

The impact of Atmospherics on WOM about Short-Life-Cycle Products: The Case of Motion Pictures

ABSTRACT

Purpose - The purpose of this exploratory research is to empirically examine the mediating effect of perceived positive emotions evoked by atmospherics and, in turn, attitude toward the brand on the relationship between atmospherics and word of mouth (WOM) about the brand.

Design/Methodology/Approach - To test the research hypotheses, 314 Greek were drafted to participate in a survey. Data was analysed using confirmatory factor analysis (AMOS) and the SPSS macro (PROCESS tool). The model was applied to motion pictures, as they provide a particularly good example of short life cycle products.

Findings - Findings indicate that atmospherics are related to WOM about the brand through perceived emotions evoked by atmospherics and, in turn, attitude toward the brand.

Research Limitations/Implications - The present study extends the relevant literature by providing both direct and indirect links between atmospherics and WOM about a brand.

Practical Implications – The model of the present study could be applied to other short life cycle products that share key characteristics with motion pictures. Moreover, the present study increases movie producers and exhibitors' understanding of the effects of theatre atmospherics on WOM about the movie, and leads to practical suggestions and implications.

Originality/value - WOM is one of the key variables that can affect the profitability of short life cycle products. To date there was no evidence that atmospherics can influence WOM about a short life cycle product.

Keywords: Word of Mouth, Motion Pictures, Atmospherics, Emotions, Attitudes

Research Paper

1. Introduction & purpose

The role of store atmosphere on consumers' cognitive, emotional and behavioral responses has been extensively studied over the last four decades (Tang et al., 2001; Eroglu et al., 2005; Parsons, 2009). Two converging streams of research in the marketing field, atmospherics and servicescape (Bitner, 1992), have provided useful insights on how and when store atmosphere influences consumers' experience and evaluation of service (Mari and Poggese, 2013). In particular, prior studies have revealed both the effects of specific atmospheric cues (such as music, scent, temperature) and the interactive effect of different environmental cues on pleasure (Morrison et al., 2011), arousal (Mattila and Wirtz, 2001), dominance (PAD) (Kottasz, 2004), resource expenditures (Babin and Darden, 1995), store evaluation, patronage intentions (Baker et al., 2002), image and shopping behavior (Mari and Poggese, 2013). Likewise, atmospherics appear to exert a significant effect on consumers' intentions to spread positive WOM about the store (Babin et al., 2005; Bonn et al., 2007; Jeong and Jang, 2011; Heung and Gu, 2012).

The vast majority of relevant research (Grewal et al., 2003; Spangenberg et al., 2006; Spence et al., 2014) to date has focused on the influence of atmosphere on consumers' perceptions of the store and only few studies have examined the relationship between atmospheric cues and consumers' perceptions of products sold in the store (Gardner and Siomkos, 1986; Fiore et al., 2000; Baker et al., 2002; Babin et al., 2004, Demoulin, 2011). Gardner and Siomkos (1986), for instance, supported that a high-image store (e.g. a store with tile floor and narrow aisles) can increase the favorability of a brand sold in this store. In the same vein, Fiore et al. (2000) indicated that the addition of a pleasant and appropriate fragrance to the product display leads to increased positive attitude toward the product, higher purchase intention, as well as to

an effective assessment of the higher price the consumers are willing to pay for the product. These studies, however, did not investigate the relationship between store atmospherics and the word of mouth (WOM) about the brand or product.

WOM has a decisive influence on consumer behavior, since it generates more than twice the sales of paid advertising, whereas 20 to 50 percent of all purchase decisions can be mainly attributed to it (Bughin et al., 2010). Taking into account the importance of WOM in marketing, a plethora of studies have examined the motives of WOM communication (Sundaram et al., 1998). WOM drivers can be categorized into four factors of motivation: self-oriented motives (e.g. impression management, emotion regulation) (Berger, 2014), other-serving motives (e.g. altruism, collective motivation) (Cheung and Lee, 2012), brand-related drivers (e.g. brand's complexity and celebrity endorsement advertising appeals) (Lovett et al., 2013) and environmental-situational drivers (e.g. atmospherics) (Derbaix and Vanhamme, 2003). The fourth factor of motivation on WOM is the most unexplored among the existing studies, even though some research has stressed the importance of atmospherics in WOM dissemination (Babin et al., 2005; Bonn et al., 2007; Jeong and Jang, 2011; Heung and Gu, 2012). The present study attempts to fill this void by empirically investigating the effect of the atmospherics on WOM about a short life cycle product.

WOM has a significant positive effect on sales revenues, especially for newly-launched, and short life cycle products (Mason, 2008; Bughin et al., 2010). Nowadays, in general, product life cycles have become shorter and newer versions of products are introduced at a faster pace (Chesbrough, 2007). Thus, contemporary marketers have to meet frequently changing objectives of the products in a short period of time, by taking into consideration all the factors influencing product success

(Grefen et al., 2009). Under these business conditions, the exploration of the effects of atmospherics on WOM about a short life cycle product is of great interest. A number of high technology and entertainment products, including mobile phones, digital cameras, video games, and motion pictures, serve as particularly good examples of short life cycle products (Elberse and Eliashberg, 2003; Calantone et al., 2010; Chen et al., 2011).

Motion pictures are the focus of the present study for the following reasons. First, a motion picture is an information (Linde, 2009), experience good (Bharadwaj et al., 2017; Kim and Hanssens, 2017) that is characterised by adaptive demand (the extent to which consumers adopt the product depends on its availability) and short life cycle (Calantone et al., 2010; Cockrill and Goode, 2010; Bruce et al., 2012). In several prior studies (Eliashberg and Shugan, 1997; Hennig-Thurau et al., 2001; Elberse and Eliashberg, 2003; Calantone et al., 2010; Delre et al., 2016; Bharadwaj et al., 2017; Kim and Hanssens, 2017) motion pictures have served as a suitable example of short life cycle products, providing useful insights to help marketers optimize marketing strategies.

Second, WOM, the “buzz” that a motion picture creates, is one of the key variables that can affect its short-term (Liu, 2006), medium-term (Elberse and Eliashberg, 2003) and long-term profitability (Hennig-Thurau et al., 2001; Elberse and Eliashberg, 2003; Karniouchina, 2011). It is not fortuitous that the most studies in the field of motion pictures (Mahajan et al., 1984; Liu, 2006; Moon et al., 2010; Craig et al., 2015; Hennig-Thurau et al., 2015; Kim and Hanssens, 2017) have focused their attention on the role WOM plays on the commercial success of a motion picture.

Third, when a motion picture is viewed in a movie theatre, the total viewing experience is influenced not only by the movie per se, but also by the movie theatre’s

atmosphere. For instance, uncomfortable seats or a high temperature in a movie theatre directly detract from customers' experience (Wall and Berry, 2007). Given that motion pictures are viewed by moviegoers who are seated in a dark theatre (Mayer, 2015), it is only specific atmospheric cues (such as facilitative elements and physical conditions) that can influence their experience. Thus, due to its focus on motion pictures, the present study attempts to isolate the atmospheric variables most closely associated with WOM about a short life cycle product.

The purpose of this study is to examine the indirect effect of the theatre atmosphere on WOM about the movie. By doing so, two sequential mediating mechanisms were explored; positive emotions evoked by atmospherics, and attitude toward the movie (see Figure 1). The construct of movie theatre atmospherics is defined through the two dimensions of "facilitative elements" (i.e. comfort, tidiness, user friendliness and functionality of the movie theatre) and "physical conditions" (i.e. comfortable temperature, adequate light, airy and quiet movie theatre) which were proposed by Greenland and McGoldrick (2005) (Table 2). These two dimensions were selected as the most common and easily controlled atmospheric cues not only of movie theatres (regardless of their seating capacity) but also of retail stores. The causal model that illustrates both the direct and indirect effects of theatre atmospherics on WOM about a movie is tested and supported in a sample of 314 Greek moviegoers. The present paper offers a "total product" perspective on movie viewing and it further contributes to the ongoing discussion about the role of store atmospherics on consumers' attitudes and behaviours towards products sold in the store (Gardner and Siomkos, 1986; Fiore et al., 2000).

2. Theoretical Background

2.1 Atmospherics

According to Kotler (1973, p. 50), atmospherics is "... the conscious designing of space to create certain effects in buyers. More specifically, atmospherics is the effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability". Kotler (1973) argues that clients act in response to the "total product". The atmosphere of a buying environment represents an important part of the "total product". Atmospheric cues may have a stronger impact than other marketing inputs at the point of purchase (Baker et al., 1994), since they affect customers' brand evaluations (Lwin and Morrin 2012). Taking several relevant atmospheric cues into consideration, Baker et al. (1994) argued that both ambient factors (e.g. personal condition such as smell and lighting) and design factors (cleanliness and other facilitative elements) augment the perceived merchandise and service quality, and ameliorate store image.

Turley and Milliman (2000) identified over 60 studies that focused on store atmospherics and consumer behaviour, and the interaction between them. They observed that each of these studies found a statistically significant relationship between atmospherics and shopping behaviour and they concluded that the retail environment has a strong effect on consumer behaviour. They divided atmospheric factors into four categories: external variables, general internal variables (e.g. lighting, scents, temperature and other physical conditions), layout and design variables (this contains several facilitative elements), and point-of-purchase and decoration variables. The impact of general internal variables and that of layout and design variables on consumer behaviour have mainly attracted the interest of the most

researchers (Turley and Milliman, 2000). The effect of atmospherics on consumer behaviour has been examined in a wide range of servicescapes such as malls (Merrilees et al., 2016), restaurants (Ha and Jang, 2012), hotels (Fakharyan et al., 2014) and casinos (Johnson et al., 2012). To the best of the authors' knowledge, only few studies have addressed the impact of movie theatre atmospherics on moviegoers' attitudes and/or behaviours, even though the quality of the movie theatre, the ease of access to the movie theatre (Eliashberg et al., 2006) and WOM and to a lesser extent the film trailer and critics' reviews (Eliashberg and Shugan, 1997) are considered to be the most important criteria for choosing a film to go and watch from the audience's perspective. These studies point out the importance of the movie theatre atmosphere.

2.2 Word of Mouth (WOM)

WOM communications are defined as “informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services and/or their sellers” (Westbrook, 1987, p. 261). According to Sweeney et al. (2014) there are four streams of research on WOM, which focus on the following areas: (1) the antecedents of WOM (e.g. satisfaction, loyalty, quality and commitment) (Harrison-Walker, 2001; Brown et al., 2005), (2) the motives/drivers of WOM (e.g. emotion regulation, social bonding and information acquisition) (Lovett et al., 2013; Berger, 2014), (3) the moderators of WOM effects (e.g. WOM valence and WOM incidence) (De Matos and Rossi, 2008), and (4) the role of the strength of the WOM communication on its effects (Wangenheim and Bayón, 2004). The present study extends research in the second stream by examining the influence of environmental/situational drivers on the generation of WOM about a brand, and sheds

light on the mediating effects of positive emotions evoked by atmospherics and attitude toward the brand on the aforementioned relationship.

Depending on its valence, WOM is categorized into positive or negative WOM communication (De Matos and Rossi, 2008). The incidence of positive WOM is more than thrice that of negative WOM (East et al., 2007), since products deemed unsatisfactory disappear quickly from the market, and the majority of customers seem satisfied with products and services received (Peterson and Wilson 1992; Mittal and Lassar, 1998).

As far as the potential origins of WOM are concerned, there are three types: experiential, consequential, and intentional WOM (Bughin et al., 2010). Experiential WOM is the commonest form of WOM and it is generated when consumers directly experience a product or service. Consequential WOM is an unplanned result of marketing activities (e.g. the launching of either a new product or a new advertising campaign), whereas intentional WOM comes up as the result of firms' investment in attention-catching marketing campaigns (e.g. the introduction of an outstanding advertising campaign with the use of celebrity endorsements). It should be noted that previous literature has mainly dealt with consumers' intentions to engage in WOM communication and not so much on the extent of their actual WOM behaviours (Brown et al., 2005). The present study concentrates on the positive, experiential WOM (intention), since it is the commonest form of WOM.

The effects of WOM on the commercial success of a product are more intense in the turbulent, short product life cycle markets of high-tech and entertainment products (Liu, 2006; Mason, 2008). These products are not able to build brand image over years and hence marketers tend to invest in aggressive marketing strategies that encourage not only opinion leaders (e.g. motion picture critics, entertainment media

and “buzz networks”) to spread positive WOM, but also consumers’ to exchange more information about the products (e.g. through sales promotion strategies). Movies is one of the three product categories (restaurants and computers are the other two categories) that generate the highest volume of WOM (Allsop et al., 2007). The lifetime of movies in theaters is quite limited, with most movies being on release for 6–10 weeks (Hennig-Thurau et al., 2001; Elberse and Eliashberg, 2003). The WOM process about a movie takes place almost instantly after the movie viewing experience, whereas in general, moviegoers’ engagement in WOM has a sharp increase on the day of or the few days after the movie’s opening (Duan and Whinston, 2008). Thus, the first days of a movie’s release are of great importance for its future commercial success (Basuroy et al., 2003), with WOM playing a key role during this period of time (Liu, 2006).

A plethora of factors, including production costs (Roschk and Grosse, 2013), critics’ ratings, Motion Picture Association of America’s (MPAA) ratings, movie genres and star power (Liu, 2006) can increase the WOM about a movie. Eliashberg and Sawhney (1994) and Eliashberg et al. (2006) claimed that movie theatre atmospherics could, also, affect consumers’ emotions and behaviours (such as WOM about a movie) and invited researchers to investigate the ways in which atmospheric marketing influences consumers’ enjoyment of a theatrical experience. The relationship between movie theatre atmospherics and consumers’ emotions and behaviours appears to be known among motion picture professionals. For the blockbusters, such as star-driven movies, producers book prime theatres at the best times of the year (Watson, 2004). Likewise, exhibitors attempt to increase customer loyalty by emboldening more customers to adopt the theatre-first-movie-second heuristic and not movie-first-theatre-second behavioural process (Eliashberg et al.,

2006). The aforementioned approach seems to corroborate Frank Price's (as cited by Wasko, 2013, p. 176) argument that "theatres are the goose; even if pay-per-view is the golden egg".

3. Research Hypotheses

3.1 The Mediating Role of Positive Emotions Evoked by Atmospherics in the Relationship between Movie Theatre Atmospherics and Attitude toward the Movie

According to the Stimulus-Organism-Response (S-O-R) paradigm, customers' internal cognitive, emotional and physiological responses to the environment act as mediators in the relationships between the environmental factors and customers' responses (Richardson et al., 1996; Vieira, 2013). Based on this framework, it can be stated that the effects of a movie theatre's atmosphere on attitude toward the movie are mediated by customers' emotional reactions evoked by atmospherics.

Indeed, Chang et al. (2011) indicated that physical consumption settings influence consumers' emotional status. That is why the use of atmospherics to create emotional relations with consumers is considered very important by retailers (Schmitt and Simonson, 1997). In particular, Kotler (1973) showed that atmospherics such as noises, scents (physical conditions), sizes, shapes and colours nourish feelings that can help shopping centres trigger customers attention and thereby increase purchase probability.

In the same vein, other scholars (Darden and Babin, 1994; Vieira, 2013) strongly supported the belief that there is a significant relationship between store environments

and consumers' emotions. Babin et al. (2005) demonstrated that emotions, experienced by consumers during shopping, can affect the total "Customer Service Value". The "Customer Service Value" deals with the utilitarian (functional qualities of a service) and hedonic value (affective qualities of a service) received from service experience. These dimensions can mediate the effect of the environment on customer satisfaction and WOM. Only an increase, however, in positive emotions can lead to higher hedonic and utilitarian service value assessments, whereas negative affect has no impact on "Customer Service Value" and, as a result, on customers' satisfaction and WOM. In general, it seems that positive emotions have greater diagnosticity than do negative emotions (Babin et al., 2005).

In art management literature (Eliashberg and Sawhney, 1994), it is proposed that the moods and emotions of consumers change continuously during the movie viewing experience. Music, previews and advertisements screened before a movie as well as the facilitative elements (for instance the comfort of seats) of a movie theatre could change viewers' emotional status. In line with this, Lwin and Morrin (2012), who examined the effectiveness of movie theatre commercials, showed that olfactory atmospheric cues increase positive feelings toward the brand to a greater extent than pictorial cues do.

As regards the relationship between positive emotions evoked by atmospherics and attitude toward the brand, retail literature reveals that brand-related attitudes are more positive when evaluated in a favourable store, compared with an unfavourable store (Akhter et al., 1994). Prior research (Obermiller and Bitner, 1984; Demoulin, 2011) showed that respondents who viewed retail products in an emotionally pleasing environment evaluated products more positively than subjects who viewed the same products in an unpleasant environment. Viewed in this light, it can be assumed that

moviegoers' positive emotions (evoked by atmospherics) can generate favourable attitudes for the movie. Indeed, Eliashberg and Sawhney (1994) attested that initial consumers' mood, evoked by theatre atmospherics, can determine to a great extent movie enjoyment. Based on the aforementioned analysis the following hypotheses are formulated:

H1a: The relationship between facilitative elements and attitude toward the movie is mediated by positive emotions evoked by atmospherics.

H1b: The relationship between physical conditions and attitude toward the movie is mediated by positive emotions evoked by atmospherics.

3.2 The Mediating Role of the Attitude toward the Movie in the Relationship between Emotions Evoked by Atmospherics and WOM about the Movie

As discussed earlier, emotions evoked by environmental characteristics can influence viewer attitude toward the movie. According to Mehrabian and Russell's (1974) approach-avoidance model, environmental factors arouse emotions that determine the approach or avoidance responses of customers to the environment. These responses are expressed in terms of changes in customers' attitudes (Cacioppo and Berntson, 1994) and/or behaviours (Chang et al., 2011). This theory has received substantial empirical support over the last four decades. In line with this theory, prior studies indicated that store induced pleasure has a positive impact on affect toward the store (e.g. liking of the store) and the intention to spend money (Chang et al., 2011). In art management literature, Veríssimo and Pereira (2013) demonstrated that a pleasantly scented movie theatre environment improved significantly the evaluations

of concession products. Hence, it can be assumed that positive emotions, evoked by movie theatre atmospherics, also affect the attitude toward the movie.

These positive attitudes toward the movie, in turn, may exert a direct positive effect on the WOM about the movie. Indeed, a satisfied customer is the greatest advertisement for the product. The amount of WOM is higher for extremely satisfied and dissatisfied consumers than it is for those with moderate intensity of satisfaction (Anderson, 1998). Prior studies (Liu, 2006; Dellarocas et al., 2007; Chakravarty et al., 2010) have claimed that there is a positive relationship between attitude toward the movie and WOM about the movie. Dellarocas et al. (2007) suggested that the valence of e-WOM expresses users' attitudes toward the movie, whereas Tsourvakas et al. (2007) indicated that moviegoers' attitudes toward the movie lead to WOM about the movie. Taking all this together, the following hypothesis is advanced:

H2: The relationship between positive emotions evoked by atmospherics and WOM about the movie is mediated by attitude toward the movie.

Despite the recent burgeoning literature, relatively little is known about how atmospherics influence WOM communication. Derbaix and Vanhamme (2003), by utilising the critical incident technique, indicated that store atmospherics can generate positively (negatively) surprising consumer consumption experiences and in turn positive (negative) WOM about their experiences. Furthermore, Heung and Gu (2012) showed that restaurant atmospherics (e.g. layout and seating arrangement) exert not only a positive effect on customers' satisfaction, but also on their intention to spread positive WOM (both directly and indirectly through customers' satisfaction). Likewise, Babin et al. (2005) found that any positive affect that consumers experience in a restaurant positively influences customer satisfaction and WOM intentions.

According to Jeong and Jang (2011) customers are more likely to spread positive e-WOM when the atmosphere of a restaurant is superior. Indeed, a content analysis (Pantelidis, 2010) of about 2.500 online restaurant reviews revealed that ambience (physical conditions) and décor (facilitative elements) are two of the most frequently discussed aspects of a restaurant experience. Using the same research methodology, O'Connor (2010) designated that room size and cleanliness (facilitative elements) significantly influence the valence of eWOM about a hotel room. In a similar vein, Bonn et al. (2007) supported that both ambient environmental factors (such as noise and temperature) and layout and design environmental factors (such as aisle space and seating) positively affect attitude toward a heritage attraction and WOM intentions. Accordingly, the present study posits that the atmosphere of a movie theatre affects the WOM about a movie.

Based on the above analysis, it is theorised that facilitative elements and physical conditions are related to viewers' attitude towards the movie through positive emotions evoked by atmospherics (hypothesis 1a and 1b) and that attitude towards the movie serves as a mediator in the relationship between positive emotions and WOM (hypothesis 2). Combining our hypotheses with the proposition that facilitative elements and physical conditions affect WOM, we provide a three-path mediation model. Hence, the following hypotheses are advanced:

H3a: The relationship between facilitative elements and WOM about the movie is sequentially mediated by positive emotions evoked by atmospherics and attitude towards the movie.

H3b: The relationship between physical conditions and WOM about the movie is sequentially mediated by positive emotions evoked by atmospherics and attitude towards the movie.

INSERT FIGURE 1

4. Methodology

4.1 Procedure

Data was obtained from a selection of moviegoers at three multiplexes (Ster Cinemas, Village Cinemas and Odeon Cinemas) in malls in Thessaloniki, Greece. The respondents were students at the Aristotle University and the Technological Educational Institution of Thessaloniki, in Greece and their ages ranged from 17 to 34 years. Overall, 314 students completed the survey, in return for which each gained a class credit. The subjects were recruited from four departments of the aforementioned institutions. The survey was conducted during three field trips to the three multiplexes. The respondents were instructed to answer the same structured questionnaire, after having watched the same movie.

4.2 Sample

Table 1 provides a detailed view of the characteristics of the sample. The choice of the sample was based on the results of prior international studies (Montgomery and Robinson, 2006; SAWA, 2017; Screen Australia, 2017) and on those of relevant surveys conducted on the movie exhibition business in Greece by ICAP (A Greek-based service provider group) (2003) and by Hellenic Statistical Authority (ELSTAT, 2014 a, b, c) on the leisure time habits of Greeks. According to the ELSTAT's study

(2014a), females have higher rates of participation in the audiences for movies compared to males. What is more, it seems that attendance at movies is significantly higher for those who have completed higher education (ICAP, 2003; SAWA, 2017; Screen Australia, 2017) and especially so for students (ELSTAT, 2014b). In addition, interestingly, singles as well as young people go more frequently to the cinema. ELSTAT's study (2014c) concluded that Greek moviegoers belong mainly to the age group of 20-24 years. In the same vein, at the international level, it appears that consumers between 18-39 years of age are more likely than other age groups to watch a movie in a theatre (MPAA, 2016). As far as the city of Thessaloniki is concerned, theatre admissions in this region (3.61 times a month) are higher than elsewhere in Greece, since it is a city with an exceptionally large student population. Indeed, the 67% of our respondents answered that they attend over four movies a year.

INSERT TABLE 1

4.3 Measures

In the present study, facilitative elements and physical conditions (movie theatre's atmospherics) were measured by means of a 2-dimension and 8-item, 7 point Likert-scale, adopted from Greenland and McGoldrick (2005). Positive emotional reactions were measured by adapting the Izard's DES scale (Izard, 1977) for emotions. The attitude towards the movie was measured by means of a 4-item, 7-point Likert scale, developed by Geuens and De Pelsmacker (1998) (for the measurement of attitude towards the brand). WOM about a movie was measured by means of a 3-item scale, adopted from Zeithaml et al. (1996) (used also by Babin et al., 2005) (Table 2).

INSERT TABLE 2

4.4 Control Variables

Gender (male=0, female=1), age (17-24=0, 25-34=1), education (undergraduate=0, further degree study=1) and frequency (Not at all=0, Once a year=1, Once a semester=2, 2-5 times a semester=3, Once a month=4, 2-3 times a month=5, 1 time a week=6, 2-6 times a week=7, Every Day=8), were used as control variables. Nevertheless, the bivariate correlations between these control variables and the outcomes were not significant. To provide more compelling results, statistical analyses, with and without the inclusion of control variables, were first conducted. The results showed no significant change. Consequently, control variables were excluded from the analyses (Becker, 2005).

4.5 Confirmatory factor analysis

To assess the convergent and discriminant validity of the measures, a confirmatory factor analysis (AMOS 20) was conducted. Results (Table 3) indicated that the model provided a good fit to the data ($\chi^2 [94] = 244.75$, $p < 0.01$, IFI=.96, CFI=.96, TLI=.94, RMSEA= 0.07). One item from physical conditions, which demonstrated low loading, however, was excluded from the analysis. All other standardised coefficients were significant (ranging from .52 to .96). Moreover, the measurement model was contrasted against alternative models. Results showed that the model fitted data significantly better than other models, supporting, therefore, the distinctiveness of the constructs. Also, given that we garnered our data using cross-sectional design, we attempted to assess the potential influence of common method

variance by conducting Harman's test (Podsakoff et al., 2003). Results reported a poor fit for the one factor model ($\chi^2 [119] = 1414.53, p < 0.01, TLI = .56, CFI = .62, IFI = .62, RMSEA = .19$). Therefore, common method bias may not constitute a severe problem for the present study.

INSERT TABLE 3

5. Results

Means, standard deviations, reliabilities and correlations for all variables appear in Table 4. In order to examine the multiple mediation model, a bootstrapping analysis was conducted (1000 bootstrap samples with 95% confidence intervals), based on the SPSS macro suggested by Preacher and Hayes (2004; 2008). This technique addresses some weaknesses of the Sobel test and, more importantly, allows researchers to incorporate multiple mediators.

INSERT TABLE 4

Results (Table 5 and 6) revealed that both facilitative elements ($\beta = .63, p < .01$) and physical conditions ($\beta = .38, p < .01$) are related to positive emotions. In addition, positive emotions evoked by atmospherics demonstrated a positive effect on attitude towards the movie regarding both models ($\beta = .41, p < .01$, for facilitative elements; $\beta = .42, p < .01$, for physical conditions). Accordingly, the bias corrected confidence intervals of both indirect effects did not include zero (between .16 and .39 for facilitative elements; between .07 and .28 for physical conditions). Paired together, they support the first hypotheses (H1a and H1b), proposing that positive emotions evoked by atmospherics mediate the relationship between both facilitative elements and physical conditions and attitude towards the movie.

INSERT TABLES 5 & 6

Furthermore, hypothesis 2 posited that attitude towards the movie mediates the relationship between positive emotions evoked by atmospherics and WOM about the movie. This hypothesis is supported, since the bias corrected confidence intervals of the specific indirect effect did not contain zero (between .30 and .55). Lastly, it was argued that positive emotions evoked by atmospherics and attitude towards the movie sequentially mediated the influence of both facilitative elements and physical conditions on WOM about the movie (H3a and H3b). The present results corroborated the multiple mediation models since the respective intervals did not include zero for both models (between .16 and .39 for facilitative elements; between .08 and .25 for physical conditions). Thus, both H3a and H3b were supported.

6. Discussion & Conclusions

The current work contributes to the literature on atmospherics and WOM in four fundamental ways. First, through the use of confirmatory factor analysis (AMOS) and the SPSS macro (PROCESS tool), this study provides further evidence that atmospherics positively influence customers' WOM intentions. In that way it extends the prior research that has supported a positive association between store atmosphere and WOM about the store (Babin et al., 2005; Bonn et al., 2007; Jeong and Jang, 2011; Heung and Gu, 2012), by developing and proving a new causal model which illustrates both the direct and indirect effects of (theatre) atmospherics on WOM about a brand (movie brand). Atmosphere and specifically facilitative elements and physical conditions trigger positive emotions in customers. Positive emotions of customers affect the formulation of their attitude toward the brand and, in turn, attitude toward the brand influences the generation of WOM about the brand.

Second, this analysis expands previous studies that have shown the influence of store environment on consumers' perceptions of products sold in the store (Gardner and Siomkos, 1986; Fiore et al., 2000; Baker et al., 2002; Babin et al., 2004, Demoulin, 2011). The present study takes this line of research a step forward by providing further support for the relationship between store atmospherics and consumers' brand related behaviours and, in particular, by illustrating the direct and indirect effects of atmospherics on WOM about a brand. Previous research papers have revealed that WOM plays a major role in about four out of five consumer decisions (Stern and Gould, 1988). Also, as far as consumer decision-making is concerned, WOM has been confirmed to have an impact on a variety of decision-making stages. In particular it has an impact not only at the early stage and at the stage of information search (Eliashberg and Shugan, 1997; Murphy et al., 2007), but also during trial or sampling of products (Bone, 1995) and finally as a form of complaining or gossiping behaviour (Cowley and Rossiter, 2002; Moore, 2012; Berger, 2014). Thus, a fundamental understanding of factors that impact on WOM about a brand is of great importance to production and retail enterprises.

Third, the present study offers new insights into the factors that affect WOM about a short life cycle product. Despite the growing research interest in this field and the admittedly great importance of WOM on sales of short life cycle products (Elberse and Eliashberg, 2003; Mason, 2008; Bughin et al., 2010; Calantone et al., 2010; Chen et al., 2011), little was known about the impact of atmospherics on WOM about a short life cycle product.

Fourth, the present paper provides an explanation, based on the Stimulus-Organism-Response (S-O-R) paradigm, for the indirect effects of atmospherics on WOM about a brand. Particularly, it shows that positive emotional responses to the

environment (organism) act as mediators in the relationships between atmosphere (stimulus) and attitude toward the brand and WOM about the brand (responses). As such, this study contributes to the growing literature on the Stimulus-Organism-Response paradigm.

The present study extends, also, the motion picture literature in two important ways. First, it points out another key factor that indirectly influences WOM about a movie; namely theatre atmospherics. According to arts management literature, WOM about a movie, which is increased during a movie's pre-release and opening week, can explain the box office revenues (Liu, 2006). Hence it is of great interest for producers and exhibitors to know that the atmosphere of theatres can indirectly affect WOM about a movie.

Second, this study extends the literature of motion pictures by investigating the indirect effects of facilitative elements and physical conditions of a movie theatre on WOM about a movie. Despite the plethora of studies on the role of atmospherics in consumer responses (Turley and Milliman, 2000), limited research has been conducted in the area of a movie theatre's atmosphere (Lwin and Morrin, 2012; Veríssimo and Pereira, 2013). According to Wakefield and Blodgett (1994), servicescapes are of great importance in many leisure services (such as in movie theatres) because they can influence both consumers' thoughts and feelings. More specifically, they mentioned that functionality (e.g. the position of the seats) and aesthetic appeals (e.g. cleanliness and surrounding external environment) affect the comfort of the customers and the ambience of the place. They tested and supported these predictions in the context of two different Major Leagues Baseball stadiums. The present study extends their work by indicating that movie theatres' facilitative elements (e.g. the functionality of the theatre) and physical conditions (e.g.

temperature and noise) influence WOM about the movie through positive emotions evoked by atmospherics and attitude toward the movie.

7. Managerial Implications

The present study offers a number of managerial implications for motion pictures producers and exhibitors. It reveals the pivotal role of a movie theatre's atmospherics in the success of a movie (attitude toward the movie and WOM about a movie) and provides an explanation of why production/distribution enterprises have become more and more involved in the theatre operation, during the last thirty years (Fu, 2009; Sunada, 2010; Jin, 2012). The vertical integration and/or horizontal control on the exhibition of movies could be a source of competitive advantage, since movie theatre atmosphere constitutes a significant part of the movie's total product.

This study examines the indirect effects of facilitative elements and physical conditions on WOM about a movie. They are two of the most common and easily controlled atmospheric cues of movie theatres, regardless of a theatre's seating capacity. Therefore, both first-run and second-run theatres could enhance moviegoers' experience by improving facilitative elements and physical conditions of the theatre, enhancing the level of movie enjoyment and moderating the valence of WOM about the movie.

Furthermore, the results of the present study suggest that producers should take into serious account the atmospherics of movie theatres for the opening week of the movie. According to Liu (2006), WOM activities experience a peak during the opening week of a movie, since the expectations of moviegoers are high. Liu (2006), also, indicated that WOM, which is increased during a movie's opening week, can account for the performance of box office revenues. Hence, producers, whenever it is

possible (for instance under vertical integration), should control the atmosphere of movie theatres, in order to positively influence the emotions, attitudes and behaviours of viewers, during this critical period for a movie.

Moreover, the findings of this study point to the mediating role of positive emotions evoked by atmospherics in the relationship between movie theatre atmospherics and the attitude toward the movie. The professionals in the motion picture industry should take into account the central role of emotions, eliminating all other factors influencing negatively the emotions evoked by atmospherics.

The present study also sheds light on the role of atmospherics on WOM communication about a short life cycle product. On the basis of the findings of this study, one can derive important strategies which might be applicable to promoting short life cycle products, such as fashion apparel, laptops, personal computers, mobile phones, electronic devices, video games, music CDs and motion pictures. For some of these short life cycle products, distribution through either exclusive or selective stores is usually the case. For instance, several well-known fashion apparel corporations including Zara and H&M, as well as several technology companies, such as Apple and Samsung, sell their products through their own stores or to a selected group of targeted intermediaries. Their main goal is to gain more control over the channels of sales and marketing. Through this strategy they can also control the atmosphere of the stores. The findings of the present study appear to be in agreement with this corporate strategy, because they suggest that producers should control the atmosphere of stores, in order to positively influence customers' emotions, their attitude toward the products and their intentions to spread WOM about the products.

On the contrary, the ephemeral nature of some stores may not allow companies to absolutely control atmospherics. For instance, pop-up retail stores are temporary

establishments that are used by firms to attract interest to their products or services. In the same vein, trade and consumer fairs last for a short period of time and offer limited control to the participating companies over the atmospherics of the convention centre. The findings of the present study refocus the attention of participating companies on the importance of atmospherics in short-term sales/exhibition spaces.

8. Limitations & Future Research

Like any other research, the present study is not without limitations. Although, as it was indicated before, students are more likely than other groups to watch a movie in a theatre (ELSTAT, 2014b), the student sample limits the external validity of the model. Future research could extend our results, using a more representative sample. In the present paper, scales were modified and applied to Greek culture because they have developed in a Western culture (USA and Western Europe). We attempted to overcome the cultural sensitivity of the scales, paying careful attention to the translation of them (translation/ back translation methodology) (Mullen, 1995).

In addition, the present study used only Greek respondents. As mentioned in the methodology section of this study, the moviegoing habits of Greeks (ELSTAT, 2014 a, b, c) are similar to those of Americans (MPAA, 2014). This study, however, needs to be replicated through a cross-cultural survey that will demonstrate the differences and similarities between two or more culturally diverse environments, regarding the effect of theatre atmospherics on WOM about a movie.

Today a significant percentage of the overall financial status of the theatre business arises from refreshments and pop corn sales. In particular, exhibitors expect to make more money from the concession stand, than from the box office (Watson,

2004). An important managerial question is how shopping experience in concession stands influence the initial mood of consumers and subsequently the attitudes towards the movie and WOM about the movie.

Pop-up cinemas and theatres are a current trend in arts management. They are temporal theatres that operate from a private building, former factory, military camp or similar space. Theatregoers may hold different expectations for pop-up than for mainstream theatres, because of pop-up theatres' ephemeral nature. Thus, the influence of theatregoers' expectations for a pop-up theatre on their perceptions of theatre atmospherics is an important new direction for future research.

Even though this study only looked at motion pictures, the model is also potentially applicable in other short life cycle products. Future research could explore the role of atmospherics on WOM about an apparel product, a high-tech product (e.g. mobile phones and personal computers) or another entertainment product (e.g. books and videogames). Companies in these business sectors very often attempt to control the distribution channels. A comparison between intensive and exclusive distribution strategies could further clarify the role of atmospherics on attitude toward the products and WOM about the products.

References

- Akhter, SH, J.C. Andrews, and Durvasula S. (1994), "The influence of retail store environment on brand-related judgments", *Journal of Retailing and Consumer Service*, Vol. 1 No. 2, pp. 67-76.
- Allsop, D.T., Bassett, B.R. and Hoskins, J.A. (2007), "Word-of-mouth research: principles and applications", *Journal of Advertising Research*, Vol. 47 No. 4, pp. 398-411.
- Anderson, E. (1998), "Customer satisfaction and word-of-mouth", *Journal of Service Research*, Vol. 1 No. 1, pp. 5-17.
- Babin, B.J. and Darden, W.R. (1995), "Consumer self-regulation in a retail environment", *Journal of retailing*, Vol. 71 No. 1, pp. 47-70.
- Babin, B.J., Chebat, J.C. and Michon, R. (2004), "Perceived appropriateness and its effect on quality, affect and behavior", *Journal of Retailing and Consumer services*, Vol. 11 No. 5, pp. 287-298.
- Babin, B.J., Lee, Y.K., Kim, E.J. and Griffin, M. (2005), "Modeling consumer satisfaction and word-of-mouth: restaurant patronage in Korea", *Journal of Services Marketing*, Vol. 19 No. 3, pp. 133-139.
- Baker, J., Grewal, D. and Parasuraman, A. (1994), "The influence of store environment on quality inferences and store image", *Journal of Academy of Marketing Science*, Vol. 22 No. 4, pp. 328-339.
- Baker, J., Parasuraman, A., Grewal, D. and Voss, G.B. (2002), "The influence of multiple store environment cues on perceived merchandise value and patronage intentions", *Journal of marketing*, Vol. 66 No. 2, pp. 120-141.

- Basuroy, S., Chatterjee, S., and Ravid, S.A. (2003), "How critical are critical reviews? The box office effects of film critics, star power, and budgets", *Journal of Marketing*, Vol. 67 No. 4, pp. 103–117.
- Becker, T.E. (2005), "Potential problems in the statistical control of variables in organizational research: a qualitative analysis with recommendations", *Organizational Research Methods*, Vol. 8 No. 3, pp. 274-289.
- Berger, J. (2014), "Word of mouth and interpersonal communication: A review and directions for future research", *Journal of Consumer Psychology*, Vol. 24 No. 4, pp. 586-607.
- Bharadwaj, N., Noble, C.H., Tower, A., Smith, L.M. and Dong, Y. (2017), "Predicting Innovation Success in the Motion Picture Industry: The Influence of Multiple Quality Signals", *Journal of Product Innovation Management*, Vol. 34 No. 5, pp. 659-680.
- Bitner, M.J., (1992), "Servicescapes: The impact of physical surroundings on customers and employees", *The Journal of Marketing*, Vol. 56 No. 2, pp. 57-71.
- Bone, P.F. (1995), "Word-of-mouth effects on short-term and long-term product judgements", *Journal of Business Research*, Vol. 32 No. 3, pp. 213-223.
- Bonn, M.A., Joseph-Mathews, S.M., Dai, M., Hayes, S. and Cave, J. (2007), "Heritage/cultural attraction atmospherics: Creating the right environment for the heritage/cultural visitor", *Journal of Travel Research*, Vol. 45 No. 3, pp. 345-354.
- Brown, T.J., Barry, T.E., Dacin, P.A. and Gunst, R.F. (2005), "Spreading the word: Investigating antecedents of consumers' positive word-of-mouth intentions and behaviors in a retailing context", *Journal of the Academy of Marketing Science*, Vol. 33 No. 2, pp. 123-138.

- Bruce, N.I., Foutz, N.Z., and Kolarici, C. (2012), "Dynamic effectiveness of advertising and word-of-mouth in the sequential distribution of short life cycle products", *Journal of Marketing Research*, Vol. 49 No. 4, pp. 469-486.
- Bughin, J., Doogan, J. and Vetvik, O.J. (2010), "A new way to measure word-of-mouth marketing", *McKinsey Quarterly*, Vol. 2, pp. 113-116.
- Cacioppo, J.T. and Berntson, G.G. (1994), "Relationship between attitudes and evaluative space: a critical review, with emphasis on the separability of positive and negative substrates", *Psychological Bulletin*, Vol. 115 No. 3, pp. 401-423.
- Calantone, R.J., Yeniyurt, S., Townsend, J.D. and Schmidt, J.B. (2010), "The Effects of Competition in Short Product Life - Cycle Markets: The Case of Motion Pictures", *Journal of Product Innovation Management*, Vol. 27 No. 3, pp. 349-361.
- Chang, H.J., Eckman, M. and Yan, R.N. (2011), "Application of the Stimulus-Organism-Response model to the retail environment: the role of hedonic motivation in impulse buying behaviour", *The International Review of Retail, Distribution and Consumer Research*, Vol. 21 No. 3, pp. 233-249.
- Chen, Y., Wang, Q. and Xie, J. (2011), "Online social interactions: A natural experiment on word of mouth versus observational learning", *Journal of marketing research*, Vol. 48 No. 2, pp. 238-254.
- Chesbrough, H.W. (2007), "Why companies should have open business models", *MIT Sloan management review*, Vol. 48 No. 2, pp. 22-28.
- Cheung, C.M. and Lee, M.K. (2012), "What drives consumers to spread electronic word of mouth in online consumer-opinion platforms", *Decision support systems*, Vol. 53 No. 1, pp. 218-225.
- Cockrill, A. and Goode, M.M. (2010), "Perceived price fairness and price decay in the

DVD market", *Journal of Product & Brand Management*, Vol.19 No. 5, pp. 367-374.

Cowley, E. and Rossiter J. (2002), "Word of mouth communication: When hearing the opinions of other consumers during consumption matters", Working Paper, School of Marketing, University of New South Wales, Sydney, 2 June.

Craig, C.S., Greene, W.H. and Versaci, A. (2015), "E-word of mouth: early predictor of audience engagement," *Journal of Advertising Research*, Vol. 55 No. 1, pp. 62-72.

Darden, W.R. and Babin, B. (1994), "Exploring the concept of affective quality: Expanding the concept of retail personality", *Journal of Business Research*, Vol. 29 No. 2, pp. 101-110.

De Matos, C.A. and Rossi, C.A.V. (2008), "Word-of-mouth communications in marketing: a meta-analytic review of the antecedents and moderators", *Journal of the Academy of Marketing Science*, Vol. 36 No. 4, pp. 578-596.

Dellarocas, C., Zhang, X.M. and Awad, N.F. (2007), "Exploring the value of online product reviews in forecasting sales: the case of motion pictures", *Journal of Interactive Marketing*, Vol. 21 No. 4, pp. 23-45.

Delre, S.A., Broekhuizen, T.L. and Bijmolt, T.H. (2016), "The Effects of Shared Consumption on Product Life Cycles and Advertising Effectiveness: The Case of the Motion Picture Market", *Journal of Marketing Research*, Vol. 53 No. 4, pp. 608-627.

Demoulin, N.T. (2011), "Music congruency in a service setting: The mediating role of emotional and cognitive responses", *Journal of Retailing and Consumer Services*, Vol. 18 No. 1, pp.10-18.

- Derbaix, C. and Vanhamme, J. (2003), "Inducing word-of-mouth by eliciting surprise—a pilot investigation", *Journal of economic psychology*, Vol. 24 No. 1, pp. 99-116.
- Duan, W., Gu, B. and Whinston, A.B. (2008), "The dynamics of online word-of-mouth and product sales—An empirical investigation of the movie industry", *Journal of Retailing*, Vol. 84 No. 2, pp. 233-242.
- East, R., Hammond, K. and Wright, M. (2007), "The relative incidence of positive and negative word of mouth: A multi-category study", *International Journal of Research in Marketing*, Vol. 24 No. 2, pp. 175-184.
- Elberse, A. and Eliashberg, J. (2003), "Demand and supply dynamics for sequentially released products in international markets: The case of motion pictures", *Marketing Science*, Vol. 22 No. 3, pp. 329-354.
- Eliashberg, J. and Sawhney, M.S. (1994), "Modeling goes to Hollywood: predicting individual differences in movie enjoyment", *Management Science*, Vol. 40 No. 9, pp. 1151-1173.
- Eliashberg, J. and Shugan, S.M. (1997), "Film critics: influencers or predictors?", *Journal of Marketing*, Vol. 61 No. 2, pp. 68-78.
- Eliashberg, J., Elberse, A. and Leenders, M.A.A.M. (2006), "The motion picture industry: critical Issues in practice, current research and new research directions", *Marketing Science*, Vol. 25 No. 6, pp. 638-661.
- ELSTAT (2014a), *Leisure time habits of Greeks belong to the age group of 20-74 years by gender and main activity*, Hellenic Statistical Authority's Report. Available at: <https://goo.gl/Gw2GCo>.
- ELSTAT (2014b), *Leisure time habits of Greeks by profession group*, Hellenic Statistical Authority's Report. Available at: <https://goo.gl/Gw2GCo>.

- ELSTAT (2014c), *Leisure time habits of Greeks by age group and main activity*, Hellenic Statistical Authority's Report. Available at: <https://goo.gl/Gw2GCo>.
- Eroglu, S.A., Machleit, K.A. and Chebat, J.C. (2005), "The interaction of retail density and music tempo: Effects on shopper responses", *Psychology & Marketing*, Vol. 22 No. 7, pp. 577-589.
- Fakharyan, M., Omidvar, S., Khodadadian, M.R., Jalilvand, M.R. and Nasrolahi Vosta, L. (2014), "Examining the effect of customer-to-customer interactions on satisfaction, loyalty, and word-of-mouth behaviors in the hospitality industry: the mediating role of personal interaction quality and service atmospherics", *Journal of Travel and Tourism Marketing*, Vol. 31 No. 5, pp. 610-626.
- Fiore, A.M., Yah, X. and Yoh, E. (2000), "Effects of a product display and environmental fragrancing on approach responses and pleasurable experiences", *Psychology and Marketing*, Vol. 17 No. 1, pp. 27-54.
- Fu, W.W. (2009), "Screen survival of movies at competitive theaters: vertical and horizontal integration in a spatially differentiated market", *Journal of Media Economics*, Vol. 22 No. 2, pp. 59-80.
- Gardner, M.P. and Siomkos, G.J. (1986), "Toward a methodology for assessing effects of in-store atmospherics", *ACR North American Advances*, Vol. 13, pp. 27-31.
- Geuens, M. and De Pelsmacker, P. (1998), "Feelings evoked by warm, erotic, humorous or non-emotional print advertisements for alcoholic beverages", *Academy of Marketing Science Review*, Vol. 19 No. 1, pp. 1-32.
- Greenland, S. and McGoldrick, P. (2005), "Evaluating the design of retail financial service environments", *International Journal of Bank Marketing*, Vol. 23 No. 2, pp. 132-152.

- Grefen, P., Mehandjiev, N., Kouvas, G., Weichhart, G. and Eshuis, R. (2009), "Dynamic business network process management in instant virtual enterprises", *Computers in Industry*, Vol. 60 No. 2, pp. 86-103.
- Grewal, D., Baker, J., Levy, M. and Voss, G.B. (2003), "The effects of wait expectations and store atmosphere evaluations on patronage intentions in service-intensive retail stores", *Journal of retailing*, Vol. 79 No. 4, pp. 259-268.
- Ha, J., and Jang, S. (2012), "The effects of dining atmospherics on behavioral intentions through quality perception", *Journal of Services Marketing*, Vol. 26 No. 3, pp. 204-215.
- Harrison-Walker, L.J. (2001), "The measurement of word-of-mouth communication and an investigation of service quality and customer commitment as potential antecedents", *Journal of Service Research*, Vol. 4 No. 1, pp. 60-75.
- Hennig-Thurau, T., Walsh, G. and Wruck, O. (2001), "An investigation into the factors determining the success of service innovations: The case of motion pictures", *Academy of Marketing Science Review*, Vol. 1 No. 6, p. 1-23.
- Hennig-Thurau, T., Wiertz, C. and Feldhaus, F. (2015), "Does Twitter matter? The impact of microblogging word of mouth on consumers' adoption of new movies," *Journal of the Academy of Marketing Science*, Vol. 43 No. 3, pp. 375-394.
- Heung, V.C. and Gu, T. (2012), "Influence of restaurant atmospherics on patron satisfaction and behavioral intentions", *International Journal of Hospitality Management*, Vol. 31 No. 4, pp. 1167-1177.
- ICAP (2003), *Movie Industry and motion pictures production*, ICAP, Athens.
- Izard, C.E. (1977), *Human Emotions*, Plenum Press, New York, NY.

- Jeong, E. and Jang, S.S. (2011), "Restaurant experiences triggering positive electronic word-of-mouth (eWOM) motivations", *International Journal of Hospitality Management*, Vol. 30 No. 2, pp. 356-366.
- Jin, D.Y. (2012), "Transforming the global film industries: horizontal integration and vertical concentration amid neoliberal globalization", *International Communication Gazette*, Vol. 74 No. 5, pp. 405-422.
- Johnson, L., Mayer, K.J. and Champaner, E. (2012), "Casino atmospherics from a customer's perspective: a re-examination", *UNLV Gaming Research and Review Journal*, Vol. 8 No. 2, p. 1.
- Karniouchina, E.V. (2011), "Impact of star and movie buzz on motion picture distribution and box office revenue", *International Journal of Research in Marketing*, Vol. 28 No. 1, pp. 62-74.
- Kim, H. and Hanssens, D.M. (2017), "Advertising and Word-of-Mouth Effects on Pre-launch Consumer Interest and Initial Sales of Experience Products", *Journal of Interactive Marketing*, Vol. 37 No. 2, pp. 57-74.
- Kotler, P. (1973), "Atmospherics as a marketing tool", *Journal of Retailing*, Vol. 49 No. 4, pp. 48-64.
- Kottasz, R. (2004), "Differences in the donor behavior characteristics of young affluent males and females: Empirical evidence from Britain", *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 15 No. 2, pp. 181-203.
- Linde, F. (2009), "Pricing information goods", *Journal of Product & Brand Management*, Vol. 18 No. 5, pp. 379-384.
- Liu, Y. (2006), "Word of mouth for movies: its dynamics and impact on box office revenue", *Journal of Marketing*, Vol. 70 No. 3, pp. 75-89.

- Lovett, M.J., Peres, R. and Shachar, R. (2013), "On brands and word of mouth", *Journal of Marketing Research*, Vol. 50 No. 4, pp. 427-444.
- Lwin, M.O. and Morrin, M. (2012), "Scenting movie theatre commercials: the impact of scent and pictures on brand evaluations and ad recall", *Journal of Consumer Behaviour*, Vol. 11 No. 3, pp. 264-272.
- Mahajan, V., Muller, E. and Kerin, R.A. (1984), "Introduction strategy for new products with positive and negative word-of-mouth", *Management Science*, Vol. 30 No. 12, pp. 1389-1404.
- Mari, M. and Poggesi, S. (2013), "Servicescape cues and customer behavior: a systematic literature review and research agenda", *The Service Industries Journal*, Vol. 33 No. 2, pp.171-199.
- Mason, R.B. (2008), "Word of mouth as a promotional tool for turbulent markets", *Journal of Marketing Communications*, Vol. 14 No. 3, pp. 207-224.
- Mattila, A.S. and Wirtz, J. (2001), "Congruency of scent and music as a driver of in-store evaluations and behavior", *Journal of retailing*, Vol. 77 No. 2, pp. 273-289.
- Mayer, B. (2015), "Progressive cinema in Toronto", *Guardian (Sydney)*, No. 1708, p. 11.
- Mehrabian, A. and Russell, J.A. (1974), *An Approach to Environmental Psychology*, MIT Press Cambridge.
- Merrilees, B., Miller, D. and Shao, W. (2016), "Mall brand meaning: an experiential branding perspective", *Journal of Product & Brand Management*, Vol. 25 No. 3, pp. 262-273.
- Mittal, B., and Lassar, W.M. (1998), "Why do customers switch? The dynamics of satisfaction versus loyalty", *The Journal of Services Marketing*, Vol. 12 No. 3, 177–194.

- Montgomery, S.S. and Robinson, M.D. (2006), "Take me out to the opera: are sports and arts complements? Evidence from the performing arts research coalition data", *International Journal of Arts Management*, Vol. 8 No. 2, pp. 24-37.
- Moon, S., Bergey, P.K. and Iacobucci, D. (2010), "Dynamic effects among movie ratings, movie revenues, and viewer satisfaction", *Journal of Marketing*, Vol. 74 No. 1, pp. 108-121.
- Moore, S.G. (2012), "Some things are better left unsaid: how word of mouth influences the storyteller", *Journal of Consumer Research*, Vol. 38 No. 6, pp. 1140-1154.
- Morrison, M., Gan, S., Dubelaar, C. and Oppewal, H. (2011), "In-store music and aroma influences on shopper behavior and satisfaction", *Journal of Business Research*, Vol. 64 No. 6, pp. 558-564.
- MPAA (2014), "Theatrical Market Statistics, Motion Picture Association of America Report", available at: <http://www.mpa.org/wp-content/uploads/2015/03/MPAA-Theatrical-Market-Statistics-2014.pdf> (accessed 5 May 2015).
- Mullen, M.R. (1995), "Diagnosing measurement equivalence in cross-national research", *Journal of International Business*, Vol. 26 No. 3, pp. 573-96.
- Murphy, L., Mascardo, G. and Benckendorff, P. (2007), "Exploring word - of - mouth influences on travel decisions: friends and relatives vs. other travelers", *International Journal of Consumer Studies*, Vol. 31 No. 5, pp. 517-527.
- O'Connor, P. (2010), "Managing a hotel's image on TripAdvisor", *Journal of Hospitality Marketing and Management*, Vol. 19 No. 7, pp.754-72.
- Obermiller, C. and Bitner, M. (1984), "Store atmosphere: peripheral cue for product evaluation", in *American Psychological Association Annual Conference Proceedings in Washington DC, USA, 1984, Consumer Psychology Division*,

- David C. Stewart, ed., American Psychological Association., Washington DC, pp. 52–53.
- Parsons, A.G. (2009), "Use of scent in a naturally odourless store" *International Journal of Retail & Distribution Management*, Vol. 37 No. 5, pp.440-452.
- Peterson, R.A., and Wilson, W.R. (1992), "Measuring customer satisfaction: Fact or artifact", *Journal of the Academy of Marketing Science*, Vol. 20 No. 1, pp. 61–71.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903
- Preacher, K.J. and Hayes, A.F. (2004), "SPSS and SAS procedures for estimating indirect effects in simple mediation models", *Behavior Research Methods, Instruments, and Computers*, Vol. 36 No. 4, pp. 717-731.
- Preacher, K.J. and Hayes, A.F. (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavior Research Methods*, Vol. 40 No. 3, pp. 879-891.
- Richardson, P., Jain, A.K. and Dick, A. (1996), "The influence of store aesthetics on evaluation of private label brands", *Journal of Product & Brand Management*, Vol. 5 No. 1, pp. 19-28.
- Roschk, H. and Grosse, S. (2013), "Talking about films: word-of-mouth behavior and the network of success determinants of motion pictures", *Journal of Promotion Management*, Vol. 19 No. 3, pp. 299-316.
- Sawa (2017), "Demographics of the cinema audience", available at: <http://www.sawa.com/why-cinema/audience> (accessed 12 September 2017).

- Schmitt, B.H. and Simonson, A. (1997), *Marketing aesthetics: the strategic management of brands, identity, and image*, The Free Press, New York, NY.
- Screen Australia (2017) "Cinema attendance of people aged 15 years and over by level of education, 2006", available at: <https://www.screenaustralia.gov.au/fact-finders/cinema/audiences/in-the-archive/by-education> (accessed 12 September 2017).
- Spangenberg, E.R., Sprott, D.E., Grohmann, B. and Tracy, D.L. (2006), "Gender-congruent ambient scent influences on approach and avoidance behaviors in a retail store", *Journal of Business Research*, Vol. 59 No. 12, pp. 1281-1287.
- Spence, C., Puccinelli, N.M., Grewal, D. and Roggeveen, A.L. (2014), "Store atmospherics: A multisensory perspective", *Psychology & Marketing*, Vol. 31 No. 7, pp.472-488.
- Stern, B. and Gould, S.J. (1988), "The consumer as financial opinion leader", *Journal of Retail Banking*, Vol. 2 No. 23, pp. 47-49.
- Sunada, M. (2010), "Vertical integration in the Japanese movie industry", *Journal of Industry, Competition and Trade*, Vol. 10 No. 2, pp. 135-150.
- Sundaram, D.S., Mitra, K. and Webster, C. (1998), "Word-of-mouth communications: A motivational analysis", *ACR North American Advances*, Vol. 25, pp. 527-531.
- Sweeney, J., Soutar, G. and Mazzarol, T. (2014), "Factors enhancing word-of-mouth influence: positive and negative service-related messages", *European Journal of Marketing*, Vol. 48 No. 1/2, pp. 336-359.
- Tang, E.P.Y., Chan, R.Y.K. and Tai, S.H.C. (2001), "Emotional influences of environmental cues on Chinese consumers in a leisure service setting", *Journal of International Consumer Marketing*, Vol. 14 No. 1, pp. 67-87.
- Tsourvakas, G., Veglis A., Emmanouilides, C. and Hatzithomas L. (2007), "Exploring

word of mouth for movies", *Hellenic Academy of Business Administration Review*, Vol. 5 No. 1, pp. 24-38.

Turley, R.W. and Milliman, R.E. (2000), "Atmospheric effects on shopping behaviour. a review of the experimental evidence", *Journal of Business Research*, Vol. 49 No. 2, pp. 193-211.

Veríssimo, J.M.C. and Pereira R.L.A. (2013), "This movie theater smells different: the effect of ambient scent on moviegoer evaluations and behaviors advance", Working Paper 1, Lisboa School of Economics & Management, Universidade de Lisboa, Lisboa.

Vieira, V.A. (2013), "Stimuli–organism–response framework: A meta-analytic review in the store environment", *Journal of Business Research*, Vol. 66 No. 9, pp. 1420-1426.

Wakefield, K.L. and Blodgett, J.G. (1994), "The importance of servicescapes in leisure service settings", *Journal of Services Marketing*, Vol. 8 No. 3, pp. 66-76.

Wall, E.A. and Berry, L.L. (2007), "The combined effects of the physical environment and employee behavior on customer perception of restaurant service quality," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 48 No. 1, pp. 59-69.

Wangenheim, F. and Bayón, T. (2004), "The effect of word of mouth on services switching: Measurement and moderating variables", *European Journal of Marketing*, Vol. 38 No. 9/10, pp. 1173-1185.

Wasko, J. (2013), *Hollywood in the Information Age: Beyond the Silver Screen*, Polity Press, Cambridge.

Watson, G. (2004), "Uncertainty and contractual hazard in the film industry: managing adversarial collaboration with dominant suppliers", *Supply Chain Management*, Vol. 9 No. 5, pp. 402-409.

Westbrook, R.A. (1987), "Product/consumption based affective responses and postpurchase processes", *Journal of Marketing Research*, Vol. 24 No. 3, pp. 258–270.

Zeithaml, V., Berry, L. and Parasuraman, A. (1996), "The Behavioral Consequences of Service Quality", *Journal of Marketing*, Vol. 60 No. 2, pp. 31-46.

Tables

Table 1: Sample

	<i>Number</i>	<i>Percentage (%)</i>
Number of Respondents	314	100
Gender		
Female	218	69
Male	96	31
Age		
17-24	292	93
25-34	22	7
Educational Level		
Undergraduate	290	92
Further degree study	24	8
On average, how often do you go to cinema?		
Not at all	28	9
Once a year	44	14
Once a semester	70	22
2-5 times a semester	70	22
Once a month	36	12
2-3 times a month	48	15
1 time a week	18	6
2-6 times a week	0	0
Every Day	0	0

Table 2: Measures

<i>Factors</i>	<i>Items</i>
1. Facilitative elements (Greenland and McGoldrick, 2005)	The theatre was: - Comfortable/ Uncomfortable - Tidy/ Untidy - Functional/ Unfunctional - User friendly/ User Unfriendly
2. Physical Conditions (Greenland and McGoldrick, 2005)	The theatre had: - Comfortable temperature/ Uncomfortable temperature - Adequate light/ Inadequate Light The theatre was: - Airy/ Stuffy - Quiet/ Noisy
3. Positive Emotions evoked by atmospherics (Izard 1977)	The theatre's atmosphere made me feel: - Joyful - Delighted - Happy
4. Attitude towards movie (Geuens and De Pelsmacker, 1998)	- I like this movie a lot - This movie is very appealing - This movie is very interesting
5. Word of mouth about the movie (Zeithaml, Berry and Parasuraman, 1996)	- I will say positive things about this movie to other people - I will recommend this movie to someone who seeks advice - I will encourage friends to attend this movie

Table 3: Measurement model

Model	χ^2	df	$\Delta\chi^2$	IFI	CFI	TLI	RMSEA
Five factor model	244.75	94		.96	.96	.94	.07
Four factor model: Facilitative elements and physical conditions	271.16	98	26.41**	.95	.95	.94	.08
Four factor model: Attitude towards the movie and WOM about the movie	341.33	113	96.58**	.93	.93	.92	.08
Four factor model: Positive emotions evoked by atmospherics and WOM about the movie	730.25	113	485.50**	.82	.82	.78	.13
Four factor model: Attitude towards the movie and positive emotions evoked by atmospherics	709.49	113	464.74**	.82	.82	.79	.13
One factor model	1414.53	119	1169.78**	.62	.62	.56	.19

Notes: IFI is the Incremental fit index; CFI the comparative fit index; and RMSEA the root-mean-square error of approximation

*Note. * $p \leq .05$, ** $p \leq .01$*

Table 4: *Descriptive statistics, reliabilities and correlations*

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Gender	.69	.46									
2. Age	.07	.26	-.08								
3. Education	.15	.53	-.09	.67**							
4. Frequency	2.82	1.67	-.12*	-.01	.07						
5. Facilitative elements	4.21	.75	.01	.14*	.09	.01	(.78)				
6. Physical conditions	4.05	.75	.03	.13*	.08	.03	.64**	(.70)			
7. Positive emotions	4.55	1.41	.04	-.04	-.10	.07	.34**	.21**	(.86)		
8. Attitude towards the movie	4.80	1.64	.05	.08	.01	.10	.18**	.15**	.37**	(.87)	
9. Word of mouth about the movie	4.98	1.88	.05	.02	-.04	.10	.17**	.13*	.33**	.87**	(.95)

Reliability coefficients appear in parenthesis,
*p ≤ .05, **p ≤ .01

Table 5: *Path coefficients and indirect effects for mediation model regarding facilitative elements*

Indirect effects	Path coefficients			Bootstrap 95% Confidence
	Word of Mouth	Positive Emotions	Attitude	
Facilitative elements (FE)	.05 (.07)	.63 (.43)	.13 (.12)	
Positive emotions (PE)	.01 (.04)		.41 (.07)	
Attitude (ATT)	.98 (.03)			
FE → PE → ATT				.26 (.06) .16, .39
PE → ATT → WOM				.43 (.06) .30, .55
FE → PE → ATT → WOM				.26 (.06) .16, .39

Significant path coefficients are in bold
Standard error in parentheses.

Table 6: Path coefficients and indirect effects for mediation models regarding physical conditions

Indirect effects	Path coefficients			Bootstrap 95% Confidence
	Word of Mouth	Positive Emotions	Attitude	
Physical conditions (PHC)	.01 (.07)	.38 (.10)	.16 (.12)	
Positive emotions (PE)	.01 (.05)		.42 (.06)	
Attitude (ATT)	.98 (.03)			
PHC → PE → ATT				.16 (.05) .07, .28
PE → ATT → WOM				.43 (.06) .30, .55
PHC → PE → ATT → WOM				.16 (.05) .08, .25

Significant path coefficients are in bold
Standard error in parentheses.

Figures

Figure 1: *Conceptual model*

