

EYE-TRACKING EXPERIMENT REGARDING VISUAL AND TEXTUAL STIMULI FOR CELEBRITY ENDORSEMENT

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Abstract

Celebrity endorsement is nowadays one of the most common instruments in marketing, as they are present in the everyday life of consumers and influence their buying decisions. Their glamorous existence is imitated by many consumers and therefore using them in advertising plays a major role for the image of brands and products. In order to maximize their success, it is important to have a certain match between the celebrity and the advertised products. Besides the techniques of how the celebrity is incorporated into the advertising is also important. In this paper there are presented the results of an eye-tracking experiment about the reactions of consumers towards products having celebrities as recommenders. There is tested in how far consumers react to visual or textual stimuli related to the celebrity. Results show that celebrity or the textual reference of the celebrity have the highest attractiveness and they are watched for a longer time.

Keywords

Celebrity endorsement, advertising, consumer, eye-tracking.

JEL Classification

M10, M31

Introduction

The celebrity brand ambassadors play a significant role for the image of a brand and also for its marketing strategy. Celebrities have an important impact as a reference group for consumers, by being a role model for these. Their glamorous life, the products they wear, the cosmetics they use are frequently imitated and copied by the consumers. Therefore, the products they endorse are frequently bought by consumers. For this reason, including celebrities in the advertising of products is frequently a key aspect for the success of any marketing strategy. Especially young people are more fascinated of brands and celebrities (Pop and Pelau, 2016) and they look for role models for their existence. Therefore, they can be more easily influenced by using celebrities in the commercials of products. For this reason,

the marketers look for popular, beautiful and famous stars to drive a company's image and their products.

In this paper we present the results of an eye-tracking experiment about the unconscious reactions of young consumers towards celebrities. There are analyzed the reactions towards visual images of celebrities or a textual reference about the celebrities.

Literature review

The role that celebrities play in advertising campaigns is a preferred strategy that marketers pursue in order to generate positive consumer responses (Amos, Holmes and Strutton, 2008; Choi and Rifon, 2012). McCracken defines celebrity endorsers as people who like public recognition and use their influence to promote consumer goods through advertising (McCracken, 1989, p.310). More recent studies come with an updated definition, stating that celebrity endorsers are an agreement between a celebrity and an entity that uses its own influence to promote the brand (Bergkvist and Zhou, 2016, p. 644). Previous research shows that celebrity endorsers have numerous effects, such as advertising impact, brand awareness, brand recall, purchase intention and buying behaviour (Spry, Pappu and Cornwell, 2011). As a result, many companies use celebrity endorsers to create unique ads that can give them recognition and have a positive impact on the brand. McCracken (1989) also noted in his studies that celebrity endorsers are "a present feature of modern marketing". As they have become a source of cultural significance, many consumers tend to care about how celebrities speak, behave and live their lives.

In the associative Network Memory Model, Till and Shimp (1998) suggest that when consumers see a celebrity or a spokesperson supporting a brand, two nodes that were initially separated, become connected in the consumer's mind, a connection that strengthens over time (Jin and Phua, 2014). As explained by McCracken (1989) in the Meaning Transfer Model, when there is a match between the celebrity and the endorsed product, consumers tend to acquire the attributes which are associated with the endorser and transfer them to the product which is being endorsed. In addition, the Match-Up Hypothesis (Kamins, 1990) further supports this explanation and states that if there is a match or "fit" between the endorser and the brand, there is a greater chance that consumers will have a more positive attitude towards the brand, resulting in a higher purchase intention.

The literature on the relationship between an endorser and the product is also robust. Researchers say, for example, that a link between the endorser and a brand is established when the endorser actually has expertise in the field of the product he is supposed to endorse (Till and Busler, 2000; Koernig and Page, 2002). Furthermore, factors like compatibility between the endorsed mark and the endorser's image and physical characteristics are also required (Biswas, Biswas and Das, 2006).

Escalas and Bettman (2005) argue that celebrities are considered a reference group for consumers and are therefore considered to be role models for consumers. Choi and Rifon (2012) also note that compatibility between the endorser's image and the consumer's self-image can increase buying behaviour and purchase intention. This means that if consumers see the endorser as a role model and strive to be like him, they will tend to copy the endorser's behaviour to a certain extent.

Previous studies have shown that the attractiveness of celebrities is an important factor (e.g. Kahle and Homer, 1985; Kamins, 1990), although consumers tend to pay much more attention to celebrities of the opposite sex than celebrities of the same sex (Greene and Adams-Price, 1990). This would lead us to the theory that when advertising to male consumers, it would be advisable to use a female endorser. Nevertheless, opinions are contradictory. Debevec and Kernan (1984) explain that female endorsers tend to adopt a more positive attitude than male endorsers, especially around male consumers. On the other hand, Caballero, Lumpkin and

Madden (1989) explain that same gender endorsers have a greater influence on the buying intention, while Petroshtus and Crocker (1989) say that gender has no influence on it. Communication holds the distribution channel together (Mohr and Nevin, 1990). Communication provides a way of conveying persuasive information through the channels of marketing (Frazier and Summers, 1984), and therefore companies use it as their primary tool and strategy for building their brand image (Erdogan 1999; Chan and Luk, 2013). Since today's consumers are so enthusiastic about celebrities (Schickel, 1985), brands have developed a strategy to use them in order to differentiate their brand from others and create a competitive advantage (Ilicic and Webster, 2015). In addition, consumers' obsession with celebrities has led them to maintain the entertainment function (Choi and Rifon, 2007). One problem that arises when choosing a celebrity endorser is the requirement of choosing the best suited celebrity to support the chosen product. McCormick (2016) explains that the success of an advertising campaign depends on the celebrity chosen to support the brand. He also explains that the image and personality of the celebrity must match the product image to get the right kind of attention, but at the same time be careful not to outshine the product itself. There is a fine line between positioning the product as the center of attention and positioning the celebrity as the center of attention. Therefore, a careful mix of factors and elements must be considered (McCormick, 2016; Pop and Pelau, 2017).

Methodology

We have organized an eye-tracking experiment to measure customer attention. Eye-tracking is a technique which helps researchers analyze and understand an individual's visual attention. Using this approach, one can decide where a consumer looks at an advertisement, how long he keeps an eye on a particular point and it also can track the path of his eyes on the commercial. Through this research, we can describe a user's whole experience when he's watching a commercial. Then we will see what the user cannot explain, because for him it is unconscious. Eye-tracking allows the researchers to monitor the eye location and consider where the individual looks. These modern instruments rely on a process known as corneal reflection. The eyes are illuminated so that their reflection can be discovered and recorded. The eye tracking tool can measure eye movement, and it is possible to accurately determine the position, period, and movement the consumer's eyes. (Rosca, 2017).

In our experiment, we have chosen 2 big pictures that include each 4 pictures from different restaurants and hotels. Each small photo has a celebrity attached, because they represent as follows: the restaurant preferred by a famous actress, the favorite hotel of a celebrity couple, a famous hotel in Paris which is the preferred by all celebrities and the favorite restaurant of a famous actor. The first picture includes only the pictures from restaurants and hotels with the assigned celebrity attached, the second picture is the same, but it includes additional the description for each one of them. The sample of the experiment contained 22 participants, with ages between 20-30 years. The participants had to watch both pictures for 10 seconds one after another, first the one without text description and only after the other one, while the eye tracking data have been registered by the eye tracking tool.

In order to be able to analyze the results we have defined Areas of Interest from each of the analyzed elements of the advertising. The Areas of Interest are subareas from a commercial, which can be selected to measure specific key performance indicators for them. For each of the pictures we have defined the following areas: the celebrity (AOI 001), the picture of restaurant or hotel (AOI 002), the additional text (AOI 003). For each of the 3 defined area, the key performance indicators have been calculated and analyzed.

Results and discussion

In order to quantify the effect of the commercial with endorsed celebrities on the people, we have calculated, with the help of the eye-tracking device several Key Performance Indicators

(KPIs) like dwell time, entry time, hit ratio as it can be observed in table no. 1. These KPIs provide us with useful statistical details about the advertising after viewing it, such as the elements of a picture seen by the participant, the number of participants in the experiment who looked at a certain element, the order of the advertising elements watched.

Table no. 1. Key Performance Indicators for the Eye-Tracking Analysis

		Viewed Time		Viewed Time		1 st View		Visitors	
		ET1 s	ET2 s	ET1 %	ET2 %	ET1 s	ET2 s	ET1	ET2
Photo 1	Celebrity	0.61	0.38	7.61	4.76	1.32	2.49	18/22	16/22
	Picture	1.06	0.87	13.22	10.82	1.76	2.14	18/22	16/22
	Text	--	0.40	--	4.99	--	2.11	--	17/22
Photo 2	Celebrity	1.08	0.65	13.48	8.11	0.90	2.75	18/22	17/22
	Picture	0.87	0.41	10.92	5.12	3.41	3.19	12/22	14/22
	Text	--	0.34	--	4.31	--	4.01	--	15/22
Photo 3	Picture	0.99	1.60	12.36	20.02	1.87	1.76	20/22	17/22
	Text	--	0.37	--	4.57	--	2.32	--	10/22
Photo 4	Celebrity	0.62	0.17	7.78	2.13	2.90	4.29	18/22	9/22
	Picture	0.88	0.69	10.97	8.67	3.53	2.75	18/22	16/22
	Text	--	0.64	--	8.05	--	3.47	--	12/22

Source: Own research results

The dwell time or the viewed time shows the total time watching a certain area of interest, so a certain element in the picture in milliseconds. In our case, we have different situations depending on which of the 4 photo we discuss and also depending on the 2 big pictures, if there is a text description or not. For photo number 1 which includes a restaurant and the face of the famous actress nearby, we have following percentages: AOI 001 -7.61%, AOI 002 – 13.22% in the first eye tracking and in the second one, with additional text description AOI 001 – 4.76%, AOI 002 – 10.82% and for AOI 003 – 4.99%. So, we can observe that in this photo, the participants spent most of their time, watching the image of the restaurant in both cases (AOI 002). This element was the most attractive one for the watchers. It was followed by the face of the famous actress (AOI 001). When the text description was introduced, they watched this description even more then the face of the actress. This means that in this situation the restaurant and it's description was more interesting for the consumers then the celebrity. Photo number 2 has a different situation – this includes a hotel room and the a famous celebrity couple. Here we have following percentages: AOI 001 -13.48%, AOI 002 – 10.92% in the first eye tracking and in the second one, with additional text description AOI 001 – 8.11%, AOI 002 – 5.12% and for AOI 003 – 4.31%. Here the things are clear. Even if there is additional text description or not, the most viewed element from the photo is the celebrity couple (AOI 001). So, in this situation the celebrity beats the product/ service. In photo number 3 we have no celebrity, there is only the image of a hotel room from Paris which is mostly preferred by the testimonials and the text description – percentages are: AOI 002 - 20.02%, AOI 003 – 4.57%, so it means participants watched longer the image then it's description. Photo number 4 includes a restaurant and nearby the face of the famous actor. In this case the results of the KPI's are the following: AOI 001 -7.78%, AOI 002 – 10.97% in the first eye tracking and in the second one, with additional text description AOI 001 – 2.13%, AOI 002 – 8.67% and for AOI 003 – 8.05%. The difference between values is big enough. The situation is similar with photo number 1. The participants of the experiment spent most of their time watching the restaurant and not the celebrity. When the text description appeared,

they watched this 4 times longer than the actor's face. We observe that it strongly depends on the celebrity which represents a brand if it will catch consumer's attention or not.

The entry time or first view shows the order in which a certain AOI from the advertising was observed by the participants. It is calculated based on the average of the entry times in milliseconds (ms) of all the watchers, from the moment the photo is seen for the first time by the participants. As it can be observed in table 2, in the case of photo number 1, most participants saw AOI 001, the celebrity for the first time. It has an average entry time of 1.32 ms. The second most attractive element in this photo is the image of the restaurant (AOI 002), with an average entry time of 1.76 ms. When the text appears, they also watched it with an average entry time of 2.11 ms. So, in the case of first view, the famous endorser beats the image. Photo number 2 shows as follows: people watch first the famous couple with an average entry time of 2.75 ms and only after the image of the hotel room AOI 002 - 3.19 and the text description AOI 003 - 4.01 ms. Again, the famous celebrity couple catch the attention of the participants and not the hotel room. In the photo number 3 they first watched the image of the hotel room from Paris with an average entry time of 1.76 ms and after the text AOI 003 – average entry time of 2.32 ms. In the case of photo number 4 which includes a restaurant and a famous actor nearby, we have following results: most participants saw AOI 001, the celebrity for the first time. It has an average entry time of 2.90 ms. The second most attractive element in this photo is the image of the restaurant (AOI 002), with an average entry time of 3.53 ms. When the text appears, they also watched it with an average entry time of 3.47 ms. This means that in the case of first view, the participants always watch the celebrity first and the represented brand after. So even if they don't spend the longest time on watching the famous testimonial, they do watch it for the first time. These get the consumer's attention first.

The hit ratio is the percentage which tells researchers how many participants from their total number have watched at least once a specific area of interest from the photo. A very important variable for the researcher is the number of participants who have seen the identified elements in the commercials at least once. We have here following situation – photo number 1 – 18 of 22 participants watched both celebrity and restaurant in the first eye tracking, when the text description appeared 17 of them watched this too. In photo number 2 the results say that the element with the most visitors is AOI 001, so the famous couple with 18/22 visitors. Only 12 people watched the hotel room in this case. The famous celebrity hotel reached out 17 views from 22 participants, while the text only 10, so less than a half watched the description. In the photo number 4 with an actors' favorite restaurant, 18 people watched both testimonial and restaurant and after 12 of them also watched the text description. So, we can observe that no element has a 100% hit ratio, no element was watched by all participants.

Conclusions

The results of the research depend on the photo analyzed but we still can take out some conclusions. In the case of the first view, the participants always watch the celebrity first and the represented brand after. So even if they don't spend the longest time on watching the famous testimonial, they do watch it for the first time. These get the consumer's attention first. Regarding the dwell time or the total viewed time, it depends on the celebrity. In the case of photo number 2 which includes a famous celebrity couple, they were viewed for the longest time by the participants. The famous actress and actor from the other pictures didn't make it. Maybe because the participants were not their fans or maybe because the photos of them were smaller in comparison with the one of the famous couple which was bigger sized. So if we take the cumulated time, when the consumers have watched the celebrity, it is definitely longer in case of photo number 2 then the time watching the brand and shorter in the case of the other photos, but it still confirms that the consumers have the tendency to watch for a longer time the celebrities. Therefore, it is important to identify which are the attention-

catchers in an advertising and to design them according to those results. This fact is also confirmed in other researches (Nistoreanu et al., 2019). Celebrities, as many experiments indicates, have a significant key role in gaining interest and influencing buyers. This role of celebrities in marketing may be enhanced and it is therefore important to identify how they should be represented in commercials in order not to overshadow the product being promoted.

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