YouTube advertising value and its effects on purchase intention

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Abstract
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Keywords
social media, social media advertising, YouTube advertising, purchase intention

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Abstract

This study investigated the factors that affect the YouTube advertising value and its effect on purchasing intention. The data were gathered through a 52-item questionnaire administered to YouTube users (n = 420). Multiple regression analysis determined the effect of the factors on YouTube advertising value, and simple regression analysis determined the effect of its value on purchasing intention. ANOVA test was run to determine the differences of demographic groups via YouTube ads value. The findings indicated that informativeness and entertainment and trendiness had a positive effect on YouTube advertising value; however, irritation had a negative effect. In addition, the findings showed that YouTube advertising value had a positive effect on purchasing intention. Also, the study examined whether YouTube advertising value factors differ according to demographic variables. The findings indicated that some of demographic factors differ via YouTube ads. The theoretical and managerial implications of these findings are discussed.

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Introduction

Advertisements are important advertising tools to attract consumers. As time goes by, new types of ads are being added to older ad types. Online advertising is now used by businesses such as television ads and radio ads. Social media has also become an area where online advertising is used. Along with the Internet, social media have developed, and the usage of both have increased rapidly together. In addition, the initially small number of social media tools has increased over time, for example, social media sites like blogs, Facebook, Twitter, Instagram, and YouTube.

Furthermore, throughout the world, social media use continues to increase daily. As of January 2018, the number of people using social media worldwide was 3,196,000,000; that is, 42% of the world’s population actively use social media. The study’s scope is Turkey. In Turkey, 51 million people, 63% of its population, use social media (Kemp, 2018).

Especially with the development of smartphones, social media have become accessible nearly everywhere, which has made social media an important platform. Thereby, social business creation, running contests, and advertising on popular social media pages. And YouTube is no exception. As a social platform, YouTube helps users discover; for example, new songs, artists, and entertaining videos. Thus, the increase in the usage of YouTube has made it an important area where businesses can reach their target audiences.
In 2005, YouTube shared its first video and has since grown day by day. As at 2019, the active monthly users of YouTube numbered 1,570,000,000. Every day, users of YouTube share more than 5 billion videos, and the number of videos increases by 40%. Every minute, 300 hours of video are uploaded to YouTube, and, every day, 30 million viewers visit the site. For advertisers running video ads on YouTube, the number grows over 40% annually, and the top 100 advertisers of YouTube have raised their spending over 60% annually (Biographon, 2019).

For businesses, it's important which type of YouTube ad is used. YouTube offers six types of advertisements: display ads, overlay ads, skippable video ads, non-skippable video ads, bumper ads, and sponsored cards (Figure 1).

| Ad Type               | Placement                                                                 |
|-----------------------|---------------------------------------------------------------------------|
| Display ads           | Appears to the right of the feature video and above the video suggestions list. For larger players, this ad may appear below the player. Platform: Desktop and Specs: 300 x 250/ 300 x 60 |
| Overlay ads           | Semi-transparent ads that appear on the lower 20% of the video Platform: Desktop and Specs: 468 x 60/ 728 x 90 image ads or text |
| Skippable video ads   | Skippable video ads allow viewers to skip them after 5 seconds if they choose. Inserted before, during, or after the main video Platform: Desktop, mobile devices, TVs, and game consoles and Specs: Plays in video player |
| Non-skippable video ads| Non-skippable video ads must be watched before the video can be viewed. These ads can appear before, during, or after the main video. Platform: Desktop and mobile devices and Specs: Plays in video player, 15 or 20 seconds long, depending on regional standards |
| Bumper ads            | Non-skippable video ads that must be watched before the video can be viewed Platform: Desktop and mobile devices and Specs: Plays in video player, Up to 6 seconds long |
| Sponsored cards       | Sponsored cards display content that may be relevant to the video, such as products featured in it. Viewers see a teaser for the card for a few seconds. They can also click the icon in the top right corner of the video to browse cards. Platform: Desktop and mobile devices and Specs: Card sizes vary |

Source: YouTube Help (n.d)
Figure 1. YouTube advertisement types.

In research conducted by HubSpot, 54% of the respondents indicated they were more interested in business or brand videos than in other communication tools (An, 2018). In online advertising, 37% of the respondents remarked that they preferred video-based ads over other types. Additionally, 83% of the respondents preferred watching videos on YouTube (An, 2018). Because video usage seems to be increasing, the use of YouTube by businesses is natural.

Businesses use YouTube in many areas, from promotion to brand awareness. As well as advertising via other YouTube channels, businesses can create their own YouTube channels.

The advertising message used in ads is important. If there is a problem with the advertising message, this will also affect the effectiveness of the advertising message negatively. Because few studies have focused on YouTube and the importance of advertising message, this study attempted to determine factors that affect YouTube advertising value and the value’s impact on purchasing intention and the study examined whether YouTube advertising value factors differ according to demographic variables. The research questions were:
1. How do pertinent factors (irritability, informativeness, entertainment and trendiness) influence the advertising value of YouTube?
2. Do the YouTube ad value factors differ according to the demographic factors?
3. Do the YouTube ads value influence purchasing intention?

**Literature Review**

**Advertising Value**

Advertising value is a measure for advertising effectiveness. Advertising value defined as “a subjective evaluation of the relative worth or utility of advertising to consumers” (Ducoffe, 1995, p. 1). So, advertising value is important for marketing for determining the content of advertising and message and the ad value varies according to the advertising medium as it is subjective. According to Ducoffe (1995, p. 3), there are three factors for explaining how consumers asses the value of advertising: informativeness, irritability and deceptiveness and entertainment. Informativeness and entertainment of advertising enhances the value of advertising, irritability and deceptiveness decreases the value of advertising.

**Factors Affecting YouTube Advertising Value**

Although a few studies only have concentrated on YouTube advertising, for this study, Web advertising, social media advertising, and the few YouTube advertising studies were investigated in a literature review to determine this study’s variables.

**Irritability**

Irritability can be described by viewers of YouTube ads as the YouTube’s advertising as boring and interrupting the people’s job on YouTube. Some studies have found that irritability negatively affects the value of web advertising (Brackett & Carr, 2001; Ducoffe, 1995; Ducoffe, 1996) the value of mobile advertising (Haghirian, Madlberger, & Tanuskova, 2005; Tsang, Ho, & Liang, 2004), and social network advertising (Dao, Lee, Cheng, & Chen, 2014; Logan, Bright, & Gangadharbatka, 2012; Taylor, Lewin, & Strutton, 2011). Bevan-Dye (2013) who investigated black Generation Y students’ attitudes toward the value of web advertising found that irritation negatively affected the value of web advertising. Hag (2009) also found that irritation negatively affected perceived advertising value and attitude toward e-mail marketing. Yang, Huang, Yang and Yang (2017) investigate consumer attitudes toward advertising via YouTube found that irritability has a negative effect on purchase attitude. Finally, Dehghani, Niaki, Ramezani and Sali (2015) concluded that irritability has a negative effect on attitude toward YouTube ads.

**Informativeness**

If YouTube advertising provides information about a business, product, service, or brand, that can be defined as informativeness. DuCoffee (1995, 1996) and Brackett and Carr (2001) found that informativeness had a positive effect on web ads, and other researchers found that it had a positive effect on the value of mobile advertising (Haghirian et al., 2005; Tsang et al., 2004). Research investigating the effect of informativeness on product involvement and purchasing intention determined that it positively affected both (Kim, Kim, & Park, 2010). Taylor et al. (2011) found that informativeness had a positive effect on the attitude toward social network ads and that men gave
more importance to informativeness than women did. Other studies found that informativeness had a positive effect on social network advertising value (Dao et al., 2014; Logan et al., 2012), on the value of web advertising (Bevan-Dye, 2013; Zha, Li, & Yan, 2015), on perceived advertising value and attitude toward e-mail marketing (Hag, 2009), on attitude toward mobile advertising (Chowdhury, Parvin, Weitenberger, & Becker, 2006) and on YouTube ad value (Dehghani et al., 2015). Yang et al. (2017) investigate consumer attitudes toward advertising via YouTube found that informativeness has a positive effect on purchase attitude. The study investigated thorough information on the impact of various factors on internet advertising found that informativeness influence attitudes toward internet advertising (Azeem & Hag, 2012).

Entertainment and Trendiness

YouTube ads’ entertainment and trendiness can be described as the fun and popularity of advertising content for the audience. Studies have shown that entertainment has a positive effect on web advertising value (Brackett & Carr, 2001; Ducoffe, 1995; Ducoffe, 1996; Taylor et al., 2011) on mobile advertising value (Bevan-Dye, 2013; Haghirian et al., 2005; Tsang et al, 2004; Zha et al., 2015). and on social network advertising value (Dao et al., 2014; Logan et al., 2012). Hag (2009) found that entertainment had a positive effect on perceived advertising value and the attitude toward e-mail marketing. Chowdhury et al. (2006) found that entertainment had a positive effect on the attitude toward mobile advertising. Dehghani et al. (2015) determined that entertainment had a positive effect on the attitude toward YouTube advertisements. The study investigated thorough information on the impact of various factors on internet advertising found that entertainment influence attitudes toward internet advertising (Azeem & Hag, 2012). Yang et al. (2017) investigate consumer attitudes toward advertising via YouTube found that entertainment has a positive effect on purchase attitude.

Purchasing Intention

As Hsu and Tsou (2011) mentioned purchasing intention is consumers’ intention to purchase products. So, it can be defined as purchasing intention is the tendency to purchase when the advertised product/service/brand is needed. Yuksel (2016) who investigated the effects of user-generated content in YouTube videos on consumers’ purchase intention found that perceived credibility, perceived usefulness and perceived video characteristics of information in the YouTube videos positively affect purchase intention. Lai, Lai and Chiang (2015) found that product placement and product involvement have positive effect on purchase intention in YouTube platform. In their study, Dehghani and Tumer (2015) determined that Facebook ads influenced the purchasing intention by affecting brand value and brand image. Dehghani et al. (2015) found that the attitude toward YouTube ads influence positively purchasing intention.

Impact of Demographic Factors on Advertising Effectiveness and Advertising Attitude

Demographic characteristics are an easy and practical way for marketers to segment consumers. Thus, many studies investigate distinction of advertising effectiveness and advertising attitude of consumers among demographic factors. Alwitt and Prabhaker (1992) found that higher income respondents tend to like television advertising less, and they also watch less television and older people also tend to like television advertising less. Shavitt, Lowrey, and Haefner (1998) showed that males, younger consumers, persons with less education, and income, and non-whites generally
reported more favourable advertising attitudes than others did. Also, Dutta-Bergman (2006) found that is a strong promotional tool for marketing targeting less educated and lower income groups.

**Methods**

**Sample**

The study sample constituted of residents of Turkey over 18 years old, who spent time on YouTube. Since the study population is very large, convenience sampling method was used to reach the sample more easily. A total of 420 questionnaires were collected.

The following formula determined the sample size (Kurtulus, 2010, p. 67).

\[ n = \pi (1 - \pi) / (e / Z)^2 \]  \hspace{1cm} (1)

where:

- \( n \) = Sample size,
- \( \pi \) = estimated proportion of the population that presents the characteristic (when unknown \( \pi = .5 \) was used),
- \( e \) = tolerated margin of error,
- \( Z \) = Level of confidence.

\[ 384 = 0.50 (1–0.50)/ (0.05/ 1.96)^2 \]

Thus, it can be said that as a result of formula, 420 questionnaires were sufficient for the study.

**Data Collection**

A literature review was conducted to establish the scales for the research variables (Ducoffe, 1995; 1996; Kim et al., 2010; Taylor et al., 2011; Wolfinger & Gilly, 2003). At the beginning of the questionnaire, participants were asked to fill out the questionnaire by considering all kinds of advertisements that appeared in YouTube videos. The completed questionnaire consists of 40 items in three parts: first, whether participants spend time on YouTube, a question about the amount of time spent on YouTube; second, questions about factors that affect thoughts on the YouTube ads value and purchasing intention; and third, questions on the respondents’ demographic characteristics. The first and third sections contain multiple-choice questions, and the second section uses a 5-point Likert-type scale (1 = Completely Disagree, 5 = Completely Agree). The questionnaire items were translated into Turkish, and the translation validity was examined by a group of subject matter experts. The questionnaire was implemented online via Google Forms. The path followed to reach the sample of the study is as follows: First, the questionnaires’ link shared via social media and secondly (remove) and secondly the survey link was requested to be shared from social media accounts. A total of 420 questionnaires were collected from October 3, 2018 to January 3, 2019. Refer to Appendix for a copy of the questionnaire.

**Empirical Model**

According to the literature discussed, this study developed the empirical model and to determine the factors affect YouTube advertising value and the effect of YouTube advertising value on purchasing intention and examine whether YouTube advertising value factors differ according to demographic variables. Research model developed for this study is in compliance with the purpose and problems of the study as showed in Figure 2.
**Hypothesis of The Study**

Hypotheses of the study are listed below:

- H₁: Irritability has a negative effect on YouTube ad value.
- H₂: Gender groups differentiate irritability.
- H₃: Age groups differentiate irritability.
- H₄: Income groups differentiate irritability.
- H₅: Education groups differentiate irritability.
- H₆: Informativeness has a positive effect on YouTube ad value.
- H₇: Gender groups differentiates informativeness.
- H₈: Age groups differentiate informativeness.
- H₉: Income groups differentiate informativeness.
- H₁₀: Education groups differentiate informativeness.
- H₁¹: Entertainment has a positive effect on YouTube ad value.
- H₁²: Gender groups differentiates entertainment and trendiness.
- H₁³: Age groups differentiate entertainment and trendiness.
- H₁₄: Income groups differentiate entertainment and trendiness.
- H₁₅: Education groups differentiate entertainment and trendiness.
- H₁₆: YouTube advertising value has a positive effect on purchasing intention.

The SPSS 22 software program was used to analyse the study’s data and, then, the results of the analysis were evaluated. Factor analysis was applied to items of the factors affecting YouTube ads’ value and purchasing intention and, then, reliability analysis was performed to measure those factors’ reliability. The means and standard variations of variables were calculated. Additionally, correlation analysis was performed to determine the relationships between the variables. Simple and multiple linear regression analyses determined the effects of independent variables on dependent variables. And ANOVA and t test analysis were to determine differ demographic variables among YouTube ads value.

**Findings**

**Respondents’ Demographic Characteristics**

61.4% of the respondents, were female, and 38.6% were male. In age, 69% of the respondents were 18–29; 28.1% were 29–39; and 12% were over 40. For personal monthly income, 51.4% of
respondents had less than 1500TL; 28.4% had 1501TL–3000TL; and 20.2% had more than 3001TL. For education, 32.1% of the respondents had graduated from high school, and 77.9% graduated from a university with a bachelor’s, master’s, or doctoral degree.

**Validity and Reliability Analyses**

“Factor analysis is a data and variable reduction technique that attempts to partition a given set of variables into groups (called factors) of maximally correlated variables” (Parasuraman, Grewal, & Krishnan, 2007, p. 489). Factor analysis was first run on all the study items. The principal components method (principal components analysis) and the varimax method were used as the inference method. As Table 1 shows, the independent and dependent variables are divided into five factors. These five factors explained 86.1% of the variability. These means these five factors can reduce the complexity of the data set by using these components, with only 13.9% loss of information. For social sciences, 60% and above total variance is sufficient.

**Table 1. Results of Factor Analysis**

| Factor 1. Irritability | Factor Loads | Variance Explained (%) |
|------------------------|--------------|------------------------|
| YouTube ads are confusing. | -.866 | 21.412 |
| YouTube ads confuse my mind. | -.863 |
| YouTube ads are annoying. | -.845 |
| YouTube ads are frustrating. | -.839 |
| YouTube ads are distractions. | -.835 |
| YouTube ads are annoying. | -.819 |
| YouTube ads are deceptive. | -.879 |
| I see YouTube ads as an unwanted interruption. | -.748 |

**Factor 2–Informativeness**

| Factor Loads | Variance Explained (%) |
|--------------|------------------------|
| YouTube ads are a good source of product/service/brand information. | .845 | 19.826 |
| YouTube ads make product/ service/brand information immediately available. | .827 |
| I get extensive information with YouTube ads. | .794 |
| YouTube ads are one of the best sources of product/service/brand information. | .794 |
| I get in-depth information from YouTube ads. | .791 |
| I have enough information about the product/service/brand with YouTube ads. | .789 |
| YouTube ads are a good source of product/service/brand information. | .707 |

**Factor 3–YouTube Advertising Value**

| Factor Loads | Variance Explained (%) |
|--------------|------------------------|
| I watch YouTube ads. | .744 | 18.925 |
| Most YouTube ads are pleasing. | .735 |
| I love the advertised product/service/brand after watching the YouTube ad. | .708 |
| I think YouTube ads are good. | .706 |
| I love YouTube ads. | .681 |
| I pay attention to YouTube ads. | .679 |
| I am happy with YouTube ads. | .674 |
| After watching a YouTube ad, I am opting to purchase a product/service/brand. | .660 |
| Impressions about a product/service/brand become stronger after watching a YouTube ad. | .655 |

**Factor 4–Entertainment and Trendiness**

| Factor Loads | Variance Explained (%) |
|--------------|------------------------|
| With YouTube ads, I learn what products/services/brands to buy to impress people. | .803 | 17.897 |
| I am learning about trends with YouTube ads. | .797 |
| YouTube ads are entertainment. | .770 |
| With YouTube ads, I am learning about brands that suit my personality. | .766 |
| Watching/reading YouTube ads is fun. | .737 |
| YouTube ads are generally fun. | .723 |
| YouTube ads show what people with similar tastes to mine buy/use. | .692 |

**Factor 5–Purchasing Intention**

| Factor Loads | Variance Explained (%) |
|--------------|------------------------|
| After watching YouTube ads, I want to buy the advertised product/service/brand. | .755 | 8.047 |
| After watching YouTube ads, I want to make a purchase. | .735 |
| After watching YouTube ads, I usually want to buy the products/services/brands that are advertised. | .722 |

*Note: KMO Measure of Sampling Adequacy = .938; Bartlett’s Test of Sphericity Approximate Chi–Square = 4586.253; df = 561; p < .00*

The reliability analysis of all the questions found that Cronbach’s alpha = .909; therefore, the scale is highly reliable. Table 2 displays the reliability analysis results, means, and standard deviations for all the variables.
Table 2. Variables’ Reliability, Means, and Standard Variations

| Variable                     | Reliability | Means | Standard Variation |
|------------------------------|-------------|-------|--------------------|
| Irritability                 | .96         | 3.5   | 1.14792            |
| Informativeness              | .96         | 2.7   | 1.07412            |
| Ad Value                     | .97         | 2.6   | 1.06998            |
| Entertainment and Trendiness | .96         | 2.5   | 1.06632            |
| Purchasing Intention         | .98         | 2.4   | 1.06257            |

As Table 2 shows, each variable’s value was well over .70, the satisfactory confidence coefficient, making each one reliable. At the same time, a Pearson correlation analysis was performed to determine the multiple co-variability between variables and to examine the relationship between the variables (Table 3).

Table 3. Correlation Analysis Results

| Variable                     | Irritability | Informativeness | YouTube Ads Value | Entertainment and Trendiness | Purchasing Intention |
|------------------------------|-------------|-----------------|-------------------|----------------------------|----------------------|
| Irritability                 | 1           | -.552**         | 1                 |                             |                      |
| Informativeness              | -.552**     | 1               |                   |                             |                      |
| YouTube Ads Value            | -.658**     | .782**          | 1                 |                             |                      |
| Entertainment and Trendiness | -.623**     | .712**          | .772**            | 1                           |                      |
| Purchasing Intention         | -.552**     | .668**          | .790**            | .692**                      | 1                    |

Note. Correlation is significant at the p < .01 level (2-tailed).

As the correlation matrix shows, the relationships between all the variables were significant at the 1% significance level. Informativeness was positively related to YouTube ads’ value, entertainment and trendiness, and to purchasing intention, while irritation negatively correlated with all other variables. At the same time, there was no multiple co-variability between the variables.

Hypotheses Tests

How Do Pertinent Factors Influence the Advertising Value of YouTube?

“Multiple regression analysis generates a mathematical relationship between a designated dependent variable (Y) and two or more designated independent variables (Xs)” (Parasuraman et al., 2007, p. 444). So, multiple regression analysis determined the factors that influence YouTube ads’ value (Table 4).

As Table 4 shows, multiple regression analysis determined the effect of irritation, informativeness, and entertainment and trendiness on YouTube value ads to be $R^2 = .709$ and $F$ adjusted to 394.800. The adjusted $R^2$ seems to explain 70.9% the dependent variable (YouTube ads’ value) by the independent variables (irritation, informativeness, and entertainment and trends) of the research model. When the Variance Inflation Factor (VIF) and tolerance values are examined, it is seen that there is no multiple linear relationship between the variables (VIF value < 10, tolerance value >, 10). The value of $F$ also shows that the research model is significant and valid.

Informativeness, with .430 beta coefficient; entertainment and trendiness, with a .340 beta coefficient; and a 1% significance level positively affect YouTube ads’ value; thus, $H_2$ and $H_3$ are accepted. Another independent study variable, irritation, affects YouTube ads’ value with a -.208 beta coefficient and a 1% significance level. Therefore, informativeness and entertainment and trendiness have a positive effect, and irritation has a negative effect on YouTube ads’ value; thus, $H_1$, $H_6$ and $H_{11}$ are accepted.
Table 4. Multiple Regression Analyses Results

| Independent Variable | β    | T     | Significance | Tolerance | VIF |
|----------------------|------|-------|--------------|-----------|-----|
| Constant             | 1.259| 6.858 | .000         |           |     |
| Irritability         | -.208| -6.364| .000         | .586      | 1.707|
| Informativeness      | .430 | 12.189| .000         | .503      | 1.987|
| Entertainment and Trendiness | .346 | 9.171 | .000         | .438      | 2.285|

Note. Dependent Variable = YouTube Ads’ Value; $R^2 = .840$; Adjusted $R^2 = .709$; $F = 394.800$; $p < .01$; Durbin-Watson = 2.194

Do YouTube Ad Value Factors Differ According to the Demographic Factors?

Because of there is one independent variable t test was used to determine the differences of groups via dependent variables (Nakip, 2017). According to the results of the t-test that conducted to determine whether the YouTube advertising value factors differ according to gender, it was found that only the irritability differs according to the gender ($t = 3.995$, $p < .05$). It was concluded that informativeness ($p > .05$) and entertainment and trendiness did not differ according to gender ($p > .05$) (Table 5). Thus, $H_2$ is accepted and $H_7$ and $H_{12}$ are rejected. As a result of T test, it was seen that men are more irritated than women from YouTube ads.

Table 5. T Test Results of Gender

| YouTube Ad Value | Gender | Sample Size | Mean    | Standard Deviation | t     | df  | p    |
|------------------|--------|-------------|---------|--------------------|-------|-----|------|
| Irritability     | Female | 258         | 3.5208  | 1.17674            |       |     |      |
|                  | Male   | 162         | 3.6566  | 1.09889            | 3.995 | 418 | 0.048|
| Informativeness  | Female | 258         | 2.5736  | 1.07650            |       |     |      |
|                  | Male   | 162         | 2.6675  | 1.07151            | 1.049 | 1.08777 | 0.277|
| Entertainment and Trendiness | Female | 258         | 2.4446  | 1.04939            |       |     |      |
|                  | Male   | 162         | 2.6155  | 1.08777            | 1.186 | 418 | 0.277|

Note. $p < .05$

“Analysis of Variance (ANOVA) is a technique for detecting relationships between a metric scaled dependent variable and one or more categorical (nominal or ordinal) independent variables” (Parasuraman et al., 2007, p. 473). According to the results of the ANOVA test, irritability did not differ according to age groups. ($F = 2.430$, $p > .05$) ($H_3$ is rejected). However, it was concluded that informativeness ($F = 4.239$, $p < .05$) and entertainment and trendiness ($F = 5.115$, $p < 05$) differ according to age groups ($H_8$ and $H_{13}$ are accepted). According to the results of the ANOVA test, irritability did not differ according to age groups. ($F = 2.430$, $p > .05$). However, it was concluded that informativeness ($F = 4.239$, $p < .05$) and entertainment and trendiness ($F = 5.115$, $p < .05$) differ according to age groups. The post-doc test was conducted to determine which subgroups differ between informativeness and entertainment and trendiness. According to this, a significant difference was found between the 18-29 age group and the aged 40 and over in informativeness ($p < .05$). Based on this, it can be said that participants aged 40 and over gives more importance to informativeness than 18-29 years. In the same way, the result of the post-doc analysis showed that there was a significant difference between the 18-29 age group and the 30-39 age group in entertainment and trendiness ($p < .05$). Participants in the 30-39 age group think that YouTube ads should be more entertaining and trendier than participants at the age 18-29 age (Table 6).

According to the results of the analysis, irritability ($F = 4.939$, $p < .05$), informativeness ($F = 8.088$, $p < .05$) and entertainment and trendiness ($F = 8.223$, $p < .05$) differ according to income groups ($H_4$, $H_9$ and $H_{14}$ are accepted). A post-doc test was conducted to determine which income groups differentiate between irritability, informativeness and entertainment and trendiness. According to the results obtained from the analysis, it was determined that there was a significant difference
between the participants who had 1501TL and under monthly income differentiate from participants with income of 3001TL and over in irritability \( (p < .05) \).

### Table 6. ANOVO Test for Age

| YouTube Ad Value | 18-29 Age | 30-39 Age | 40 Age and Over |
|------------------|-----------|-----------|-----------------|
| **Irritability** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **F**  | **P**  |
| 18-29 Age        | 3.6553    | .029      | 3.3771        | .223      | 3.6196    | .006      | 4.239 | .015 |
| 30-39 Age        | 3.7248    | .152      | 2.7906        | .100      | 3.0963    | .006      | 5.115 | .006 |
| 40 Age and Over  | 3.2382    | .002      | 2.7470        | .493      | 2.6211    | .029      | 8.088 | .000 |

*Note. p < .05*

At the same time, it was determined that there was a significant difference between the participants with income of 1501 and 3000TL and the participants with income of 3001TL or more according to the irritability variable \( (p < .05) \). Participants with income of 1500TL or less and participants with income of 1501 - 3000TL have more irritation in YouTube ads than participants with income of 3001 or higher. According to the results obtained from the post-doc analysis, the income group of 1501TL - 3000TL is significantly different from the groups with an income of both 1500TL and under and 3001TL and over \( (F = 8.088, p < .05) \). Participants in the 1501TL - 3000TL income group are less interested in informativeness than those who have an income of 1500TL or under \( (p < .05) \) and 3001TL or more \( (p < .05) \). According to the results of the post-doc test conducted to determine the differences between the income groups and the entertainment and trendiness of YouTube ads, the income group of 1501TL - 3000TL significantly different from the groups with income of both 1500TL and under and 3001TL and above \( (F = 8.223, p < .05) \). Participants in the income group of 1501TL - 3000TL are less interested in the entertainment and trendiness of YouTube ads from income of 1500TL or less \( (p < .05) \) and 3001TL or more \( (p < .05) \) (Table 7).

### Table 7. ANOVA Test for Monthly Income

| YouTube Ad Value | 1500TL and Under | 1501 – 3000TL | 3001TL and Over |
|------------------|-------------------|----------------|-----------------|
| **Irritability** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **F**  | **P**  |
| 1500TL and Under | 3.6215    | .427    | 3.3748    | .009    | 3.2382    | .003    | 4.939 | .008 |
| 1501 – 3000TL   | 2.8664    | .000    | 2.2926    | .003    | 2.8084    | .006    | 8.088 | .000 |
| 3001TL and Over  | 2.5747    | .668    | 2.2041    | .006    | 2.7765    | .134    | 8.223 | .000 |

*Note. p < .05*

### Table 8. ANOVA Test for Education

| YouTube Ad Value | Primary | High School | University and Over |
|------------------|---------|-------------|---------------------|
| **Irritability** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **F**  | **P**  |
| Primary          | 3.8333   | .204        | 3.5994   | .204        | 3.4984   | .048        | 2.016 | .134 |
| Highschool       | .048    | .024        | .048    | .428        |
| University and over | .053    | .206        | .053    | .457        |
| **Informativeness** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **F**  | **P**  |
| Primary          | 2.4812   | .206        | 2.6991   | .206        | 2.7878   | .053        | 1.920 | .148 |
| Highschool       | .053    | .206        | .053    | .457        |
| University and over | .053    | .206        | .053    | .457        |
| **Entertainment and Trendiness** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **Mean**  | **LSD Sig.** | **F**  | **P**  |
| Primary          | 2.2356   | .146        | 2.4836   | .146        | 2.5892   | .024        | 2.610 | .075 |
| Highschool       | .146    | .146        | .146    | .371        |
| University and over | .024    | .146        | .024    | .371        |

*Note. p < .05*
According to the results of ANOVA test, no significant differences were found with the irritability ($F = 2.016, p > .05$), informativeness ($F = 1.920, p > .05$) and entertainment and trendiness ($F = 2.610, p > .05$) according to education groups (Table 8). Thus, $H_5$, $H_{10}$ and $H_{15}$ were rejected.

**Do YouTube Ads Value Influence Purchasing Intention?**

“Simple regression analysis generates a mathematical relationship between one variable designated as the dependent variable ($Y$) and another designated as the independent variable ($X$)” (Parasuraman et al., 2007, p. 444). So, simple regression analysis was run to test effect of YouTube’s ad value on purchasing intention. Table 9 displays results of simple regression analysis to determine the effect of YouTube ads’ value on purchasing intention.

| Independent Variable  | $\beta$  | $t$   | Significance | Tolerance | VIF |
|-----------------------|----------|-------|--------------|-----------|-----|
| Constant              | .315     | 3.849 | .000         |           |     |
| YouTube Ads’ Value    | .801     | -27.324 | .000       | 1.000     | 1.00|

*Note.* Dependent Variable = Purchasing Intention; $R = .801$; Adjusted $R^2 = .640$; $F = 746.588$; $p < .01$; Durbin-Watson = 1.805

Simple regression analysis to determine the effect of YouTube ads’ value on purchasing intention resulted in adjusted $R^2$ assigned at 640 and $F$ assigned at 746.588. Thus, the research model is sufficient to explain 64% of the purchasing intention. When the VIF and tolerance values are examined, it is seen that there is no multiple linear relationship between the variables (VIF value $< 10$, tolerance value $> .10$). YouTube ads’ value, with an .801 beta coefficient at the 1% significance level, positively affects purchasing intention; thus, $H_{16}$ is accepted.

**Conclusions**

In an environment where competition is increasing day by day, businesses are looking for different ways to influence consumers. Social media is also one of the ways to influence consumers. In recent years, increased usage of social media has created new business opportunities. As a social media channel, YouTube has attracted the attention of businesses; therefore, this study examined factors that affect YouTube ads’ value and its effect on purchasing intention. Also, the study examined whether YouTube advertising value factors differ according to demographic variables. According to the hypothesis test results, the acceptance/rejection status of the hypotheses is shown in Table 10.

One of the research problems of the study, *How Do Pertinent Factors Influence the Advertising Value of YouTube?* has found the answer as follows: The results show that informativeness, entertainment, and trendiness positively affect, and irritability negatively affects YouTube ads’ value. The other research question *Do YouTube Ad Value Factors Differ According to The Demographic Factors?* has found the answer as follows: The results show that men are more irritated than women to YouTube ads. Participants aged 40 and over find YouTube ads more informative than participants aged 18-29. The participants at the age between 30-39 think that YouTube ads should be more entertaining and trendier than other ages. The participants with an income 1500TL and under want more informative ads and participants with an income 3001TL and over participants want more entertaining and trendy YouTube ads. The participants’ income 1500TL and under want more informative ads. 3001TL and over participants want more entertaining and trendy YouTube ads than other income groups. It can be said that income is somewhat indicative for perception of YouTube ads value. The last research question, *Do YouTube Ads Value Influence
Purchasing Intention? result has answered as follows: The study’s other result shows that YouTube ads’ value positively influence purchasing intention. Thus, this result confirms previous findings on factors that affect web advertisement value (Bevan-Dye, 2013; Brackett & Carr, 2001; Ducoffe, 1995; Ducoffe, 1996), mobile advertisement value (Haghirian et al., 2005; Tsang et al, 2004), and social network sites (Dao et al., 2014; Haghirian et al., 2005; Logan et al., 2012; Zha et al., 2015). Furthermore, this study’s findings confirm Dehghani et al. (2015) and Yang et al. (2017)’s studies on YouTube advertising. Looking at the results of the study, it can be said that the empirical model of the study was supported, and all the research questions were answered.

### Table 10. The Acceptance/Rejection Status of the Hypotheses

| Hypothesis | Acceptance/Rejection Status |
|------------|----------------------------|
| H1: Irritability has a negative effect on YouTube ad value. | Accepted |
| H2: Irritability differs between women and men, men are more irritated than women. | Accepted |
| H3: Irritability differs by age groups. | Accepted |
| H4: Irritability differs by income groups. | Accepted |
| H5: Irritability differs according to education groups. | Rejected |
| H6: Informativeness has a positive effect on YouTube ad value. | Accepted |
| H7: Informativeness differs by gender, men give more importance to YouTube ads than women. | Rejected |
| H8: Informativeness differs by age groups. | Accepted |
| H9: Informativeness differs by income groups. | Accepted |
| H10: Informativeness differs by education groups. | Rejected |
| H11: Entertainment and trendiness differ by gender, men think YouTube Ads should be more entertaining and trendier than women. | Rejected |
| H12: Informativeness differs by age groups. | Accepted |
| H13: Informativeness differs by income groups. | Accepted |
| H14: Entertainment and trendiness differ by income groups. | Accepted |
| H15: Entertainment and trendiness differ by education groups. | Rejected |
| H16: YouTube advertising value has a positive effect on purchasing intention. | Accepted |

### Limitations of The Study

This study has some limitations. The main limitation is the convenience sampling method, which is not generalizable. Using random sampling would enhance the study findings’ generalizability. Maybe, for different product categories and for different demographic characteristics and for different cultures different findings can occur. However, the study also provides insights for businesses into the appropriate usage of YouTube ads. Furthermore, researchers should replicate the study for various product categories to differentiate YouTube ads’ usage. Future research should consider these limitations.

### A Managerial Implications

As said earlier the empirical model of the study was supported, and all the research questions were answered. So, it can be said that the results of the study are important for businesses. The results of this study offer an empirical point of view about YouTube ads. One aim of advertising, of course, is to attract consumers’ attention; therefore, businesses should pay close attention to YouTube ads’ positive features. Watching YouTube ads is the first stage of product/service/brand awareness. As a result of the study it was found that irritability has a negative effect on YouTube ads value. So, if YouTube ads irritate consumers, they will avoid, skip, or close the ad. On the other hand, it was found that informativeness and entertainment and trendiness have positive effect on YouTube ads value. Providing information about product, service, or brand attracts consumers’ attention. If an ad is entertaining, consumers will watch it until the end. As known, consumers use social media as an entertainment area. Therefore, businesses must consider that their brands’ advertising and advertising message need to be kept away from irritability that annoys consumer. Consumers give more attention to ads that are more informative or entertainment. In other words, to attract the
attention of consumers, businesses that want to advertise on YouTube should consider the factors of informativeness and entertainment and trendiness, and irritation because ads that attract their attention positively affect their purchasing intention.

As a result of the study it was found that YouTube ads value differentiate some demographic factors, so businesses must think the demographic factors of their target segment. The results of the study show that especially Millennials and Generation Zs’ YouTube usage is more than other generations. So, businesses should think of them as a segment for YouTube ads and create ads especially aimed at them. The income data combined with the age data could assist marketing practitioners with audience segmentation and targeting of YouTube ads.

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Appendix

Do you spend time on YouTube?

( ) Yes  ( ) No

How long do you spend on YouTube?

Indicate the statement you agree with by placing an X.

| Item                                                                 | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|----------------------------------------------------------------------|----------------|-------|---------|----------|-------------------|
| YouTube ads are confusing.                                           | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads confuse my mind.                                         | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are annoying.                                            | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are frustrating.                                         | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are distractions.                                        | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are annoying.                                            | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are deceptive.                                           | ( )            | ( )   | ( )     | ( )      | ( )               |
| I see YouTube ads as an unwanted interruption.                       | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are a good source of product/service/brand information.  | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads make product/service/brand information immediately       | ( )            | ( )   | ( )     | ( )      | ( )               |
| available.                                                           | ( )            | ( )   | ( )     | ( )      | ( )               |
| I get extensive information with YouTube ads.                        | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are one of the best sources of product/service/brand      | ( )            | ( )   | ( )     | ( )      | ( )               |
| information.                                                         | ( )            | ( )   | ( )     | ( )      | ( )               |
| I get in-depth information from YouTube ads.                         | ( )            | ( )   | ( )     | ( )      | ( )               |
| I have enough information about the product/service/brand with       | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads.                                                         | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are a good source of product/service/brand information.  | ( )            | ( )   | ( )     | ( )      | ( )               |
| I watch YouTube ads.                                                 | ( )            | ( )   | ( )     | ( )      | ( )               |
| Most YouTube ads are pleasing.                                       | ( )            | ( )   | ( )     | ( )      | ( )               |
| I love the advertised product/service/brand after watching the YouTube| ( )            | ( )   | ( )     | ( )      | ( )               |
| ad.                                                                 | ( )            | ( )   | ( )     | ( )      | ( )               |
| I think YouTube ads are good.                                        | ( )            | ( )   | ( )     | ( )      | ( )               |
| I love YouTube ads.                                                  | ( )            | ( )   | ( )     | ( )      | ( )               |
| I pay attention to YouTube ads.                                      | ( )            | ( )   | ( )     | ( )      | ( )               |
| I am happy with YouTube ads.                                         | ( )            | ( )   | ( )     | ( )      | ( )               |
| After watching a YouTube ad, I am opting to purchase a product/      | ( )            | ( )   | ( )     | ( )      | ( )               |
| service/brand.                                                       | ( )            | ( )   | ( )     | ( )      | ( )               |
| Impressions about a product/service/brand become stronger after     | ( )            | ( )   | ( )     | ( )      | ( )               |
| watching a YouTube ad.                                               | ( )            | ( )   | ( )     | ( )      | ( )               |
| With YouTube ads, I learn what products/services/brands to buy to    | ( )            | ( )   | ( )     | ( )      | ( )               |
| impress people.                                                      | ( )            | ( )   | ( )     | ( )      | ( )               |
| I am learning about trends with YouTube ads.                         | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are entertainment.                                       | ( )            | ( )   | ( )     | ( )      | ( )               |
| With YouTube ads, I am learning about brands that suit my personality.| ( )            | ( )   | ( )     | ( )      | ( )               |
| Watching/reading YouTube ads is fun.                                  | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads are generally fun.                                       | ( )            | ( )   | ( )     | ( )      | ( )               |
| YouTube ads show what people with similar tastes to mine buy/use.     | ( )            | ( )   | ( )     | ( )      | ( )               |
| After watching YouTube ads, I want to buy the advertised product/    | ( )            | ( )   | ( )     | ( )      | ( )               |
| service/brand.                                                       | ( )            | ( )   | ( )     | ( )      | ( )               |
| After watching YouTube ads, I want to make a purchase.               | ( )            | ( )   | ( )     | ( )      | ( )               |
| After watching YouTube ads, I usually want to buy the products/      | ( )            | ( )   | ( )     | ( )      | ( )               |
| services/brands that are advertised.                                 | ( )            | ( )   | ( )     | ( )      | ( )               |

Your Gender:

Your Age:

Your Education:

Your Monthly Income: