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Congruence and placement in sponsorship: An eye-tracking application

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ABSTRACT

Sporting events can be announced using sports posters and by disseminating advertisements on the internet, on the street and in print media. But until now, no prior research has measured the effectiveness of sponsorship in sporting event posters. This study uses eye tracking to measure the effectiveness of sporting event posters and proposes considering the level of the viewer's attention as an indicator. This research involves a factorial experiment based on the following variables: congruence, the number of sponsors, and placement of the sponsor's advertisement in a sporting event poster. The results indicate that sponsors positioned in the poster's area of action receive more attention. However, we were unable to prove that congruent sponsors receive more attention, as claimed in the literature. This result could be due to a situation of blindness towards the sponsor. The conclusion section of this paper discusses theoretical conclusions and potential managerial actions.

1. Introduction

Spending on sports sponsorship is continuously increasing each year. According to IEG (2016), the estimate for total spending in 2016 was $22.4 billion USD, and the global forecast for 2017 is $60.2 billion USD. However, despite these significant macroeconomic figures, most authors calculate that the results of the investment in sponsorship still cannot be accurately measured [50].

A sponsorship contract usually includes the sponsor's appearance in commercial communications as well as during the sporting event [3], which implies that the sponsor's brand and the sporting event's brand co-exist throughout the course of the event [46]. Even if the main objectives of sponsors have changed over time [44], they still tend to focus on gaining a high level of exposure and awareness with regard to mass media [8,55]. Sponsors also aim to increase sales, improving brand image and brand recognition as well as developing a strong loyalty [48].

The concept of fit between the sponsor and the sporting event is relevant as it can have an impact on spectator's attitudes and the intention to buy [53], which clearly justifies the study of this subject. However, the most important objective driving brands to invest in sponsorship is an increase in awareness of the brand [26, 28, 44]. According to Grohs and Reisinger [25], managers focus their efforts on promoting their corporate and brand image as their most important sponsorship goals.

Although this investment continues to experience a gradual increase each year, until now no standardized metrics have been established to measure the effectiveness of sponsorship [39]. Along these lines, Meenaghan and O'Sullivan [41] confirm that the sponsorship industry still needs to develop and establish clear, credible, valid measurement mechanisms [41]. Boronczyk, Rumpf and Breuer [8] claim attention as a significant indicator that research should assess since it remains fairly uninvestigated in the academic literature. It would therefore be important for future research studies to focus on this cognitive perspective (attention) [16].

This study examines the effectiveness of sporting event sponsorship, specifically in terms of print advertising (posters), which offers a significant advance in the field due to the current lack of research on this subject [23, 61]. The importance of this type of poster has been highlighted in previous studies as a fundamental part of communication, especially in regard to sporting events [7]. They stand out due to their low cost, visibility, strategic placement, and associated consumer response [9]. The sports poster can be tailored for a wide variety of configurations, i.e. bus stops, underground stations, billboards, etc. Either way, posters are always created digitally so they can be disseminated through social networks, on the Internet in general (in this regard, Pinterest even consider them to be a form of artwork). Nonetheless, the focus of our research is on posters (print advertising).

Our objective is to measure the level of attention that sponsors achieve based on their congruence with the sporting event, their

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position on the poster and the number of sponsors. Information was obtained through a controlled laboratory eye tracking experiment. The purpose of our research is highly significant considering that the impact of attention remains rather unexplored in the literature [8] despite the fact that attention is a fundamental precondition for the impact of a sponsorship on the behavior of consumers [10].

The contributions of this study include: the first approach to studying the effectiveness of sporting event sponsorship in print advertising publications, expanding knowledge of the cognitive response to the effect of congruence on sponsorship, and contributing to the study of the effectiveness of measuring sponsorship using neuroscientific methods, specifically the number of sponsors participating in an event. The following sections explain the theory that supports the hypotheses, the details of the experiment and the results.

2. Sponsorship and attention

Previous studies on the effectiveness of sponsorship have focused on quantitative methods that usually measure attitude towards the brand, event or logo [39, 44] or involved qualitative cognitive studies that have almost exclusively focused on the amount of time a sponsor's image appears on the screen for television campaigns [34, 45]. There is still room for development in measuring the effectiveness of sponsorship [40]. Very few authors have explored the effectiveness of sponsorship by examining the reception of sensorial information and cognitive processing of information in consumers [55]. According to Meenaghan and O'Sullivan (2013), this trend represents a necessary advance in this field, which is deserving of attention. The most relevant studies in this area include Olson and Thjømøe's [45] analysis of the influence of the exposure conditions of sponsorships on television, obtaining cognitive and affective results. They found that the sponsor's placement and duration of exposure affect the sponsors' effectiveness. Nevertheless, according to Breuer and Rumpf [10], it is necessary to analyze observable variables such as visual attention in order to conduct a more in-depth analysis of information processing and its influence on the effects of recall. Pursuing this objective, they studied the influence of the exposure time, simultaneity of sponsors, and placement on visual attention paid to sponsorship, as well as recall of televised sporting event broadcasts. Some of the most recent studies have considered visual processing and cognitive need [16] to measure attitude towards the sponsor and the intention to buy.

Subsequently, other attempts to measure the effects of sponsorship have been approached from the same perspective of attention using eye tracking systems to measure the simultaneous appearance of the action and the sponsor, the contrast between sponsors and their surroundings, and an overload of information [11]. Along these lines, other studies have used cognitive observation mechanisms to measure attention in integrated marketing environments [1]. This last study uses the level of attention based on eye tracking and electroencephalogram to evaluate the effectiveness of congruent and incongruous messages.

Eye tracking technology allows us to test the effectiveness of sponsorship by physiologically evaluating users' or consumers' attention [32], specifically in print and digital media [59]. According to the information theory, attention is the limited quantity of mental capacity that a person can dedicate to a only few different tasks at any given moment based on the category and priority of said tasks [33]. Common, daily tasks require less attention than more complex tasks, but our attention is limited, and by the theory of capacity, our attention is also selective. Eye tracking technology allows us to measure the attention paid to sponsorship exposure as spectators observe the communication stimulus. According to Breuer and Rumpf [10], research on attention must control for variables of positioning (placement) within sponsorship communication actions.

2.1. Attention to placement in sporting event posters

Little consideration has been given to measuring attention in academic research, despite being recognized as the starting point for the hierarchical process of behavior in popular models such as AIDA (Attention, Interest, Desire, and Action) [35]. Research that measures the attention paid to sponsorship includes studies by Breuer and Rumpf [10], and Olson and Thjømøe [45]. These researchers assessed the size (the relative percentage of the television screen occupied by the sponsor) and the exclusivity of the sponsorship on the screen (in terms of the amount or degree of confusion on the screen). We do not have any prior information on attention behaviors that measures the effectiveness of sports sponsorship based on its placement within common print communications such as sporting event posters.

We were not able to find the general guidelines for creating sporting event posters but the posters we approached in online search engines such as Google.com and Bing.com are commonly divided into two parts. The upper, centered section usually contains information about the sporting event in larger print. This is usually an abstract representation of the event's action or an image of the participants, especially if they are renowned athletes. It is common in contemporary design for sponsors to be placed on the lower part of the poster for an overall vertical design. Examples of this format can be found in search engines online, event websites, Instagram, Pinterest, and other social networks for nearly all kinds of sports disciplines at all levels, from amateur to professional, such as: Valencia Open 500 (tennis), 24 h Le Mans (car racing), Annual Bonfire Pipe to Pipe (snowboarding), International Sail Trophy (sailing), Estrella Damm Barcelona Master (paddle tennis), and National University Rugby Championships, among others. We will call the lower section, which contains various brands and sponsors' logos, the sponsor area. We do not have any prior information about the influence of sporting event posters on attention, but we do know that the interaction of sponsors with advertising [12] and with other sponsors [18] can have an impact on the amount of attention received.

Our first hypothesis is based on the theory developed by Russell [56] about the sponsor's position on the poster, which is supported by the model of affective transfer [36]. The presentation of a sponsor brand in the poster's area of action is categorized as implicit placement [19], which presents a brand in a program in which it plays a passive role without mentioning its characteristics or benefits. Yang and Roskos-Ewoldsen [65] define visual placement as the presentation of the brand in the background, in a plane that is secondary to the main scene. Product placement emerged as a means to reduce costs of film productions [43]. In this regard, hiding the actual marketing interest is a key objective for advertising companies [5]. Considering the similarities to the placement of sponsors on television commercials [24] and taking into account prior studies on placement that have found that the brands featured in the story's action scene had a better recall rate [51], it is logical to assume that:

H1. : Sponsors placed in the poster's area of action will receive greater attention than sponsors that are placed in the sponsor area, regardless of their congruence.

2.2. Congruence

Congruence is the concept that measures the “fit” of the relationship between the sponsor and the sponsored party based on the consumer's perception. Congruence relates the sponsor to the event, and has been studied in regard to the effectiveness of sports sponsorship in recent years ([18]; Rifon, Choi, Trimble, & Li, 2004). This research is relevant as it has determined that there is an impact on recall and knowledge of sponsors [15, 18]. The term is used to indicate the perception of similarity between the sponsored party and the sponsor [15] in regard to the type of relationship or compatibility [57]. The perception of

congruence between the sponsor and the sporting event is based on the logical relationship and the connection between the two constructs [38, 63]. This relationship permits the event image to be transferred to products and vice versa. Therefore, the consumer can more easily store information about these products thanks to the elaborate link created between the event and the sponsor [14].

Congruent sponsorships create a greater distinction between the product and other products on the market [4] and can result in improving the efficiency of a sales promotion [13]. Conversely, incongruence in sponsorship results in an insufficient transfer of the images of the event's values towards the sponsor [38].

Gwinner and Eaton [29] found that recall of the sponsor improves when consumers perceive a congruent relationship between the image of the event and the sponsored brand. Therefore, the cognitive and affective responses of consumers towards the sponsored brands and the sporting event are key factors to evaluating the effectiveness of the sponsorship. Consequently, evaluating the congruence and fit between the sponsor and the event's specific characteristics can provide information regarding the consumer's perception of the sponsored brands and have an impact on the effectiveness of the communication materials, which leads us to the study's second hypothesis:

H2. : Congruent sponsorships receive a greater level of attention than incongruent sponsorships, regardless of their position.

3. Methodology

3.1. Image validation

First, three sports categories were pre-selected through convenience sampling: tennis, sailing and Formula 1. Then, a sample of 100 students generated up to four associations of categories of brands of congruent and incongruent sponsorships for each of the three sports disciplines, based on a survey with open-ended questions. We then conducted a new survey of 89 students, asking them to assess the degree of coherence of the most frequently generated associations from the previous stage on a Likert scale (from 1 to 7) based on (Alonso Dos Santos et al., 2016), the values associated with the logos of sporting events' sponsors are congruent with those of the events; the image of the sponsors is similar to that of the events (sponsors and events approach the same purposes and client base). The associations with a greater degree of coherence and incoherence were used to set up the images. The last step involved conducting a focus group where we qualitatively tested the quality of the communication materials we created and the final results of coherence and incoherence. Based on the communication materials that received positive feedback, we created the final stimuli using real posters from past events (Table 1). These posters did not show any images of real players or sports teams that could possibly influence the subjects' involvement in the study. Table 1 displays the name of the different groups randomly presented according to the the function of exposure regarding the within-subjects experiment. The codes associated with the level of exposure for each group indicate the types of stimuli involved.

3.2. Experimental design

The experimental design is based on previous studies conducted with eye tracking systems in online environments [30,42]. This study is based on a mixed experimental design, combining inter-group (gender and discipline) and intra-subject (position, congruence and saturation) designs. We used 24 stimuli in a 2x2x2x3 experimental design between subjects factors: two different positions (inside and outside), two types of saturation (four sponsors or one) and two types of congruence (congruent and incongruent). As for the within-subjects variables: three different disciplines (tennis, Formula 1 and sailing). A total of 24 experimental groups were used, each composed of 10 subjects. Table 1 shows the name of each experimental group, the observation sequence, the code assigned to the type of stimulus, and a link to view the stimuli.

Each group was balanced based on age and gender, while maintaining the random assignment of the test units to each group, and the groups to the congruent or incongruent experimental set. Therefore, the effect of the congruence factor can be determined using the following equation: $\alpha = (O1 + O2 + O3) - (O4 + O5 + O6)$. Consequently, the final model is as follows:

$$y_{ijk} = \mu + \alpha_i + \alpha_j + \alpha_k + \varepsilon_{ij}$$

In this equation, y_{ijk} is determined by the value of the fixation for the i modality of gender (α_i), the j modality for congruence (α), and the k modality for the type of discipline (α_k).

3.3. Data collection and experimental validity

The fieldwork was conducted in the neurological studies room in the Faculty of Economic Sciences of a Chilean University during the first two weeks of September 2016. The convenience sampling was conducted on the university campus and its surrounding areas. The sample consisted of 111 men and 129 women completely unrelated to the subject matter and the individuals in charge of this research. The average age was 21 (deviation of 4).

The experiment was carried out in an air conditioned, soundproof, one-way mirror room, following the recommendations of the International Telecommunication Union (2002), as previously done in prior eye tracking experiments [30]. The EyeTribe eye tracking system was used for data collection, which has a sampling rate of 60 Hz. The average precision is 0.5 degrees of the visual angle with a spatial resolution of 0.1°. The device has a latency of < 20 milliseconds and permits 16 points for the calibration process. It permits horizontal and vertical head movements of up to 75 cm. EyeTribe has proven to be a reliable system for measuring eye movements in conjunction with the open source program OGAMA [49].

Before beginning the experiment, each participant was required to provide consent and asked whether they had any known eye diseases. The experiment was approved by the university's ethics committee. The calibration process was then initiated, which involves the participant focusing their gaze on the movement and fixation of 16 strategically located points on the screen. The open source software OGAMA was used as the recording system [62]. Each subject viewed a digital version of the poster for each discipline for eight seconds, and then a black image was flashed on the screen for one second after each image. The exposure time for posters and black images was determined following previous research by [27] and they were validated through a qualitative analysis with a test sample of 10 subjects. After viewing the commercial communication materials (stimuli), each participant provided their sociodemographic details.

4. Results

The areas of interest (AOI) are the marked areas on each sign from which we intend to obtain detailed information. Depending on the sign, the AOIs contain the target study brand and/or the original brands on the sign. For each AOI, we obtained indicators for the complete fixation time (CFT), time to first fixation (TFF) and the number of fixations (NF).

4.1. Exploratory analysis

The analysis of the results begins with an exploratory analysis in order to understand the general behavior of attention paid to the posters. Table 2 shows the attention indicators (Complete Fixation Time-CFT, Time to First Fixation-TFF and Numbers of Fixations-NF): average (A), standard deviation (SD) and the Shapiro Wilk indicator to compare normality for each type of stimulus. The level of exposure serves as a guide to arrange the order in which stimuli are presented.

Table 1
Experimental design. The sequence uses the following codes in this order: sports discipline (Formula 1 = F1, Sailing = S, Tennis = T), congruence (C = congruent, I = incongruent), number of sponsors (1 or 4), and position (I = inside the area of action, or O = outside).

Experimental group	Observation sequence			Name of stimulus	Link
G1	F1_C_4_O	S_C_4_O	T_C_4_O	E	https://goo.gl/sILiJq
G2	T_C_4_O	F1_C_4_O	S_C_4_O		https://goo.gl/k7fEii
G3	S_C_4_O	T_C_4_O	F1_C_4_O		https://goo.gl/t2h5sn
G4	F1_I_4_O	S_I_4_O	T_I_4_O	G	https://goo.gl/k4bg6h
G5	T_I_4_O	F1_I_4_O	S_I_4_O		https://goo.gl/dZ9i61
G6	S_I_4_O	T_I_4_O	F1_I_4_O		https://goo.gl/Pmellf
G7	F1_C_1_O	S_C_1_O	T_C_1_O	B	https://goo.gl/qDY0Wi
G8	T_C_1_O	F1_C_1_O	S_C_1_O		https://goo.gl/CxKFjb
G9	S_C_1_O	T_C_1_O	F1_C_1_O		https://goo.gl/wZhfKE
G10	F1_I_1_O	S_I_1_O	T_I_1_O	D	https://goo.gl/M4zfO7
G11	T_I_1_O	F1_I_1_O	S_I_1_O		https://goo.gl/HAUEjq
G12	S_I_1_O	T_I_1_O	F1_I_1_O		https://goo.gl/qgVwqK
G13	F1_C_4_I	S_C_4_I	T_C_4_I	F	https://goo.gl/49P7tc
G14	T_C_4_I	F1_C_4_I	S_C_4_I		https://goo.gl/CBevR2
G15	S_C_4_I	T_C_4_I	F1_C_4_I		https://goo.gl/x4NsHi
G16	F1_C_1_I	S_C_1_I	T_C_1_I	A	https://goo.gl/JDEpzX
G17	T_C_1_I	F1_C_1_I	S_C_1_I		https://goo.gl/wu4VFY
G18	S_C_1_I	T_C_1_I	F1_C_1_I		https://goo.gl/CbsLBW
G19	F1_I_4_I	S_I_4_I	T_I_4_I	H	https://goo.gl/bRDDl0
G20	T_I_4_I	F1_I_4_I	S_I_4_I		https://goo.gl/el9Vd7
G21	S_I_4_I	T_I_4_I	F1_I_4_I		https://goo.gl/JLp1Eu
G22	F1_I_1_I	S_I_1_I	T_I_1_I	C	https://goo.gl/Lu8KAj
G23	T_I_1_I	F1_I_1_I	S_I_1_I		https://goo.gl/kcdyis
G24	S_I_1_I	T_I_1_I	F1_I_1_I		https://goo.gl/W1E20q

Table 2
Average scores and standard deviation of attention in the AOI in milliseconds. Experimental logo (ExpL) and original logos (OriL). Average (A) Standard Deviation (SD) and Normality (N).

Type	AOI	CFT			TFF			NF		
		A	SD	N	A	SD	N	A	SD	N
E	ExpL	99.2	106.8	0.84*	1761.8	1967.4	0.82*	0.4	0.4	0.8*
	OriL	277.4	293.3	0.86*	3170.7	2994.7	0.88*	1.2	1.2	0.8*
G	ExpL	87	105.7	0.8*	1670.1	1948	0.81*	0.4	0.5	0.8*
	OriL	155	256	0.65*	2191.9	2623.7	0.8*	0.6	0.9	0.7*
B	ExpL	129	151.4	0.8*	2022.1	1828.2	0.8*	0.5	0.5	0.8*
D	OriL	142.8	224.3	0.6*	1341.1	1395.8	0.8*	0.4	0.6	0.7*
F	ExpL	407	538.1	0.62*	1229	877.6	0.92	0.9	0.6	0.9
	OriL	182.5	316.2	0.6*	1272.2	1378.9	0.83*	0.9	1.4	0.68*
A	ExpL	526.9	321.3	0.96	1845.1	1144.9	0.94	0.13	0.8	0.91
H	OriL	295.7	256.2	0.9	1011.7	709.6	0.92	0.8	0.7	0.87*
	ExpL	232.7	284.5	0.78*	1291	1427.1	0.83*	1.2	1.4	0.82*
C	OriL	531.7	373.4	0.9	1895.1	1237	0.91	1.2	0.7	0.92

* $p < .05$.

In general, as can be deduced from Table 2, the participants paid little attention to the lower part of the posters. For poster types G, B and D, the average (A) number of fixations (column FN) on the experimental logo (second from the left when the amount of logos is four) is less than one. For posters B and D, the average indicators reveal that only half of the subjects looked at the sole sponsor.

Fig. 1 shows the fixation map with a rainbow color palette (the example is the four sponsors-congruent-outside). The algorithm calculates the normal distribution of all the fixations based on their duration. The figure shows the average of the E and F stimuli. The map indicates that the participants paid more attention to the subject's face and the date of the event. They paid less attention to the name of the event, the video scoreboard and the player behind the net about to receive the serve. It also highlights the Professional Tennis Association logo and the phrase “programme officiel.” Finally, some attention was paid to the sponsors, however, it does not appear to be significant.

The concept of banner blindness is a qualitative indicator of when users ignore or do not pay attention to online advertisements, which leads to a decrease in the click rate per impression [42]. Banner blindness or advertising blindness is a concept that we can extrapolate to the field of sponsorship in order to explore the exposure and attention variables with regard to the subjects of the sponsors [31]. Banner blindness occurs when the stimuli targeted by the sponsors do not impact the subjects, they ignore the sponsorship while processing the main, general theme of the stimulus (the website) [52, 58]. We have coined the term sponsor blindness when referring to the tendency of subjects failing to notice and process the sponsors presented in a sporting event poster. Although studying blindness towards the advertisement is not the objective of this study, considering prior research on banner blindness [6, 60], we can deduce that the sponsors go unnoticed. The sponsors only received an average of 227 milliseconds of the total exposure time (8000 ms), accounting for 2.8% of the total duration.

4.2. Placement

Fig. 2 shows the average complete fixation time on the sponsored brand for the three disciplines based on their position in the area of action (inside) or in the sponsor area (outside) (A, B, C, and D stimuli). The average for the incongruent message (531.7 ms) and the congruent message (526.9 ms) is higher when the brand is inside the area of action (142.8 and 129 ms respectively).

In order to test the hypothesis regarding the type of placement (inside-outside), a nonparametric analysis of CFT, TFF and NF was performed. Table 3 shows the average ranges and significance of the Mann-Whitney test. The results in the last column indicate that attention (CFT and NF) was greater for the sponsors placed in the area of action than for the sponsors placed in the lower part of the poster, regardless of the congruence of the brand with the event. However, differences in TFF were not found between any of the categories.

4.3. Congruence

Table 4 shows the levels of significance from the comparison of stimuli A-C, B-D, F—H, and *E*-G in order to resolve the hypothesis regarding the impact of the sponsor's congruence on the level of attention. The groups are compared in pairs according to their composition. Consequently, we cannot confirm that sponsors receive more attention based on their congruence in any of the possible situations for any of

Fig. 1. Attention map with rainbow color palette showing the average of E and F stimuli.

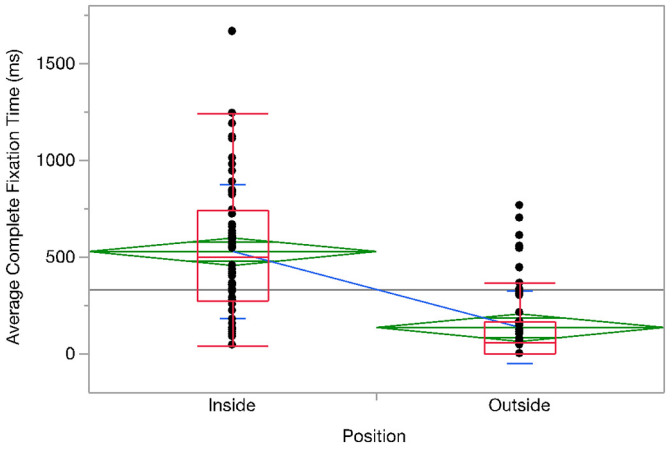

Fig. 2. The average complete fixation times in milliseconds for the logo, based on their position, either inside or outside the area of action for the total of congruent and incongruent sponsorships. The red lines mark the box plot, the diagonal blue line connects the averages, the horizontal blue lines show the standard deviation and, lastly, the green rhombuses represent the averages and confidence intervals. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

Table 3
Type of stimulus, attention coefficient, position, average range, and Mann-Whitney U statistical coefficient for the hypothesis regarding the type of placement.

Stimulus	Measure	Position	Average range	U of Mann.
Congruent	CFT	Inside	41.41	133*
		Outside	20.29	
	TFF	Inside	31.1	432
		Outside	29.94	
	NF	Inside	39.09	200.5*
		Outside	22.47	
Non congruent	CFT	Inside	41.38	123.5*
		Outside	19.62	
	TFF	Inside	32.33	395
		Outside	28.67	
	NF	Inside	40.27	157*
		Outside	20.73	

* $p < .001$.

Table 4
Type of stimulus, attention coefficient, position, average range, and Mann-Whitney U statistical coefficient for the hypothesis addressing the impact of the sponsor's congruence on the level of attention.*

Stimulus	Measure	Position	Average range	U of Mann.
One sponsor inside (A-C)	CFT	Congr	30.9	438
		Incongr	30.1	
	TFF	Congr	30.45	448.5
		Incongr	30.55	
	NF	Congr	31.75	412.5
		Incongr	29.25	
One sponsor outside (B-D)	CFT	Congr	32.1	402
		Incongr	28.9	
	TFF	Congr	33.72	353.5
		Incongr	27.28	
	NF	Congr	32.17	400
		Incongr	28.83	
4 sponsors inside (F—H)	CFT	Congr	31.75	412.5
		Incongr	29.25	
	TFF	Congr	33.03	374
		Incongr	27.97	
	NF	Congr	32.35	395.5
		Incongr	28.65	
4 sponsors outside (*E*-G)	CFT	Congr	31.6	417
		Incongr	29.4	
	TFF	Congr	31.07	433
		Incongr	29.93	
	NF	Congr	33.17	440.5
		Incongr	27.83	

* $p < .001$.

the coefficients or posters. In other words, we found no differences based on the sponsor's congruence when there is only one sponsor in the poster's area of action, or when there is only one sponsor in the sponsor area, or when there are four sponsors (objective logo) in the sponsor area, or when there are four original sponsors in the sponsor area and the logo is in the area of action.

5. Conclusions

Although research on sponsorship has increased considerably in the last few decades [46, 50], academics and professionals agree that organizations often adopt incorrect or inaccurate measures [41] that are qualitative and informal [21] in order to measure the effectiveness of their sponsorship activities. There is also a consensus in the previous literature on sponsorship regarding the importance of congruence in the image transmission process [3, 44, 50]. Despite the economic

importance of sponsorship, due to lacking measurements and an academic persistence [21] on developing further research on the subject, there is still no empirical research to date on the attention processes related to the communication of sporting events through posters.

This study analyzes attention processes for 24 types of stimuli for different sports disciplines (sailing, tennis and F1), the sponsor's placement (inside or outside the area of action), the number of sponsors (one of four), and the sponsor's congruence (congruent or incongruent). The exploratory analysis showed that there is a certain degree of blindness towards the sponsor, as only 2.8% of the attention paid to the poster falls on the sponsor area in the case of posters with advertisers displayed on the lower part of the poster for a tennis event. We were able to show that the sponsors placed in the area of action receive more attention than the sponsors in the lower section, regardless of congruence and discipline. In regard to the second hypothesis, we did not find any evidence as to the impact of congruence on the attention paid to the sponsor, despite the fact that the academic literature clearly establishes the importance of fit and congruence [47, 64].

The theory of schemas argues that congruence facilitates cognitive fit [37], but we were unable to demonstrate that congruent sponsorships receive a different amount of attention than incongruent sponsorships, which does not consequently mean that we were able to demonstrate any differences in terms of attitude [20], intention to buy [54], recall [17], or brand image [64]. Therefore, our conclusions do not counter the prior research on this subject since, despite the fact that the duration of attention does not differ, congruence may have an impact on the aforementioned variables. On the other hand, perhaps the time of exposure in conjunction with banner blindness was not enough for sufficient cognitive processing of the connection with the sponsorship.

On another note, the theory of advertising placement works for print sporting event communications (posters) [19]. As expected, when sponsors are placed in the area of action, they receive more attention than when they are placed in the sponsor area, for both congruent and incongruent sponsors. Therefore, as established in the literature, by receiving more attention, it is expected that these sponsors would have greater recall rates [24] and recognition rates [51].

In terms of managerial recommendations, the results seem to indicate that sponsors should invest in placing their brands in the area of action on sporting event posters, which would consequently attract more attention and obtaining higher recall and recognition rates. In terms of congruence, as we were unable to find any differences due to the aforementioned reasons, we should recommend fit strategies for short-term actions in accordance with the academic literature.

In regard to future research and limitations, the results of this experiment should be carefully extrapolated; firstly, because the study was based on a convenience sample rather than a representative sample and, secondly, because the selected sports disciplines do not represent the totality of various disciplines. In regard to the effects of the placement of sponsorship, future lines of research should consider the perceived differences according to gender [2], the number of sponsors, and the relationship between the attention received, spontaneous recall, recognition, and the intention to buy. It may be particularly interesting to consider the influence of the cultural dimension in future research. In this sense, a cross-cultural analysis should provide further data on how fans from different cultures perceive the same sporting event [22] and the impact on the image transmission process in sports sponsorship.

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