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# The surprise effect of ambient ad on the path leading to purchase: Testing the role of attitude toward the brand

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## ABSTRACT

Enterprises have made changes in their marketing and communication activities because of increased competition and changes in consumer behavior. In seeking to stand out from their competitors, brands have started to use more creative, extraordinary, interactive, and nontraditional approaches in their advertisements. One of these approaches is ambient advertising, which involves the guerilla marketing activities and alters environmental elements that consumers interact with (e.g., pedestrian paths, bus stops) creatively and unexpectedly and renders these elements meaningful in terms of advertising. In ambient advertising literature, relationships between perceived surprise, attention toward the ad, attitudes toward the ad and brand, purchase intention, and mediation effect of attitude toward an unknown brand have not been hierarchically tested. In this study, the effectiveness of ambient advertising was evaluated based on a structural equation model and the data were collected from 194 consumers through cross-sectional survey method. The results revealed some statistically significant relationships. In conclusion, perceived surprise was determined as a strong antecedent of attention toward the ad, attitude toward ambient advertising was found to have a positive effect on purchase intention, and it was also found that attitude toward the brand had a mediating effect between attitude toward the ad and purchase intention.

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## KEYWORDS

Ambient advertising; perceived surprise; attention toward advertising; attitude toward advertising; attitude toward brand; purchase intention

## 1. Introduction

Today, enterprises face challenging competition, and marketing and communication activities have gained great importance in the efforts of enterprises to achieve their marketing goals. The main objectives of commercial enterprises are to reach their target consumer group effectively, to inform them about the company's products through marketing and communication activities, and to gain positive cognitive, emotional, and operational feedback through these activities. Product, service, and communication activities need to be effective if positive feedback is to be obtained, and in this context, advertising is considered to be the most common marketing communication tool used

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by enterprises. The American Marketing Association defines advertising as ‘the placement of announcements and persuasive messages in time or space purchased in any of the mass media by business firms, nonprofit organizations, government agencies, and individuals who seek to inform and/or persuade members of a particular target market or audience about their products, services, organizations, or ideas’.<sup>1</sup> It is of utmost importance that such activities of a company be different from those of other enterprises, as today’s consumers live in an ‘information society’ and often experience ‘sensory overload’ through exposure to more information than they can mentally process, and the main source of this sensory overload is advertising. On average, a person is exposed to 3500 advertising messages every day, up from the 560 messages reported three decades ago (Solomon 2013). The advertising complexity resulting from this advertisement bombardment (Rosengren 2008) has resulted in the development of ‘advertising blindness’ among consumers, as a mental avoidance of traditional advertising (Reyburn 2010, quoted by Jurca 2012), resulting in the cognitive and emotional impact of traditional advertising being lost. Creative advertising offers a way out for enterprises, and one of the most frequently used creative advertising techniques is ambient advertising, involving the implementation of guerilla marketing strategies. Ambient advertising refers to making use of such environmental elements as bus stops, pedestrian paths, door knobs, etc. that consumers interact with in a way that is uncommon, creative, unexpected, and usually changed in some way while transmitting the advertising messages of the brand, thus actualizing a marketing communication. Hutter and Hoffmann (2011) define ambient advertising as ‘the guerilla form of outdoor advertising’; it also differs from traditional advertising in that it has cognitive and emotional effects on consumers, being original (Maniu and Zaharie 2014), attractive and surprising (Hutter and Hoffmann 2011, 2014), uncommon and unexpected (Luxton and Drummond 2000), and creative (Jurca and Ioan 2013). Ambient advertising is expected to attract the attention of consumers toward the advertisement through its surprise effect. Ambient advertising is an innovative form of outdoor advertising that aims to unexpectedly encounter consumers with surprises to attract their attention (Hutter and Hoffmann 2014) and it is often placed in unusual and unexpected places, for the first time or temporarily, and implemented through unconventional methods (Luxton and Drummond 2000). In this context, according to Hutter (2015), an ambient advertising has to provide these three conditions, being temporary, unexpected, and unusual. However, an ambient advertising not only surprise consumers and grab their attention but also it invites and involves consumers to the location where it is implemented. To attract the consumer’s attention, ambient advertisements are placed in unusual locations in their social environment (Gambetti, 2010). It may be partially or fully integrated with elements of the urban environment. Therefore, at first encounter, ambient advertising is perceived as something that seems funny and attention-grabbing, because ambient advertising is not integrated into the commercial environment. It thus may not be perceived as a commercial which consumers typically encounter but as an attractive stimuli. Consequently, it attracts the consumer to the area where the ad is implemented. On the other hand, ambient advertising can also appear in a very differentiated form from its surroundings (Hutter 2015). Moreover, previous studies suggested that when an object is differentiated from its surroundings, it may attract more attention of passers-by (Van der Stigchel et al. 2009).

The attention toward advertising can also serve as a premise in the development of an emotional attitude toward the brand and the advertisement. Attitude refers to the tendency to have a positive or negative reaction toward an object, an opinion, or an environment (Odabaşı and Barış 2002), and it is further assumed that attitudes have causal effects on behavioral intentions (Mitchell and Olson 1981). The attitude of the individual is known to have a direct effect on purchasing decisions (Odabaşı and Barış 2002), and it is therefore expected that a positive attitude toward ambient advertising and the advertised brand can lead to a purchase intention.

Although advertising agencies in Turkey have started to make use of ambient advertising, there are only a limited number of conceptual and applied academic studies of this form of advertising in literature. This study is the first in literature to examine the effect of ambient advertising on Turkish consumers through a model. In the present study, the main goal is to answer the question, 'What are the effects of ambient advertising on consumers?' While investigating these effects, specific aim of this study is to present the advertising effectiveness mechanism, which emerges by virtue of ambient advertising. In this context, this study aims to reveal how this advertising effectiveness mechanism hierarchically works and demonstrates the relationships between the effectiveness variables step by step, attributing to the related literature knowledge. The issue of ambient advertising was chosen as a field of study based on its growing popularity in Turkey in recent years. By studying the effects of ambient advertising through a model, the effects of specific variables in practical terms were revealed. It is also believed that this study will contribute both to practical application and to literature.

In ambient advertising literature, advertising effectiveness variables that we used in our article have not been evaluated through a structural equation modeling (SEM) for an ambient advertising. This study revealed the relationships between these variables. More clearly, the effect of surprise and attention factors emerged by means of ambient advertising on attitudes toward the ad and the brand and purchase intention were measured through SEM and revealed in this study. Transferring of the positive attitudes from an advertising to an unknown brand and mediation effect of that attitude toward an unknown brand on the relationship between attitude toward the ad and purchase intention were also investigated in this study. The identification of the effects of ambient advertising on consumers and understanding the relationship between these effects will increase the interest of enterprises and advertising agencies to take advantage of this advertising trend, while also filling a gap in literature. This study generates some benefits of applying ambient advertising for practitioners to be able to get rid of heavy costs of traditional advertising forms and obtain expected returns from the ad. This study is also a practical study which reveals how the effect of the surprise that traditional advertising generally does not succeed and is emerged by means of ambient advertising affects consumers cognitively, emotionally, and behaviorally. To this end, the study attempts to investigate the perceived surprise effect, the attention toward advertising, attitudes toward advertisements and the brand, and the purchase intention in the study in terms of the effect of ambient advertising. The mediating effect of the attitude toward the advertised brand between the attitude toward advertising and purchase intention was also tried to be determined. In this regard, the aim of this study is to identify the effects of ambient advertising, which has recently seen widespread growth in Turkey, on consumers and to test a model that aims to determine how this effect works.

## 2. Perceived surprise effect

Ambient advertising is a nontraditional form of advertising that is based on the creativity. In this type of advertising, direct and contextual advertising messages are communicated through the use of existing environmental elements, transforming them in such a way that they surprise the target audience (Jurca 2012). One of the most significant features of ambient advertising is (Figure 1) its ability to surprise the consumers. In addition to its originality, the ability of ambient advertising to surprise is the first step for reaching to effectiveness in relation to the context in which the advertisement is applied (Maniu and Zaharie 2014). Ambient advertising aims to surprise consumers in unexpected ways in order to attract their attention to the message of the advertisement, since surprise is a result of the difference between the expectations and perceptions of an individual (Hutter and Hoffmann 2011). This difference is used frequently in ambient advertising to attract more attention from consumers, and it is very hard for consumers who have experienced such surprises with unexpected messages not to process these messages in their minds (Johnston and Hawley 1994). That said, when a consumer experiences surprise through ambient advertising, it stimulates the advertising schema that s/he has developed in his/her mind based on previous experiences. Schema, in this regard, refers to all of the experiences that a person accumulates and organizes in his/her mind over time and constitutes an area that, once created, becomes too hard to change later. Every new experience of an individual results in the activation of the schema and the recall of previous corresponding experiences (Bartlett 1932, quoted by Beals 1998; Jurca and Madlberger 2015). Advertising can also be defined as an external form of information that individuals process in their minds. Consumers swiftly recognize and interpret advertisements as persuasive messages with the help of previously created advertisement schema. Additionally, consumer reactions to advertisements are shaped through past experiences and knowledge (Jurca and Ioan 2013). According to Schema Congruity Theory, the difference between stimuli (nontraditional advertisement/ambient advertising) and schema (not expecting to see an advertisement in a certain place) leads to a surprise effect (cited by Hutter and Hoffmann 2011, 42 from Mandler 1982; Alden et al. 2000). The same theory attests that encountering a stimuli that is congruent with the schema in the mind of the individual will result in the person becoming familiar with the stimuli, thus ensuring a sense of relief, enabling limited cognitive effort. However, encountering a stimuli that is incongruent with the schema in the mind of the individual will trigger the creation of a more intense cognitive effect in the mind by revealing the surprise effect, making the stimuli meaningful (Jurca and Ioan 2013).

It is also known that a coherent relationship exists between stimuli, including innovation, surprise, uncertainty and complexity, and the attention directed toward these stimuli (Berlyne 1960, cited by Olney, Holbrook, and Batra 1991). It can thus be said that one of the main goals in ambient advertising is to enable cognitive effort in the mind of the consumer by triggering the surprise effect and drawing their attention to the advertisement (Hutter and Hoffmann 2011). For example, when a consumer who expects to see a traditional advertisement (print ad, television ad) encounters a non-traditional advertisement (ambient advertising), s/he will experience surprise, and his/her attention toward the advertisement will be increased (Hutter 2015).



**Figure 1.** Ambient advertising sample (<https://www.pinterest.co.uk/pin/124623114660421575/>, accessed 18 February 2018.).

### 3. Attention toward advertising

Attention is the directing of an individual's information-processing activities to a specific stimuli (Solomon 2013). Moates and Schumaer (1980) define attention as the general distribution of the mental activity of an individual toward the tasks that the individual performs (MacInnis and Jaworski 1989). Attention may also be defined as the mental effort and cognitive capacity that an individual uses for the task with which s/he is occupied (MacKenzie 1986). The density of attention is associated with the level of

stimulation in the individual, which can be measured with the help of electrophysiologic techniques and is, in general, controlled by the features of the stimuli to which the individual is exposed (cited by Kahneman 1973, from Berlyn 1960). On the other hand, cognitive psychology suggests that the receiver's attention is a prerequisite for the processing of the message (cited by Hutter 2015, from Anderson 2005). The attention toward advertising emerges as soon as the consumer is exposed to an advertisement, and this is the first step in processing the advertisement message in the mind of the consumer. It is for this reason that remarkable, vivid, and unusual stimuli are used in advertisements, with the aim being for consumers to consciously notice an advertisement (Bob and Stroebe 2016). To be considered effective, the advertising message first needs to expose itself to the consumer and then draw the consumer's attention (Doyle and Stern 2006). Furthermore, consumers tend to notice advertisements that are clearly differentiated from the environments in which they are used and where they are not expected (Schiffman and Wisenblit 2015). As a guerilla marketing application, ambient advertising is considered an effective tool in attracting consumer attention thanks to its surprise effect (Jurca and Madlberger 2015). It can be said further that such advertisements are examples of creative advertising in unexpected forms, placed in unexpected locations, aimed at surprising consumers (Hutter and Hoffmann 2014; Jurca and Madlberger 2015; Luxton and Drummond 2000; Hutter 2015). Ambient advertisements can be influential in the development of an attitude toward the relevant advertisement. In the traditional hierarchy of effects model, it is stated that the effectiveness of an advertisement is achieved through two different ways: through comprehension/learning, and through assessment. In learning, the features of the advertisement draw the attention, and in this way, an advertisement can be understood and stored in the memory. In assessment, it is the features of the advertisement that draw attention, leading to the formation of an attitude toward the advertisement and the brand, and the creation of a purchase intention (Thorson, Chi, and Leavitt 1992). Generally, according to the traditional hierarchy of effects model, a consumer exposed to an advertisement passes through, in order, cognitive, emotional, and conative stages; and the advertisement shows its effects through these stages (Smith, Chen, and Yang 2008). It can be said, therefore, that the attention toward ambient advertising with a surprise effect may be effective in developing an attitude toward the ambient advertisement (Hutter 2015).

#### **4. Attitudes toward the advertising and brand**

'Attitude' can be defined as the tendency to respond positively or negatively to an individual or an object, or as an implicit intention of an individual, and has cognitive, emotional, and conative dimensions (Ajzen 2005; Fishbein and Ajzen 2010). '[The] emotional component contains sense and emotions about an object, while the cognitive component represents the beliefs about an object. [The] behavioral component contains the actions and the behaviors against an object' (Severin and Tankard 2001, cited by Gülmez 2016). Moreover, attitudes cause an object to be liked or disliked, being related to the covering positive or negative evaluations that are held consistently toward an object or an idea, emotion, or tendency to react, and leading to similar objects being treated in a consistent manner (Kotler and Keller 2012). Attitudes toward advertising can

be examined under two headings: general attitudes toward advertising, and attitudes toward a specific advertisement. General attitudes toward advertising are the learned tendencies of consumers, involving continuous positive or negative reactions toward advertisements in general. The attitude of a person toward a specific advertisement can be defined as the negative or positive attitude that the consumer develops during a specific period of exposure to a specific advertisement stimuli (cited by Akyüz 2010, from Lutz 1985). The foundations of researches into attitudes toward a specific advertisement are based on the studies of Mitchell and Olson (1981); Shimp (1981); and MacKenzie, Lutz, and Belch (1986). In these studies, the effects of the attitude of a consumer toward a specific advertisement on their attitude toward the brand and their purchase intention were examined, while in the present study, attitudes toward a specific advertisement (ambient advertising) were examined.

The attitude of a consumer toward a brand is defined as the tendency of an individual to respond positively or negatively to the brand in question after being exposed to advertisement stimulation (Phelps and Hoy 1996). Mitchell and Olson (1981) define attitudes toward brands as the 'inner evaluations of a customer towards a brand', while Spears and Singh (2004) define the attitude toward a brand as a partially consistent and one-dimensional brief summary that most likely stimulates behaviors toward the brand.

The messages given by advertisements may affect the relationship between the attitude toward the advertisement and the attitude toward the brand. This situation arises particularly when consumers lack any information about the advertised brand. In this regard, it can be said that while developing their attitudes, consumers tend to rely on their attitudes toward the advertisement to which they are exposed (Sallam and Algammash 2016). Furthermore, it has been suggested that a positive evaluation of an advertisement carried out by a consumer can be transferred to the brand by creating a positive attitude toward the brand in which the advertisement is made, in cases where the consumer lacks sufficient information (Shimp 1981; Babut and Dabija 2012, cited by Jurca and Madlberger 2015). Belief toward a brand is shaped by advertisements, and these beliefs affect the attitudes toward the advertisement, and consequently, the advertised brand (Suh and Yi 2006). Accordingly, a relationship can be expected between the attitudes toward the advertisement and the attitudes toward the brand. On the other hand, attitudes are known to be premises of behaviors and behavioral intentions with subjective norms and perceived behavioral control variables (Fishbein and Ajzen 2010). Related literature has identified a significant and consistent relationship between attitudes toward the brand and purchase intention (Phelps and Hoy 1996). For this reason, it can be said that both the attitude toward the advertisement and the attitude toward the brand influence purchase intention (Gresham and Shimp 1985; Goldsmith, Lafferty, and Newell 2000). Finally, an indirect relationship may exist between the attitude toward the advertisement and purchase intention, via the attitude toward the brand. This situation can arise if the consumer develops a positive attitude toward the advertisement, which may lead to a positive attitude toward the brand, prior to developing a positive purchase intention (MacKenzie, Lutz, and Belch 1986; Brown and Stayman 1992).

Creative advertisements are expected to draw emotional reactions from consumers, to contribute to the development of a positive attitude toward the advertisement and to create purchase intention (Kover et al. 1995, quoted by Smith, Chen, and Yang 2008).

These kinds of advertisements look more appealing to consumers in an intrinsic way (Maniu and Zaharie 2014). As a creative advertisement form, ambient advertising is expected to have a positive effect on consumer attitudes during purchase (Jurca and Ioan 2013). Furthermore, a stimuli with a surprise effect enforces the assessments in terms of emotions. For this reason, ambient advertising may result in the development of attitudes toward both the advertisement and the brand. On the other hand, evaluations toward advertisement and brand can lead to the formation of a purchase intention by reflecting the conative dimension (Hutter 2015; Brown and Stayman 1992).

## 5. Purchase intention

Purchase intention is the enhanced plan that is related to the purchase of a particular good or service (Kaushal and Kumar 2016), involving also the personal behavioral tendencies of consumers related to the brand. Intentions differ from attitudes, in that attitudes are brief evaluations by individuals, while intentions are motivations that are developed by a person regarding his/her conscious efforts in the execution of a behavior (Eagly and Chaiken 1993; Bagozzi et al. 1979; Ostrom 1969, quoted by Spears and Singh 2004). Purchase intention can thus be defined as the conscious effort exerted by a consumer prior to purchasing a brand. According to MacKenzie, Lutz, and Belch (1986), an attitude toward an advertisement involves cognitive, emotional, and conative stages, and so, the present study assumes that an ambient advertisement with a surprise effect will draw attention to itself; that this attention can be transformed into a positive attitude toward the advertisement; that the positive attitude toward the advertisement can be transferred to the brand; and consequently, that the positive attitude toward the advertisement and brand can create a purchase intention. It is further assumed that attitudes toward the brand may have a mediating effect on the relationship between the attitude toward the advertisement and the purchase intention, since the attitude toward the advertisement is transferred to the brand.

## 6. Research method

In this study, quantitative research method was adopted and relational survey method as one of the quantitative research designs was made use. Relational survey is a research method that is used to describe or measure the degree of relationship between two or more variables or a set of scores. As a further relational survey method, an estimation model was used in which the aim is to identify the independent variable or variables that can predict changes in the dependent variable (Creswell 2012). In this study, the efficiency of ambient advertising was evaluated through 'the model of attitude towards advertisement' (MacKenzie, Lutz, and Belch 1986) together with the perceived surprise effect. This model suggests that the reactions of consumers toward an advertisement may be based on cognitive (e.g., attention), emotional (e.g., attitude toward the advertisement and brand), and conative (e.g., purchase intention) dimensions. The fact that ambient advertising is extraordinary and is applied in unexpected places creates a surprise effect, and consumers try to come up with a cognitive explanation for this situation, leading them to pay more attention to the relevant advertisement. Furthermore, cognitive psychology suggests that attention paid by the observer is a prerequisite for message processing

(Anderson 2005, cited by Hutter 2015). Attention toward the advertisement constitutes the first step in the processing of the message and takes a leading role in the process of developing an attitude toward the advertisement. Accordingly, ambient advertising is expected to stimulate emotional dimensions such as attitudes toward the advertisement and brand, and these emotional evaluations lead to a purchase intention by reflecting the conative dimension (Brown and Stayman 1992, quoted by Hutter 2015). Taking this into account, within the scope of the study, the cognitive, emotional, and conative dimensions of the measurement of advertising effectiveness were investigated, and a conceptual model was developed by attributing it on literature based on these interdimensional relationships. Furthermore, a second model is presented to test the mediating effect of the attitude toward the brand on the relationship between the attitude toward the ambient advertising and purchase intention.

### **6.1. Data collection tool**

The study makes use of the advertising effectiveness survey developed by Hutter (2015), in which the effect of an advertisement is evaluated based on five variables, being 'perceived surprise effect' (Izard 1977); 'attention towards the advertisement' (Buchholz and Smith, 1991); 'attitude towards the advertisement' (Mitchell and Olson 1981); 'attitude towards the brand' (Bruner and Kumar 2000); and 'purchase intention' (MacKenzie, Lutz, and Belch 1986), culminating in a single scale. A total of four statements were used to evaluate the perceived surprise (unusual, surprising, creative advertisement, etc.). Accordingly, four statements were used to evaluate the level of attention toward the advertisement (I paid much attention to the ad, I highly concentrated on the ad, etc.), and three statements were used to evaluate the purchase intention (I will buy from this brand, etc.). In all of these evaluations, a five-point Likert-type scale (1 = strongly disagree, 5 = strongly agree) was used, and attitudes toward the advertisement were evaluated using two statements, while attitudes toward the brand was evaluated using three statements (e.g., I like/do not like the advertisement; or I like/do not like the brand), and a semantic differential scale was used. The scale was translated into Turkish by the researcher and then adapted to Turkish by retranslating it with experts in the field. Due to the adaptation process, explanatory factor analysis (EFA) (maximum likelihood/Promax) was projected to reevaluate the subconstructs of the scale, and then, these subconstructs are verified through confirmatory factor analysis (CFA).

Within the study, consumers were exposed to an ambient advertisement sample (Appendix 1)<sup>2</sup> as a stimulus, which belongs to an overseas company engaged in the production of herbal tea. The advertisement was demonstrated to consumers as printed on a sheet of A4 paper. Before participants evaluate the ambient advertising, they were informed about the stimulus, which represents the ambient advertising. It was clarified that it was a real advertising applied on the pavement in a city and declared that they were expected to evaluate the advertising in this context. In the selection of the product group, attention was paid to select a product that was neutral in terms of gender, while in selecting an overseas brand, attention was paid to obtaining a result that was free from the existing attitudes of the consumer to a brand with which they were familiar. The compatibility of the advertisement example and the effectiveness scale adopted in the study was checked by three academicians employed in the department of public

relations and advertising of a state university, and thus, context and content validity were provided.

## **6.2. Participants**

The study sample comprised students of a state university and was made during the summer school period. A convenience sampling method, being a nonrandom sampling approach, was used for the sampling, with data gathered from 194 students aged 18–34 using a questionnaire between June 20 and 27, 2016.

## **6.3. Hypotheses**

The overall design of the study was developed based on the fact that (1) a creative ambient advertisement with a surprise effect can attract consumer attention (Hutter and Hoffmann 2014; Jurca and Madlberger 2015); (2) it may be possible for consumers to develop a positive attitude toward an advertisement, and therefore the brand (Suh and Yi 2006; Sallam and Algammash 2016; Hutter 2015; Maniu and Zaharie 2014); and (3) these positive attitudes may lead to an intention to purchase the relevant brand (Hutter and Hoffmann 2014). The hypotheses of the study were developed based on these factors, and the relationships between these variables were tested using SEM.

The hypotheses of the study are as follows:

*Hypothesis 1:* Perceived surprise effect has a direct and positive impact on attention toward the ambient advertising.

*Hypothesis 2:* Attention toward the ambient advertising has a direct and positive impact on attitude toward the ambient advertising.

*Hypothesis 3:* Attitude toward the advertising has a direct and positive impact on purchase intention.

*Hypothesis 4:* Attitude toward the ambient advertising has a direct and positive impact on attitude toward the advertised brand.

*Hypothesis 5:* Attitude toward the advertised brand has a mediating effect on the relationship between attitude toward ambient advertising and purchase intention.

## **7. Analysis and results**

EFA was performed to determine the validity of the constructs included in the study, and CFA was performed to confirm the model. After testing the validity of the constructs, the hypotheses were tested by using SEM. Analyses were made using SPSS 25.0 software and AMOS 24.0 software.

### 7.1. Exploratory factor analysis

EFA was conducted to determine the factors, which belong to each construct, and the results of the analysis were presented in Table 1. Oblique rotation (Promax) method was used in analysis due to the fact that there is medium-level correlation (min. 0.425; max. 0.609) between the factors (Hair et al. 2014). Some stated items which have lower factor loadings than 0.4 and are cross-loading (ATA1; PS5, PS6) were, respectively, removed from the analysis and the analysis was performed again. It was determined that the Kaiser Meyer Olkin (KMO) measure of sampling adequacy value which measures the degree to which the sets of correlations are compact was 0.883 and Bartlett's test of sphericity was significant ( $\chi^2$ : 1714,450; df: 120;  $p < 0.001$ ), indicating that the factor analysis is appropriate on these data (Hair et al. 2014).

Reliability of the scale was checked with Cronbach's alpha and it was determined that sub-constructs of the scale have reliability coefficients between 0.77 and 0.89. According to Nunnally and Bernstein (1994) when Cronbach's alpha is 0.70 and above that, it can be said that the scale is reliable. As can be seen in Table 1, the scales are reliable in this study.

Factor loadings are considered practically significant at 0.45 or above when sample size is between 150 and 199 (Hair et al. 2014). As can be seen in Table 2, factor loadings of the items demonstrated a distribution between 0.483 and 0.963. Descriptive values of factors were given in Table 3. It can therefore be said that all factor loadings are significant in this study.

Mean and standard deviation values of the factors in the study are as follows.

### 7.2. Confirmatory factor analysis

Evaluation of the research model was conducted with two-step approach proposed by Anderson and Gerbing (1988). According to this approach, fit index values of the confirmatory measurement model are tested first via confirmatory factor analysis and then fit index values of the structural model are examined and hypotheses are tested. In this context, CFA was performed to test the fit index values of the confirmatory measurement model. Confirmatory measurement model and standardized estimation values were given in Figure 2 based upon the analysis performed. In Figure 3, structural model with no mediation effect and standardized estimation values were given. In Figure 4, structural model with mediation effect and standardized estimation values were given.

According to Hair et al. (2014) and Hu and Bentler (1999), Goodness of Fit (GFI) value has to be 0.90 or above, RMSEA has to be lower than 0.08, and TLI and CFI have to be 0.90 or above. These value ranges are generally associated with a model that fits well. According to Schumacker and Lomax (2015), GFI values which are close to 0.90 reflect

**Table 1.** Reliability results.

$\alpha$	Perceived surprise	Attention toward the ad	Attitude toward the ad	Attitude toward the brand	Purchase intention
Hutter (2015)	0.95	0.92	0.97	0.94	0.93
This study	0.86	0.80	0.84	0.77	0.89

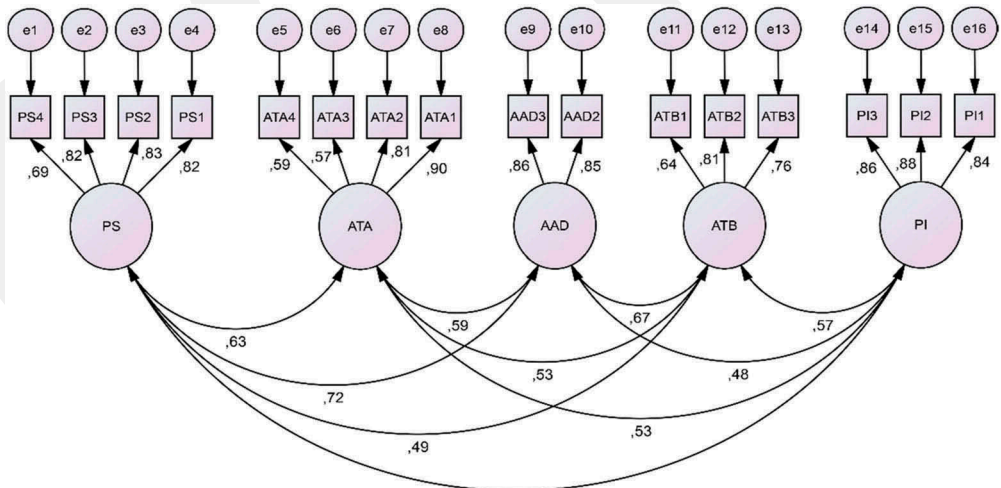
**Table 2.** The results of exploratory factor analysis.

Scale items	Factor loading	Total variance explained	Cronbach's alpha
<b>Perceived surprise</b>			
PS1	0.798	42.678	0.865
PS2	0.779		
PS3	0.896		
PS4	0.645		
<b>Attention toward the ad</b>			
ATA1	0.769	8.728	0.804
ATA2	0.895		
ATA3	0.640		
ATA4	0.483		
<b>Attitude toward the ad</b>			
AAD2	0.526	5.008	0.841
AAD3	0.963		
<b>Attitude toward the brand</b>			
ATB1	0.668	7.379	0.774
ATB2	0.711		
ATB3	0.772		
<b>Purchase intention</b>			
PI1	0.811	11.100	0.895
PI2	0.829		
PI3	0.939		

Extraction method: maximum likelihood.  
 Rotation method: Promax with Kaiser normalization.  
 Total variance explained: 74.893.

**Table 3.** Descriptive values of factors ( $n = 194$ ).

Constructs	Mean	Standard deviation
Perceived surprise	3.70	0.776
Attention toward the ad	3.27	0.852
Attitude toward the ad	3.72	0.908
Attitude toward the brand	3.39	0.792
Purchase intention	3.28	0.918



**Figure 2.** Confirmatory measurement model.

the good fit as well. Forza and Filippini (1998) propose that AGFI value has to be 0.85 or above to be evaluated as a good fit. However, AGFI value is generally lower than the GFI value based on the model (Hair et al. 2014). In this study, it is seen that fit index values

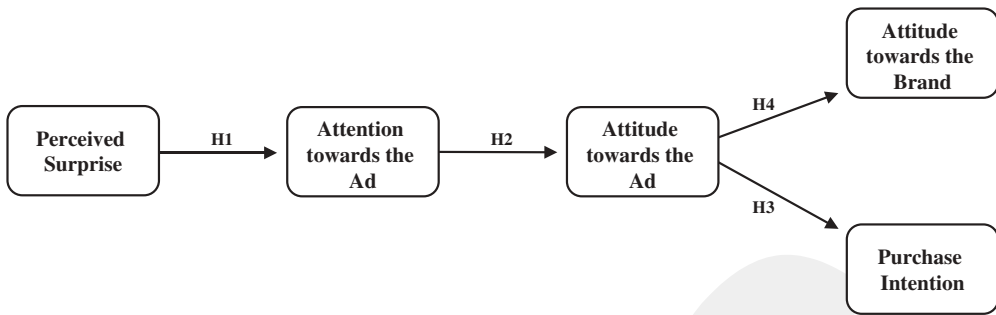


Figure 3. Measurement model 1 (without mediation effect).

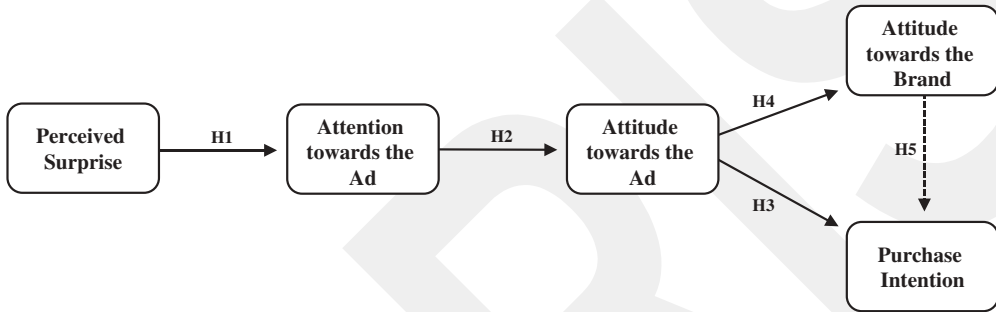


Figure 4. Measurement model 2 (with mediation effect).

related with the model are higher than the acceptable fit index values. Besides, confirmatory measurement model and all paths in the model are statistically significant ( $p < 0.001$ ). In Table 4, fit index values of the confirmatory factor analysis were given.

Convergent and discriminant validity checks were made to ensure construct validity in evaluating measurement model (Hair et al. 2014). To ensure convergent validity, Average Variance Extracted (AVE) values have to be higher than 0.50 for each construct and CR values have to be higher than 0.70 for each construct. To ensure discriminant validity, MSV (maximum shared variance) and ASV (average shared variance) values have to be lower than AVE values which belong to related constructs and the square root of the AVE values has to be higher than correlations between the constructs (Fornell and Larcker 1981; Hair et al. 2014). Convergent and discriminant validity values of the constructs were presented in Table 5. In this context, it was established that CR values for each construct are higher than 0.70, AVE values are higher than 0.5, and MSV and ASV values for each construct are lower than AVE values.

As can be seen in Table 6, the square root of the AVE values for each construct is higher than correlations between the constructs and all constructs discriminate from each other.

Table 4. Fit index values of confirmatory factor analysis.

	CMIN	df	CMIN/df	GFI	CFI	TLI	AGFI	RMSEA
Confirmatory factor analysis	139.086	94	1.480	0.921	0.973	0.965	0.886	0.05
Acceptable fit index values	–	–	<3	>0.9	>0.9	>0.9	>0.85	<0.08

**Table 5.** Results of construct validity tests.

Constructs	Convergent validity		Discriminant validity	
	CR	AVE	MSV	ASV
Perceived surprise	0.870	0.627	0.515	0.332
Attention toward the ad	0.814	0.532	0.398	0.329
Attitude toward the ad	0.841	0.726	0.515	0.387
Attitude toward the brand	0.780	0.544	0.455	0.324
Purchase intention	0.896	0.741	0.321	0.253

**Table 6.** Square root of the AVE and correlation values for each construct.

Constructs	Perceived surprise	Attention toward the ad	Attitude toward the ad	Attitude toward the brand	Purchase intention
Perceived surprise	<b>0.792</b>				
Attention toward the ad	0.631*	<b>0.729</b>			
Attitude toward the ad	0.718*	0.591*	<b>0.852</b>		
Attitude toward the brand	0.488*	0.534*	0.675*	<b>0.737</b>	
Purchase intention	0.425*	0.533*	0.480*	0.567*	<b>0.861</b>

\* $p < 0.001$ ; Square root of AVE for each construct is shown on the main diagonal with bold.

### 7.3. Testing the hypotheses

The hypotheses developed in accordance with the model of the study were tested using SEM. The mediating effect, on the other hand, was tested with the three-stage approach proposed by Baron and Kenny (1986). The model with no mediating effect and the model with mediating effect are presented in Figures 3 and 4, respectively, and the fit index values related to the models are shown in Table 7. All of the structural path analysis estimations for both models were found to be statistically significant ( $p < 0.001$ ,  $p < 0.01$ ,  $p < 0.05$ ).

Based on the fit index values presented in Table 7, it can be seen that the fit index values of both measurement models are at acceptable levels. The hypothesis test results of the model with no mediating effect and with mediating effect are given in Tables 8 and 9, respectively.

According to the results of the hypotheses tests presented in Table 8, the perceived surprise effect has a statistically significant and positive effect on attention toward the advertisement ( $\beta$ : 0.681;  $p < 0.001$ ), indicating that Hypothesis 1 is supported. Attention toward the advertisement has a statistically significant and positive effect

**Table 7.** Fit index values for measurement models.

	CMIN	df	CMIN/df	GFI	CFI	TLI	AGFI	RMSEA
Measurement model 1	201.112	100	2.011	0.889	0.939	0.927	0.849	0.072
Measurement model 2	191.225	99	1.932	0.894	0.944	0.932	0.855	0.069

**Table 8.** Hypothesis testing results of measurement model with no mediating effect.

Hypotheses	Constructs	$\beta$	$B$	SE	CR	Results
Hypothesis 1	PS → ATA	0.681	0.854*	0.101	6.192	Supported
Hypothesis 2	ATA → AAD	0.685	0.694*	0.140	6.758	Supported
Hypothesis 3	AAD → ATB	0.728	0.635*	0.080	6.948	Supported
Hypothesis 4	AAD → PI	0.569	0.592*	0.087	7.088	Supported

\* $p < 0.001$ .

on attitude toward the advertisement ( $\beta$ : 0.685;  $p < 0.001$ ), indicating that Hypothesis 2 is supported. Attitude toward the advertisement has a statistically significant and positive effect on attitude toward the brand ( $\beta$ : 0.728;  $p < 0.001$ ), indicating that Hypothesis 3 is supported. Finally, attitude toward the advertisement has a statistically significant and positive effect on purchase intention ( $\beta$ : 0.569;  $p < 0.001$ ), indicating that Hypothesis 4 is supported.

These results partly concur with those of the very first studies examining the relationship between the perceived surprise effect, attention toward the advertisement, attitude toward the advertisement, attitude toward the brand and purchase intention (Shimp 1981; MacKenzie, Lutz, and Belch 1986; Biehal, Stephens, and Curlo 1992), and the results of recent studies (Kaushal and Kumar 2016; Maniu and Zaharie 2014). Additionally, the results of the present study concur with the findings in relevant literature that ambient advertisements will reveal schema incongruity due to its surprise effect (Jurca and Madlberger 2015; Hutter and Hoffmann 2014) and that this incongruity may trigger attention toward the advertisement by increasing the cognitive efforts of consumers (Jurca and Ioan 2013). This finding also demonstrates similarities with the results of Hutter and Hoffmann's study (2014) in which the surprise effect of ambient advertising was examined.

In Baron and Kenny's (1986) measurement of the mediating effect of their first approaches, the effect of attitudes toward the advertisement, as the independent variable, on purchase intention, as the dependent variable ( $\beta$ : 0.569;  $p < 0.001$ ), is shown in Figure 3. Based on their second approach, the effect of the independent variable on the attitude toward the brand as a mediating variable ( $\beta$ : 0.728;  $p < 0.001$ ) was found to be statistically significant. According to their third approach, the effect of the independent variable on the dependent variable should decrease or become statistically insignificant in the final stage. According to the measurement model with the mediating effect given in Figure 4, it can be seen that the positive effect of the attitude toward advertising on purchase intention ( $\beta$ : 0.257;  $p < 0.05$ ) remains statistically significant, but decreases, and that the mediating variable ( $\beta$ : 0.387;  $p < 0.01$ ) has a statistically significant and positive effect on the dependent variable as can be seen in Table 9. Consequently, it can be determined that attitude toward the brand has a partial mediating effect on the relationship between the attitude toward the advertisement and purchase intention, as can be seen in Table 8, which means that Hypothesis 5 is supported.

The results of the study related to the mediating effect are consistent with the findings of Hutter and Hoffmann (2014) that attention toward the advertisement affects the attitude toward the advertisement, and that the attitude toward the brand affects the purchase intention (Hutter and Hoffmann 2014) when the attitude toward the advertisement is transferred to the brand (Shimp 1981). In cases where the consumers

**Table 9.** Hypothesis testing results of measurement model with mediating effect.

Hypothesis	Constructs	$\beta$	<i>B</i>	SE	CR	Results
Hypothesis 5	AAD → ATB	0.728	0.635***	0.080	6.948	Supported (partly mediation)
	AAD → PI	0.257	0.262*	0.123	2.209	
	ATB → PI	0.387	0.461**	0.175	3.121	

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ .

lack sufficient information about the brand, they trust the advertisement of the brand and transfer the positive attitude, which occurs through advertisement to the brand (Shimp 1981; Babut and Dabija 2012, quoted by Jurca and Madlberger 2015). Thus, a purchase intention emerges, and this explains the mediating effect of the attitude toward the brand.

In conclusion, this study found that the perceived surprise effect created by ambient advertising affects attention toward the advertisement, and attention toward the advertisement affects the attitude toward the advertisement. Furthermore, the attitude toward the advertisement has a positive and significant effect on both the attitude toward the brand and the purchase intention. The mediating effect of the attitude toward the brand on the relationship between the attitude toward the advertisement and the purchase intention was also tested within the scope of the study, and this mediating effect was also found to be positive and significant.

## 8. Discussion and recommendations

Rising competition and changing consumer behaviors have led to the effectiveness of traditional communication activities carried out by brands being called into question. Catching the target audience at the right place with the right message and through an appropriate application is becoming more important every day. Examples of nontraditional creative advertising are encountered daily, since advertisement examples are creatively fictionalized, unfamiliar to consumers and surprising, distinguish themselves from other traditional advertisements, and take the initiative in the development of the expected positive attitude and behavior toward the advertisement and the brand. Accordingly, although not common yet in Turkey, ambient advertising is in frequent use as a creative form of communication in foreign countries. In this study, an attempt is made to identify the effects of ambient advertising on consumers. The power of the relationship between the perceived surprise effect, the attention toward the advertisement, the attitude toward the advertisement and brand, and the purchase intention are all evaluated by SEM, and the mediating effect of the attitude toward the brand on the relationship between the attitude toward the advertisement and purchase intention was also tested.

This study offers some implications and insights for both theory and practice to the body of related literature. According to the results of the study, it can be said that the attention level of consumers who are baffled and surprised by ambient advertisements toward the advertisement may increase; that the increased level of attention may trigger the development of a positive attitude toward the advertisement and the brand; and that these attitudes may turn into purchase intentions. It can thus be said that by triggering the surprise effect (Hutter 2015), ambient advertising gets rid of the advertisement complexity (Rosengren 2008) created by traditional media and is able to stimulate the cognitive, emotional, and conative dimensions of the attitudes of consumers. The results of the present study demonstrate that the attention of consumers can be attracted by ambient advertising, and that such efforts can lead to enterprises standing out from their competitors in terms of their communication activities. To achieve this, however, it is necessary for ambient advertising to be placed in unexpected locations and to take unexpected forms (Luxton and Drummond 2000) and should differ from formerly applied ambient advertising. It should be completely new and unique. Using similar ambient

advertising to that used in the past can reduce the surprise effect (Hutter and Hoffmann 2011). It could be said that customers with high attention toward advertising due to the surprise effect develop a positive attitude toward advertising, and in cases with insufficient information about the brand, consumers transfer the attitude they developed toward the ambient ad to the brand. It can therefore be said that when there is no brand awareness, positive attitudes generated by ambient ad can be transferred to an unknown brand. Consumers, thus, may develop positive attitudes for brands just by relying on the advertisement of the brand if they feel surprised by ambient ad. Finally, attitudes created by ambient advertising are effective in developing a purchase intention toward the brand, with the attitude toward the brand being the mediator in this relationship. Even consumers do not know the brand which uses ambient ad, that brand still might be a mediator and cause consumers to purchase from it.

On the other hand, as already mentioned in the study, ambient advertising has been growing its popularity in Turkey and this study provides some contributions to Turkish practitioners and advertisers as well. According to a sectoral report which was published by The Union of Chambers and Commodity Exchanges of Turkey,<sup>3</sup> almost all of the companies (99.9%) operating in Turkey are small and medium-sized enterprises. It is not always possible for these companies to make high-budget marketing communication activities. For that reason, not just only big companies but also this kind of small companies can make use of ambient advertisements, which are cost-friendly and much more attention-grabbing compared to traditional media. Small companies, thus, can differentiate themselves and stand out amongst others with ambient advertisements' surprising executions in the cluttered advertising world. This study demonstrated that ambient ad as a surprising stimulus could cause consumers to direct their attention to the stimulus. Consumers, in this way, can develop positive attitudes toward ad and brand. Finally, these positive attitudes can lead consumers to purchase from these companies making use of ambient ad in their marketing communication activities. Especially in the development process of ambient ad in Turkey, small- and medium-sized enterprises benefit from this new and impressive ad form.

In future studies, evaluating the exposure of consumers to an ambient advertisement applied in a real environment may provide more comprehensive data. Furthermore, the advertisement sample shown as a stimulus in the present study belongs to a company producing herbal tea. Therefore, a further study which will be performed with another product line may give different results. In addition to that, in a future research, considering other variables such as recall of the advertising as a cognitive output and other types of cognitive variables except attention may reveal other features of the ambient advertising. As a final recommendation, the dispersion effect of ambient advertising in terms of word-of-mouth marketing can be tested in a further study.

## Notes

1. <https://www.ama.org/resources/Pages/Dictionary.aspx> (Accessed 12 February 2018).
2. <https://tr.pinterest.com/pin/441141725970663921/> (Accessed 12 June 2016).
3. <http://www.kobi.org.tr/index.php/bilgibankasi/statistikler> (Accessed 7 November 2018).

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