Brands in Entertainment: Product Placement in Movies

Abstract

The film industry has been growing as has the amount invested in it. This investment comes from several sources, one of which is called product placement. Product placement happens when products or brands are used in movies, television scripts or other media with various purposes. Despite being used for decades, product placement has become more popular recently. Its importance for companies that have their brands announced and for movie studios that announce them is growing. As product placement becomes more relevant, it is important to know if these placements are effective with their audience and which specific characteristics of these placements can facilitate brand recall. This study was developed in stages, including both secondary and primary data. Primary data was obtained through movie exhibition sessions and individual movie analysis. Through statistical analysis it was possible to conclude that the way a brand is presented influences its recall by the audience.

Keywords: Product Placement, Brands, Movies, Entertainment

Introduction

As the entertainment industry continues to grow and with the evolution of brands, companies start to look for new ways to promote their products through the entertainment industry, which brings a large variety of options, but none of them as glamorous as the movies. During the past years, according to Ibope (2011), investments in advertising have grown significantly, and it comes mainly from famous brands.

Movies began at the end of the 19th century, more specifically in 1895, at Salon Indien du Grand Café, in Paris, where the Lumières held their first screening of projected motion pictures, presenting the cinematograph. It was the beginning of the movie industry, according to the website Deustch Welle (2011).

The movies was established as one of the main options of leisure for people around the world, and it brought opportunities in the business world. After it was realized that viewers noticed product placements, the idea that investments in advertisement in movies could be useful emerged, as Patil and Bisoyi (2012) explained.

According to Shimp (2002), the advertisement, in general, has the mission to inform about the brand's existence, to persuade clients to buy their products or use their service; to remind, keeping the brand's name alive inside the clients' memory; to add value to their offer; and help other efforts from the company, as the propagation of a promotion. Boone and Kurtz (1998) said that to have a more effective communication with their target market, the marketing professionals mix different promotional elements during the development of a promotional strategy.

Boone and Kurtz (1998) also explain that 'promotion' is the communication link between those who want to buy and the ones who want to sell, and several ways are used to send messages about their products or service, or even about their ideas. The same authors remind us that the message can be communicated in a direct way, through the companies' sales group, or it can be in an indirect way,
being the last one through ads and promotions.

The use of product placements is not a new idea, according to Belch and Belch (2008), as it exists, approximately, since 1930. Elliot (2005) believes that product placements were used even before this. The same author says that those insertions were also used in soap operas in the 1950s (Belch, Belch, 2008). The products also showed up in movies, as many movie producers believed that using real products during the scenes could make it more real. However, nowadays, the use of this artifice is much more common than in the past, and it was during the 20th century turn, that this kind of promotional attitude has grown substantially, according to Solomon (2008).

This paper aims to analyze how brands are showed in movies and how efficient product placements are, evaluating if the viewers can recall, or not, the brands or products that appeared during the movies. To achieve this goal, we present theoretical references about the subjects and analyze the outcomes from the primary data collected.

Throughout this paper, some terms are used as synonymous: product placement and brand/product insertion, and all of those can be defined as the use of specific products or brands in the movie script, also in television programs, and other media (Solomon, 2008). This concept is going to be detailed in the next section.

**Literature review**

**Product Placement**

According to Belch and Belch (2008), despite the fact that the product placement is an old activity, only during the 21st century its use grew considerably. And nowadays they are used to provide exposure to several companies of different sizes and industries.

The product placement referred to the insertion of specific products and to the use of brand names in movies and television scripts (Solomon, 2008). It has also been used in other kinds of media such as theaters and musicals (Belch, Belch, 2008), in comic books (Steinberg, 2006), video games (Gutnik et al., 2007), computer games (Chitu, Tecău, 2010), and even in books, although it is not very common (Rich, 2006). Solomon (2008) elucidates that this kind of strategy is an old tradition among movies, though the product placements have become more financially profitable and ostensible in last few decades. Belch and Belch (2008) remind that some of those placements have even become plot threads. Chitu and Tecău (2010) explain that it would be almost impossible to make some movies without product placement contracts between the producers and companies.

The product or brand insertion, even though more popular in television nowadays, emerged from the movies, and the majority of the brands has to pay a certain amount of money to have their products appearing in movies, or even have more visibility, depending on the agreement between the brand and the film makers. Sometimes, other brands do not have to pay to make the merchandising in films as they always provide products to be used in the movies (Kotler, Keller, 2006).

The product placement is considered a non-traditional support media, and it represents only a small amount of the advertising budgets (Belch, Belch, 2008). The use of this kind of media has increased
considerably during the past years and, according to Belch and Belch (2008), analysts hope that this trend will last, as this kind of placement become more popular.

According to Belch and Belch (2008), product placements are considered as a support media, those kind of media that arise from the growing customers' ability to evade the advertisements, making advertisers have to look for other ways to show their messages to possible customers; it results in significantly changes in the media industry. According to those authors, an important grown happened in the use of support media, if compared to traditional and/or new media. In the same way, Chitu and Tecau (2010) also emphasize that besides the fact that the customers can avoid the traditional media, not paying attention to the advertisement, it can become really expensive.

The logic behind the product placement is that from the moment the product belongs to the script or to the scenery, it can not be avoided, ensuring the customers' exposure to the brand. Due to the low perception from this kind of action, since it is not direct, the audience might not react in a negative way as they could react if comparing to an advertising in a traditional media. Besides that, researches show that the association to a program or movie or to a celebrity, can improve the image that the customer have about the product and, in certain cases, it increases the sales (Belch, Belch, 2008).

Therefore, with the brand in a movie, the companies benefit with some associations that are a result of it, like the association with the actors and with the movie (Chitu, Tecău, 2010). Using superstars to endorse the image from products is an expensive strategy, however a lot of marketing professionals still believe in its effectiveness. All kind of celebrities are requested and, according to Solomon (2008), the explanation of the predominance of superstars in this business is presented by a study that concluded that famous faces get the viewers' attention and are assimilated more efficiently than "common" faces by our brains.

Celebrities increase the advertising knowledge and promote the corporate image and the attitudes toward the brand. Endorsing the product with a celebrity face can be a strategy to distinguish it from other similar products, mainly when the consumers can not perceive the difference between the company's products and its competitors' as Solomon (2008) explains.

The celebrities incorporate cultural meanings, according to Solomon (2008), symbolizing important categories, such as status, social class, genre, age, kinds of personalities. In general, the advertiser defines which meanings the product must transmit and then chooses the celebrity that is more able to incorporate and carry that meaning. And, in order to make those advertisings with celebrities effective, the celebrity and the product images must be similar; this choice is named 'adequation hypothesis' (Solomon, 2008).

A company has developed a measure known as Q score (Q is for quality). This measure is used to decide if certain celebrity will be effective to endorse certain product, considering the familiarity level of the consumers with a name, and the number of respondents that indicate a favorite person/ program/ character (Solomon, 2008). However, according to the author, this index may not work well when a celebrity is popular, but does not have a good image to conciliate with a product.

The product or brand placement, according to Belch and Belch (2008), are an important Integrate Marketing Communication (IMC) strategy portion to many businesses, such as BMW, Apple Computers, PepsiCo. According to those authors, much of the logic involved in the product placement
is that, from the moment the product belongs to the script or scenery, it can not be avoided, what guarantees its exposition.

As Solomon (2008) says, the directors like to incorporate brand's accessories, because it contributes to the movie's realism, creating a familiarity, as the example from the movie Minority Report, when Steven Spielberg used brands such as Nokia, American Express, Pepsi, Guinness, Reebok and Lexus, and this last brand had created a sport car model, named Maglev, just for this movie. Todd (2004), also mentioning this movie, remembered that the placement of familiar brands in a future environment were important to decrease the gap that could occur with the audience due the time issue. Macklem (2002) agrees with the quotes about Steven Spielberg's movie, and also remembers the James Bond movies, in which the main character was always driving an Aston Martin car. Sometimes changes are made in the film set due to the product placements, as Clifford (2008) says, in order to guarantee that the insertion represents what the customer wants.

To understand what the client wants, it is important to know what is in the center of the consumers decisions process (Solomon, 2008). To Blackwell, Miniard and Engel (2011), if the marketing professionals understand the why and how people consume, they can attract, more efficiently, their customers, besides offering them products and services that are more appropriate. In this way, the next item discusses the consumer behaviour.

**Consumer Behaviour**

Solomon (2008) explains that the behaviour is a new field of study, and as it has been expanding, different perspectives affect it. Blackwell, Miniard and Engel (2011, p.6) define consumer behaviour as "activities people get busy with when they obtain, consume and afford products and services".

Within the study field of behaviour consumer, some concepts must be presented to achieve the objective of this paper: subliminal perception, apprenticeship and brand awareness.

According to Kotler and Keller (2006), the subliminal perception implicates in messages that are presented in a subliminal way, in which the audience has no consciousness about them. Though they affect behaviour, its importance is owned to the fact that the product placement are made this way, without intrusion, as explained by Belch and Belch (2008).

The stimuli that is presented below the threshold or limen for awareness are found to influence thoughts, feelings, or actions, the subliminal perception occurs when the stimuli evoked is below the consumer consciousness level, according to Solomon (2008). The author say that the subliminal messages can, supposedly, be sent through audio and visual ways. The same author says that some researches indicate that people can be influenced by those subliminal messages, under some specific conditions, although there are some doubts surrounding this techniques utilities in the majority marketing concepts.

Solomon (2008) explains that some issues can discourage the use of subliminal messages, such as the difference between each individual's threshold level, or the fact that the audience has to pay total attention to the stimulus and that does not always happen, as it is very common that television and movie audiences change their focus periodically. What can also happen is that the person is not even paying attention to the stimulus, and other issue that can discourage the use of subliminal messages is
the fact that even if the wanted effect is induced, it can operate in a very general way. The example used by Solomon (2008) is from a message that can increase someone's thirst, but not necessarily the desire to consume a specific drink.

The concept of learning (apprenticeship) is also used, as the customers need to have a consciousness about a brand first, so then they can remind about that brand later (Blackwell, Miniard, Engel, 2011). Blackwell, Miniard and Engel (2011, p.513) define that "the cognitive learning occurs when the processed information in the short-term memory is stored in the long-term memory". The authors also said that what determine the cognitive learning are two coefficients: the first is the Rehearsal, that is the mental repetition of information by the short-term memory. The second is the Elaboration, which is the integration degree between the people's existing knowledge and the stimuli that is given to them, but the person motivation and ability to use it, affect the information process. Blackwell, Miniard and Engel (2011, p.211) mention that according to the motivation, two types of apprenticeship can happen, the intentional and the incidental, where the first happens when people make all the efforts to learn in a way they are going to remind it later, but the incidental learning "occurs despite the lack of intent to do so".

Another kind of apprenticeship mentioned by Solomon (2008) is the observational learning, that occurs when people observe other people actions and notice the reinforcements received by them, occurring, this way, the learning as a result from other person's experience, and not a self-experience. This process is known as imitation. Examples to be copied can also come from tv shows and movies.

The ability that customers have of learning by observing other's behaviour makes the marketing professionals' life easier, since they look for better associations to their products to get more customers buying it (Solomon, 2008). And, to Solomon (2008), the memory has a fundamental role in apprenticeship, and is used when the customers make an information recall during their decisions and shopping processes, and the marketing professionals wait that the customers will not forget their products during this moment, and those professionals must struggle to make their brands be reminded by the consumers.

There are a lot of controversy surround de apprenticeship issue, if this is conscious or unconscious. To have this consciousness, customers first have to learn about the brand, through their experiences. And the brand awareness has the intention to make easier this learning, as long as the brands can distinguish from each other, and, as consequence, stand out (Solomon, 2008).

According to Solomon (2008), the customers' forgetfulness is a problem for marketing professionals, and, with that, they have to make efforts so their brands are remembered in a recall made by the consumers. Blackwell, Miniard and Engel (2011) define "recall" as the activation of a long-term memory that is transferred to a short-term memory. Blackwell, Miniard and Engel (2011, p.518) mention that the recall success depends on some things, such as a memory trace, that can be activated by a "stimuli that activates, in the memory, a relevant information to be remembered". Therefore, it is important that the customers are consciousness about the product/brand.

The business identify their products with their brands, symbols and a different package (Boone, Kurtz, 1998). The same authors also explain brands as a combination of some elements such as name, term, signal, symbol, design, used by companies to differentiate themselves.
Research methodology

In this study, the objective was to verify the effectiveness of product or brand placement in movies, in other words, to verify if the audience reminds some of the brands that they have seen during the movie. In order to achieve this objective, we developed a descriptive research. According to Gil (1999), it has a primary data collection, such as questionnaires, besides the description of the effect that the advertisement in the movie caused on the audience. Sampieri, Collado and Lucia (2006, p. 101) complement that the descriptive research seeks to specify important properties and particulars from any action that can be analyzed as "describe the data collection".

The sample was selected as a convenience sample, that can be understood as "non-probabilistic method, in which the samples are selected based in the convenience to the researcher or interviewer. Also known as accidental sampling. The convenience sample is very used in the first moments from the research[...]" (Hair Jr. et. al., 2010, p.164).

The questionnaire used for this study was based on Bressoud, Lehu and Russel (2008), and is better described in hereafter. According to Sampieri, Collado and Lucia (2006), questionnaires are the most popular way to collect primary data and can have two kinds of questions: open and closed.

The closed questions, to Sampieri, Collado and Lucio (2006), are easy to codify and prepare to analyze, although it is necessary the anticipation of the answers. This kind of question was used mainly to establish the audience profile: genre, age and level of schooling. Those questions were considered by McDaniel and Gates (2004, p.277) as a nominal scale, that is very used in marketing researches, and divide the data in categories that are "mutually exclusive and collectively exhaustive".

Following, in the questionnaire, there is an open question about the respondent's occupation, being explained, by McDaniel and Gates (2004), as a kind of question that allowed to the respondents to answer it in their own words, but those are harder to consolidate and analyze, because they might need an additional investigation about the answer.

The next question from the questionnaire is an ordinal scale, that, according to McDaniel and Gates (2004, p.277) have some nominal scales lettering particulars, but also have the "ability to sort the data". In this study, the scale goes from 0 to 10, where 0 means that the viewer did not like the movie, and 10 means that the viewer liked it a lot, for the purpose of evaluating the audience's interest for the movie.

The two next questions are closed, being the first one if the viewer had already watched the movie (yes or no). Then there is the question that asked the viewer to select its favorite movie genre, choosing between nine options that were given to them (Action, Animation, Adventure, Comedy, Drama, Sci-Fi, Romance, Suspense, Horror); or the option "Another", that allowed the respondent to write another genre that could not be found in the previous list.

The last question was an open one, asking if the respondent could remind of any brand or product that was showed in the movie; in case the answer was affirmative, the person should mentioned which product or brand they remembered.

The pre-testing was made with ten people, with the same profile of the focused audience, in a previous
specific session. From the analysis of the pre-test, some questions were excluded.

The primary data collection was made in movie sessions, considering the study’s objective. The chosen movie was Transformers 3: Dark of the Moon that, according to IMDB (2013), lasts 154 minutes.

This movie was chosen because it presents a high number of product placements and its box office in the year of its release (2011) was the second highest in the year, according to Box Office Mojo (2013), with a total value of US$352,390,543, only in the United States. The highest box office in 2011 belongs to the movie Harry Potter and the Deathly Hallows: Part 2, but this movie does not have product or brand placements and, therefore, can not be analyzed according to this study’s purposes.

Transformers 3: Dark of the Moon was released on June 29th, 2011. It is classified as an action, adventure and sci-fi movie, its director is Michael Bay, the writer, Ehren Kruger and the main actors are Shia Labeouf and Rosie Huntington-Whiteley.

The movie sessions happened in an amphitheater of the Uberlandia Federal University (UFU - Universidade Federal de Uberlândia), in Uberlândia, Minas Gerais, Brazil. We conducted four sessions, promoted throughout the campus with posters, and emails sent to undergrad students from Management, Information Management, Computer Science, International Relations, Economics and Accounting courses. An event was also created on Facebook, with people from other courses and schools invited. Trying to get more people to participate in the sessions, we offered popcorn and soda and also a prize raffled at the end of each session (a DVD movie). The dates and times of the sessions had the same purpose, with sessions during the afternoon (2:30PM) and at night (6PM).

The total number of respondents was one hundred and three, divided in the sessions as following: session 1 - 11 participants; session 2 - 19 participants; session 3 - 57 participants; session 4 - 16 participants.

From the one hundred and three questionnaires, three were discarded because they were not answered correctly, resulting in a total number of one hundred questionnaires that could be used for the analysis. Another source of primary data collected was related to the movie, with an analysis of the product placements present in the movie Transformers 3: Dark of the Moon. The analysis was based in the article "The Evolution of Product Placement" (Walton, 2010), in which each product placement from the movie was analyzed according to the criteria of Mode, Tone, Prominence, Relevance, Character Use and Other Brand, besides the quantities of brands in the movie, and the percent of those placements, like it will be shown in the results.

We also collected secondary data, considered by Kotler and Keller (2006) as a data that were collected before to another finality and that can be found somewhere else. In this study, those kind of data where found in books and articles available in libraries and also on the internet.

We developed a descriptive analysis of the data. Besides the relation between the pre- chosen movies, as suggested by Walton (2010) - mode, tone, prominence, relevance, character use and other brands, we also analyzed the level of consumer’s remembrance of the brands, verified trough the Binary Logistic Regression, that, according to Corrar, Paulo and Dias Filho (2009), is a kind of Multiple Linear Regression.
The mainly particularity that differs the Logistic Regression from other regression models is the fact that its dependent variable is dichotomous, according to Corrar, Paulo and Dias Filho (2009). A variable is dichotomous when the answer assumes only two possible values, as explained by Paula and Diniz (2013). Corrar, Paulo and Dias Filho (2009) complement that, with it, the analysis results can enable associations to some categories to be made, such as accept or decline, positive or negative, and in this study if it is efficient or not.

The next section present the results obtained from the data collected.

**Data presentation and Analysis**

From the total number of respondents considered for analysis (one hundred), 38% had already watched the movie at least one time, and 62% were watching it for the first time. The median grade the movie obtained from the audience was eight.

Among the participants, most of them were male (63%), with the female gender representing 37% of the sample. The respondents were mostly students (95%), while the other 5% were equally distributed between professors, administrative assistants, managers, lab technicians and attendants, each of those with a participation of 1% of the total amount.

Regarding schooling, most of the respondents (97%) did not complete their undergraduate studies, while 2% have a graduate degree and only 1% had not yet completed the high school. About the age, 97% of the audience were between 18 and 25 years, 2% between 26 and 30 years and only 1% was between 31 and 40 years old. The synopsis of the respondents profile is presented in table 1.

**TABLE 1**

**Respondents' Profile**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Schooling</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>63%</td>
<td>18 to 25 years</td>
<td>Undergrad (incomplete) 97%</td>
</tr>
<tr>
<td>Female</td>
<td>37%</td>
<td>26 to 30 years</td>
<td>Graduate (complete) 2%</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>100%</td>
<td>31 to 40 years</td>
<td>High school (incomplete) 1%</td>
</tr>
<tr>
<td></td>
<td>TOTAL: 100%</td>
<td>TOTAL: 100%</td>
<td>Managers 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lab Techs 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Attendants 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TOTAL: 100%</td>
</tr>
</tbody>
</table>

The respondents' favorite movie genres are: Comedy (29%), followed by Action movies (20%), and Sci-Fi movies (12%).

This study objective was to determine if the product placement were efficient, and, according to the collected data, the product placement in this movie, for this audience, was effective, as 77% of the total respondents identified some of the brands that were presented in the movie. The total number of recognized brands were 20: Apple, Camaro, Chevrolet, Cisco, Corvette, Dodge, Ferrari, Ford, Gilette, GMC, Hermés, Impala, Lenovo, Mercedes, NASA, Nike, Nokia, TrumpTower, Twitter and 7-Eleven.
In the movie individual analysis, we found 272 product placements, distributed between 88 different brands. In other words, during the movie, 88 different brands appeared some of them more than one time, totaling 272 placements.

As mentioned previously, we based our analysis on Walton (2010); however, due to the characteristics of the chosen movie, we had to make an adjustment in one variable. In the movie Transformers 3, some product placements were movie characters, therefore, the variable named "Character Use", instead of having only two variables (Yes/No) as presented by Walton (2010), also had a third option: "Is the Character".

According to Walton (2010), the Mode category is the way the placement is made, in other words, in a visual or audio, when brands are orally mentioned or visually showed, or an audiovisual way, when the brand is orally mentioned and visually presented at the same time. The other category explained by Walton (2010) is the Tone, that is if the brand or product was showed in a positive or negative or a neutral way. The Prominence, explained by Walton (2010), can be clear or unclear, it indicates if it was showed clearly, or not, during the placement. The category Relevance determines the importance of the product placement for the scene. The next category is the Character Use, mentioned previously, that was adapted for the analyzed movie. The last category is Other Brands, that indicates if the brand in the placement shares the scene with another brand or if it is presented alone (Walton, 2010).

The placements identified in the movie Transformers 3 were analyzed according to the described categories based on Walton (2010).

In the Mode category, we have that 8% were audiovisual placements, 7% were audio and 85% visual brand placements.

The next analyzed variable was the Tone, in which 6% of the brands had a negative tone, 85% neutral and 9% positive.

Regarding the variable Prominence, we found 75% of unclear placements, while only 25% were clear. In the next variable, the Relevance, in the brands analysis, 9% of them had a high relevance, while 49% had some relevance and 42% had a low relevance.

The next analyzed variable is Character Use, in the brand analysis, 38% of them were not used by the characters, while 50% were used, and 13% were the characters.

The last variable to be analyzed is Other Brands, to check if the brand in the placement was sharing the scene with another brand, or not, and 42% did not share it, while 58% share it.

In the movie Transformers 3: Dark of the Moon, besides the variables that were already mentioned and analyzed, another fact was also analyzed: the time of the placement, meaning how long it lasts. Most of the brands, about 63%, lasts less than 10 seconds in total, while other brands (about 13%), lasts more than 100 seconds in total.

The brands that lasted more than 100 seconds were, mainly, the brands that were evaluated as "Is the character" in the variable Character Use.
In order to find and narrow the connexions between what may influence the brand recall, at first we eliminated all the brands found in the movie that are barely known in Brazil, or even not sold in the country. Therefore, the total placements used to make the statistical analysis was 207, instead of 272, and the total of brands was 48, instead of 88 (our initial number).

The binary logistic regression model was applied, using the SPSS 18.0 software, to the definition of the final model that minimizes the variable numbers and maximizes its precision.

The sample that was used is composed by 4800 observations. This value was obtained with the division of the 48 brands that could be recognized between the 100 respondents.

If the model could be guided only by the situation in which most of the cases are classified, this sample would be composed of 4621 answers "no" and 179 "yes", then, a priori, all the observations would fit the answer no, from the question if the brand was recalled.

This analysis' objective was to verify if the variables Mode, Tone, Prominence, Relevance, Character Use and Other Brands could explain the fact of the placements being, or not, recalled by the audience. The step directed analysis using the Wald Statistic used six steps until the final model could be generated, as can be verified in table 2.

**TABLE 2**

**Coefficient Model until step 6 for the movie: Transformers 3**

<table>
<thead>
<tr>
<th>Step</th>
<th>Chi-quadrado</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>126,776</td>
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<td>0</td>
</tr>
<tr>
<td>Block</td>
<td>126,776</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Model</td>
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<td>0</td>
</tr>
<tr>
<td>Step 2</td>
<td>21,121</td>
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<td>0</td>
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<tr>
<td>Block</td>
<td>147,898</td>
<td>2</td>
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</tr>
<tr>
<td>Model</td>
<td>147,898</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Step 3</td>
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<tr>
<td>Block</td>
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<td>Model</td>
<td>165,37</td>
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<tr>
<td>Step 4</td>
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<tr>
<td>Block</td>
<td>175,185</td>
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<tr>
<td>Model</td>
<td>175,185</td>
<td>4</td>
<td>0</td>
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<tr>
<td>Step 5</td>
<td>4,245</td>
<td>1</td>
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<tr>
<td>Block</td>
<td>179,43</td>
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<td>Model</td>
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<tr>
<td>Step 6</td>
<td>5,653</td>
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<td>Block</td>
<td>185,082</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Model</td>
<td>185,082</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>
The Model Chi-square, that tests the hypothesis that all the equation coefficients are null, according to Corrar, Paulo and Dias Filho (2009), and in this study this value was 185,082, with 6 degrees of freedom, that correspond to the difference between the number of stipulated parameters in the initial and final model. This way, it is possible to notice that the placements particularly contribute to a better quality of the model predilections.

In the next model phase, in each step a new variable is inserted, the statistical probability -2log likelihood decreases, it goes from 1528,697 to 1343,615, what indicates an improvement in the model; on the other hand, the pseudo $R^2$ increases. The Cox and Snell pseudo $R^2$ indicates that 38% of the variation that occurred in the log of odds ratio estimates are explained by the independent variable set. The Nagelkerke $R^2$ increased approximately 45% the power of the model's explanation obtained in the first step, going from 9.6% to 13.9 %, what can explain 13.9% of the registered variation in the dependent variable, such as presented in table 3.

**TABLE 3:**
**Synopsis of the -2LogLikelihood Model**

<table>
<thead>
<tr>
<th>Step</th>
<th>-2 Log likelihood</th>
<th>Cox &amp; Snell R Square</th>
<th>Nagelkerke R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1401,921</td>
<td>.026</td>
<td>.096</td>
</tr>
<tr>
<td>2</td>
<td>1380,799</td>
<td>.030</td>
<td>.111</td>
</tr>
<tr>
<td>3</td>
<td>1363,327</td>
<td>.034</td>
<td>.124</td>
</tr>
<tr>
<td>4</td>
<td>1353,512</td>
<td>.036</td>
<td>.131</td>
</tr>
<tr>
<td>5</td>
<td>1349,267</td>
<td>.037</td>
<td>.135</td>
</tr>
<tr>
<td>6</td>
<td>1343,615</td>
<td>.038</td>
<td>.139</td>
</tr>
</tbody>
</table>

Each variable importance can be noticed by their Wald value. In other words, the highest its value, the highest its influence. In this study, the variable that has the highest influence in the audience brand recall is the Relevance that, besides having a high Wald value, also has a significance valued zero, in which the lowest value of the significance the better, as the lowest number means the highest significance of a specific variable.

**TABLE 4:**
**Chi² Wald and Significance value from the variables at the end of the step 6**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Name of the variable</th>
<th>Chi² (Wald)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAR00004</td>
<td>Mode</td>
<td>22,028</td>
<td>0.000</td>
</tr>
<tr>
<td>VAR00005</td>
<td>Tone</td>
<td>5,756</td>
<td>0.016</td>
</tr>
<tr>
<td>VAR00006</td>
<td>Prominence</td>
<td>8,200</td>
<td>0.004</td>
</tr>
<tr>
<td>VAR00007</td>
<td>Relevance</td>
<td>93,994</td>
<td>0.000</td>
</tr>
<tr>
<td>VAR00008</td>
<td>Character Use</td>
<td>4,508</td>
<td>0.034</td>
</tr>
<tr>
<td>VAR00009</td>
<td>Other Brands</td>
<td>32,172</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Final considerations

This study had the objective to verify if product placements made in movies are efficient or not. We found that for the analyzed movie and the selected audience, it was effective, as some of the brands were recalled by the audience after the movie.

From this information, the authors made connexions between some variables that could, or not, have some relation with the brand recall in a specific placement. It was possible to notice that the way the placement is made can interfere in the brand recall.

For future studies, we suggest using a wider sample, including and mixing respondents with different profiles, to analyze the influence of personal characteristics and experiences in the brand recall. Another suggestion for future studies is to use other movies to collect more data, in order to compare and improve the results.

REFERENCES


