college students demographic feature have an impact on their perceptions of SMS ads. Thus, descriptive survey method was used as the research model. Age, gender, the number of SMS ads received on mobile phones per week, the attitudes towards ads and special offers received on the phone, amount and frequency of shopping per month were asked. Kruskal Wallis tests were used to determine whether the subdimensions differ by, age, amount and frequency of shopping per month and the attitudes towards ads and special offers received on the phone. For gender, Mann Whitney U tests were applied and 6 hypotheses were developed in the scope of the study, which are;

H₁= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by gender.

H₂= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by age.

 H_3 = Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by the number of SMS ads received on mobile phones per week.

H₄= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by the attitudes towards ads and special offers received on the phone.

 H_5 = Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by the amount of shopping per month.

H₆= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by the frequency of shopping per month.

2.3. Data Analysis

The data analysis was done using SPSS 20 (Statistical Package for Social Sciences) software. Frequency

distribution was done for the demographic information collected from 265 undergraduates. Then, factor analysis done for Consumer Behaviors and Attitudes towards SMS Ads scale data. Factor weight was regarded as 0,50 and questions 4 and 15 were exluded from the scale. Three subdimensions were formed based on the factor analysis. Cronbach's Alpha value was found 0,702, which was considered to be a good level after the validity, reliability, factor and difference tests were done.

3. Findings

3.1. Factor and Reliability Analysis

Factor analysis was applied to the data of the scale used in the study after determining whether the data set was fit for factor analysis using KMO and Barlett's test. Kaiser-Meyer-Olkin (KMO) test result was 0.854, which shows that factor analysis is applicable to the data set. As the p value for Barlett's test was 0.00, p< 0.05 in other words, the relationship between the variable was sufficient to do the factor analysis.

| Table 1. Consumer Behaviors and Attitudes towards SMS Ads Scale Factor and Reliability Analyses Result | S |
|--|---|
| | |

| Factors | Item | F.Weight | F.Explanation Rate | Cronbach's Alfa |
|---|------|----------|-----------------------|-----------------|
| | s12 | ,725 | | |
| | s14 | ,697 | | ,787 |
| Reliability of | s16 | ,645 | | ,,,,, |
| SMS Ads | s13 | ,611 | 19,758 | |
| (Factor – 1) | s5 | ,579 | | |
| | s18 | ,568 | | |
| | s9 | ,505 | | |
| The Level of Interest in SMS Ads (Factor – 2) | s3 | ,830 | | |
| | s1 | ,740 | | ,761 |
| | s6 | ,619 | 17,444 | |
| | s2 | ,593 | | |
| | s17 | ,536 | | |
| | s11 | ,764 | | 700 |
| Negative | s10 | ,746 | 14.012 | ,709 |
| Aspects of SMS Ads (Factor – 3) | s7 | ,706 | 14,013 | |
| | s8 | ,631 | | |

The four factors presented in the table explain 51,215% of the variance. The overall reliability of the scale is present on the three factors and total reliability is 0,702. Kolmogorov-Smirnov normal distribution test results for the factors are shown in Table 2.

Table 2. Kolmogorov-Smirnov Normal Distribution Test Results (Test of Normality)

| - | Factor - 1 | Factor – 2 | Factor – 3 |
|------------------------|------------|------------|------------|
| Kolmogorov-Smirnov Z | 1,306 | 2,295 | 1,769 |
| Asymp. Sig. (2-tailed) | ,066 | ,000 | ,004 |

 H_0 = Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions have a normal distribution. As shown on the table, Factor 2 and Factor 3 values were p<0,05, so Hypothesis H_0 was rejected. Therefore, the use of nonparametric tests was thought appropriate.

3.2. Testing the Differences in Consumer Behaviors and Attitudes towards SMS Ads Scale Subdimensions by Gender

Whitney U test was used in order to identify the differences by gender of the participants. The following hypotheses were developed in this context;

H0= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions do not differ by gender.

H1= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by gender.

In order to measure the differences in subdimensions, hypotheses H1a, H1b and H1c were also developed. The difference test results are presented in Table 3.

| | Factor – 1 | Factor – 2 | Factor – 3 |
|------------------------|------------|------------|------------|
| Mann-Whitney U | 7960,000 | 8133,500 | 7533,000 |
| Wilcoxon W | 13525,000 | 13698,500 | 13098,000 |
| Z | -,723 | -,439 | -1,427 |
| Asymp. Sig. (2-tailed) | ,470 | ,661 | ,154 |

Table 3. Mann Whitney U Test Results for Participants' Gender

As p>0,05, there is no significant difference between gender and the factors. So, Hypotheses H_{1a} , H_{1b} , and H_{1c} were rejected.

3.3. Testing the Differences in Consumer Behaviors and Attitudes towards SMS Ads Scale Subdimensions by Age

Kruskal Wallis test was used in order to identify the differences by the age of the participants. The following hypotheses were developed in this context;

H₀= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions do not differ by age.

H₂= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by age.

In order to measure the differences in subdimensions, hypotheses H_{2a} , H_{2b} , and H_{2c} were also developed. The difference test results are shown in Table-4.

| | Factor – 1 | Factor – 2 | Factor – 3 |
|-------------|------------|------------|------------|
| Chi-Square | 2,108 | 5,276 | 3,848 |
| df | 3 | 3 | 3 |
| Asymp. Sig. | ,550 | ,153 | ,278 |

Table 4. Kruskal Wallis Test for Participants' Age

As p>0,05, there is no significant difference between age and the factors. So, Hypotheses H_{2a} , H_{2b} and H_{2c} were rejected.

3.4. Testing the Differences in Consumer Behaviors and Attitudes towards SMS Ads Scale Subdimensions by the Number of SMS Ads Received on Mobile Phones per Week.

Kruskal Wallis test was used in order to identify the differences by the number of SMS ads received on mobile phones per week. The following hypotheses were developed in this context;

H₀= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions do not differ by the number of SMS ads received on mobile phones per week.

H₃= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by the number of SMS ads received on mobile phones per week.

In order to measure the differences in subdimensions, hypotheses H_{3a} , H_{3b} and H_{3c} were also developed. The difference test results are shown in Table-5.

| | Factor - 1 | Factor – 2 | Factor – 3 |
|-------------|------------|------------|------------|
| Chi-Square | 3,608 | 1,459 | 2,033 |
| df | 4 | 4 | 4 |
| Asymp. Sig. | ,462 | ,834 | ,730 |

Table 5. Kruskal Wallis Test Results for the Number of SMS Ads Received by the Participants Weekly

As p>0,05, there is no significant difference between the number of SMS ads received by the participants on a weekly basis and the factors. So, Hypotheses H_{3a} , H_{3b} and H_{3c} were rejected.

3.5. Testing the Differences in Consumer Behaviors and Attitudes towards SMS Ads Scale Subdimensions by the Attitudes towards Ads and Special Offers Received on the Phone.

Kruskal Wallis test was used in order to identify the differences by the attitudes towards ads and special offers received on the phone. The following hypotheses were developed in this context;

 H_0 = Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions do not differ by the attitudes towards ads and special offers received on the phone.

H₄= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by the attitudes towards ads and special offers received on the phone.

In order to measure the differences in subdimensions, hypotheses H_{4a} , H_{4b} and H_{4c} were also developed. The difference test results are shown in Table-6.

| | Factor – 1 | Factor – 2 | Factor – 3 |
|-------------|------------|------------|------------|
| Chi-Square | 17,240 | 39,619 | 9,015 |
| df | 4 | 4 | 4 |
| Asymp. Sig. | ,002 | ,000 | ,061 |

Table 6: Kruskal-Wallis Test results for participants' attitudes towards ads and special offers received on the phone

As shown in the table, there is a meaningful difference as p<0.05 for Factors 1 and 2. For that reason, Hypotheses H_{4a} and H_{4b} were accepted and hypothesis H_{4c} was rejected.

3.6. Testing the Differences in Consumer Behaviors and Attitudes towards SMS Ads Scale Subdimensions by the Amount of Shopping per Month.

Kruskal Wallis test was used in order to identify the differences by the amount of shopping per month. The following hypotheses were developed in this context;

H₀= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions do not differ by the amount of shopping per month.

 H_5 = Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ by the amount of shopping per month.

In order to measure the differences in subdimensions, hypotheses H_{5a} , H_{5b} and H_{5c} were also developed. The difference test results are shown in Table-7.

Table 7: Kruskal-Wallis Test results for the amount of shopping per month

| | Factor – 1 | Factor – 2 | Factor – 3 |
|-------------|------------|------------|------------|
| Chi-Square | 3,580 | 9,918 | 3,129 |
| df | 2 | 2 | 2 |
| Asymp. Sig. | ,167 | ,007 | ,209 |

As shown in the table, there is a meaningful difference as p<0,05 for Factors 2. There is no meaningful difference found for Factors 1 and 3 as p>0,05. For that reason, Hypotheses H_{5a} and H_{5c} were rejected and Hypothesis H_{5b} was accepted.

3.7. Testing the Differences in Consumer Behaviors and Attitudes towards SMS Ads Scale Subdimensions by the Frequency of Shopping per Month

Kruskal Wallis test was used in order to identify the differences by the frequency of shopping per month. The following hypotheses were developed in this context;

H₀= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions do not differ by the frequency of shopping per month.

H₆= Participants' attitudes towards Consumer Behaviors and Attitudes towards SMS Ads scale subdimensions differ

by the frequency of shopping per month.

In order to measure the differences in subdimensions, hypotheses H_{6a} , H_{6b} and H_{6c} were also developed. The difference test results are shown in Table-8.

Kruskal Wallis test was used in order to identify the differences by the frequency of shopping per month. The difference test results are shown in Table 8.

Table 8: Kruskal-Wallis Test results for the frequency of shopping per month

| | Factor – 1 | Factor – 2 | Factor – 3 |
|-------------|------------|------------|------------|
| Chi-Square | 7,260 | 2,712 | ,951 |
| df | 3 | 3 | 3 |
| Asymp. Sig. | ,064 | ,438 | ,813 |

As p>0.05, there is no significant difference found between the frequency of shopping per month and the factors. So, Hypotheses H_{6a} , H_{6b} and H_{6c} were rejected.

4. Conclusion

In this study, university students' ages, genders, the number of SMS ads they receive on mobile phones per week, the attitudes they have towards ads and special offers they received on the phone, the amount and frequency of shopping they do per month were investigated. Age distribution according to the demographic information obtained centered on between the ages 21 and 23. A total of 265 students, 105 of whom were males and the rest 160 were males expressed their opinions.

The analysis results imply that age, gender, the number of text messages with advertisement content received on a weekly basis and the frequency of shopping the students do monthly do not seem to have an influence on the perceived reliability and the attractive quality of SMS ads. In addition, it was observed that there is a meaningful difference in terms of SMS ads reliability and the attraction they have according to the attitudes towards ads and special offer messages received on the phone. There is no significant difference found for the negativity factor. Also, the reliability of text messages and the negative aspects they have do not differ significantly by the amount of shopping per month while there is a meaningful difference found for the attraction the short messages have.

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