To influence or not to influence? Conceptual model exploring effectiveness of influencer marketing and social media in sport sponsorship campaigns

Abstract

The paper develops a conceptual model for exploring the effectiveness of influencer marketing and social media in sport sponsorship campaigns. A questionnaire related to the obstacle course race (OCR) Tribalion and its sponsors was designed and conducted to verify the proposed model on a particular sports competition. The data were analysed using structural equation modelling (SEM) and necessary condition analysis (NCA). The findings show that the presence of influencers and sponsorship messages on social media within the campaign are influential for sponsorship effectiveness, but not detrimental. Also, positive attitude toward sponsors directly contributes to, but is also necessary for, a higher likelihood of purchasing sponsor products or services. Findings illustrate that to maximise the effectiveness of sport sponsorship campaigns, sponsors should not blindly rely on influencers and social media, but should strategically integrate them into the communication strategy that prioritises authentic engagement, a strong brand-sponsor fit, and long-term sponsorship contracts.

Keywords: sponsorship, obstacle course racing (OCR), influencer marketing, sponsorship effectiveness, attitude towards sponsors

Paper type: Original research

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1. Introduction

The role of event sponsorship is becoming a central focus of marketing activities, especially given the presence of intense competition. One of the most common forms of sponsorship involves engagement in entertainment events, such as sports events (Lin and Bruning, 2021). Sport sponsorship has been praised as the most effective form of sponsorship, as the heightened attention and emotion evoked by the sports match might be partially directed towards sponsorship messages (Krugman, 1983). After choosing the specific event to sponsor, the marketing practitioners should decide how they will communicate their sponsorship activities and messages. In the last few years, increasing attention has been directed toward the significance of social media in sports, as these platforms are considered a precious medium for bidirectional communication between sports brands and consumers (Einsle *et al.*, 2023) and serve as a useful resource for sports management (Escamilla-Fajardo *et al.*, 2022). Besides social media, influencers have emerged as another medium of transmitting advertisement and sponsorship messages. Essentially, influencers function as micro-celebrities who have amassed a substantial "follower network" and are regarded as credible opinion leaders within one or several specific niches (Brison and Geurin, 2021). Today, influencers are believed to play a crucial role in shaping consumer attitudes and behaviours (Lou and Yuan, 2019) and their role in sports sponsorship is becoming increasingly evident. The influence of influencers and social media on consumer attitudes and behaviour in the context of sports event sponsorship remains an underexplored area, highlighting the need for further research.

One of the sports and sports events which is gaining popularity, interest and visibility is the obstacle course races (OCR). OCR has emerged as one of the fastest-growing sports in recent years and proof to it is its approval to be a part of the modern pentathlon for the 2028 Olympic Games (BBC, 2023). This type of sporting event combines physical and psychological challenges, as competitors must overcome various obstacles requiring strength, endurance,

agility, and mental resilience. Given the growing recognition of this sport, sponsorship of OCR is becoming a topic of interest. These events offer brands a unique opportunity to connect with active, health-conscious, and motivated consumers who share values such as perseverance, goal-setting, overcoming challenges, and a passion for adventure and competition.

The objectives of this research are two-fold. The first is to enlarge the current body of literature related to the assessment of sponsorship awareness and consequent behaviour by proposing a new conceptual model. The proposed model is grounded on the work of Maricic *et al.* (2019) and is significantly expanded, taking into account constructs related to sponsorship presence on social media, as well as influencer marketing activities. To test the proposed conceptual model, we designed and conducted a survey on the effectiveness of sponsorship in the Tribalion OCR, the largest obstacle course race in the Balkans. The second objective is to identify sufficient and necessary factors affecting consumers' awareness, attitude towards sponsorship and purchase intention. On one side, we applied the covariance-based Structural Equation Modeling (CB-SEM) (Jöreskog, 1978) which follows the sufficient logic, while on the other, we employed Necessary Condition Analysis (NCA) (Dul, 2016), which follows a necessity logic. The combined approach helps achieve a broader understanding of the primary data as well as improves theorising.

The paper is structured as follows: the next section provides a review of the existing literature on cost-effectiveness of involving influencers and social media for expanding sponsorship messages, while Section 3 presents the proposed conceptual model. The subsequent section covers the research methodology and findings, followed by Section 5, which discusses limitations and future research directions. The final section provides concluding remarks.

2. The cost-effectiveness of utilising influencers and social media to extend the reach of sponsorship messages

Although the influence of social media and influencers on consumer behaviour has become increasingly prevalent in digital marketing literature, there is still a need for further research on how these factors directly shape consumers' purchasing decisions. Having in mind that the influencer marketing market has more than tripled since 2020 and that as of February 2025, there were 5.24 billion social media users worldwide (Statista, 2025), it is valuable to examine the extent to which consumer trust in influencers and social media affects their willingness to make purchasing decisions.

In the context of sports event sponsorship, sponsored content is embedded within non-commercial media content, reducing the intrusive and persuasive tone typical of traditional marketing messages, thereby making sponsorship messages less overt to the audience (Maricic *et al.*, 2019). On the other hand, influencers, through their social media content, have an additional ability to shape consumer attitudes and behaviours toward sports event sponsors (Saima and Khan, 2020). Findings from Barari (2023) indicate that social media influencers have a superior impact on consumers' engagement, which is higher for virtual than human influencers. Additionally, research has shown that as consumers age, influencer marketing tends to have less of an impact, as older individuals are more discerning and aware of persuasive tactics (Allende *et al.*, 2024).

Previous research highlights the significance of influencer marketing and social media in sponsorship contexts, emphasising their crucial role in increasing brand recognition and building consumer trust. Racz (2020) found that marketing professionals and brand owners often prefer to use influencer advertisements on social media in combination with promotions via official brand accounts. Liu (2021) underscored the importance of the parasocial

relationship between influencers and their followers, which enhances audience attention to product-related information and increases user engagement. Similar findings have been reported by Hermanda et al. (2019), who determined that influencer engagement and active communication through social media significantly impact brand image and brand awareness.

Literature suggests that influencer marketing and communication through social media plays a crucial role in sports event sponsorship by subtly embedding promotional content within social media interactions, fostering consumer engagement and trust. The aim of this research is to examine this mechanism through a conceptual model.

3. Conceptual model development

Marketing experts have been trying for years to design a conceptual model for measuring the effectiveness of sponsorship (Speed and Thompson, 2000). During the literature review and the development of the proposed conceptual model, three existing conceptual models served as guidelines. The model by Maricic *et al.* (2019), which explores the interdependence of *Involvement* in a sporting event, *Exposure* to a sporting event, Sponsorship *Awareness*, *Attitude* towards event sponsors, and *Purchase Intention*. Then, the model by Bargoni *et al.* (2023), which analysed the impact of influencer endorsement services on campaign success. Finally, elements from the model of Demirel and Erdogmus (2016) related to sponsorship on social media, attitude towards sponsorship and purchase intention were incorporated.

In our research, an attempt was made to expand some of the currently developed conceptual models to measure the impact of influencers and social media on attitudes towards sporting event sponsorship. The proposed conceptual model consists of seven constructs: *Involvement, Exposure, Awareness, Influencer Impact, Sponsorship presence on social media, Attitude,* and *Purchase Intention*.

3.1 Involvement

According to Walraven et al. (2014), an individual's involvement is an important factor influencing the effectiveness of communication and promotional activities. It is believed that when a sports brand or a brand targeting sports enthusiasts sponsors a sports event, the effect will be more pronounced among those who have a high level of involvement with sports, as opposed to those who do not. Consumers' motivations to engage and participate in leisure and sports activities are determined by their personal interests and desires, which also leads to increased attention and focus on sponsored content at events that interest them. Harvey *et al.* (2006) also highlight that individuals who are more interested in a particular sport will be more exposed to sponsored content, which will ultimately have a positive impact on memory and recognition of that content. This is also known as the "spill-over" effect suggested by Krugman (1983). In our research, we test the following hypothesis:

H_1. Consumer involvement in a particular sport has a direct positive effect on sponsorship awareness.

3.2 Exposure

As Maricic *et al.* (2019) state, exposure to a specific sports event plays a key role in the process of transferring the sponsors' message because it enables them to convey their message, and this construct is expected to affect the sponsors' recognition of the sports event. According to Kwon and Shin (2020), continuous exposure to a specific sports event over time is crucial for the event sponsors, and it is considered more important for sponsor recognition than repeated short exposures through other activities. Additionally, Walraven *et al.* (2014) mentioned that there is a direct positive relationship between exposure to a sponsored event and recall and recognition. The exposure generated by a specific sports event is believed to build strong sponsor recognition, yet there is limited research examining these impacts. The level of exposure is a

factor that influences sponsor awareness, as the audience is more exposed to the sponsor's messages, making it more likely that the sponsor of the sports event will be recognised and noticed. Therefore, our next hypothetical statement is:

H_2. Consumer exposure to a particular sport competition has a direct positive effect on sponsorship awareness.

3.3 Awareness

The main sponsorship objective is that the consumers recognise sponsor activities and become aware of the brands behind the sponsorship. Brand strength in consumer awareness is reflected in its ability to be recognised or recalled in various contexts (Mao and Zhang, 2013), with brand associations being key to shaping its image and building a stable network of brand knowledge (Keller, 1993). Standard methods for assessing awareness include unconscious recall, partially aided recall, and aided recall (recognition) (Maricic *et al.,* 2019).

3.4 Influencer impact

In the context of influencer marketing, achieving high brand recognition is one of the primary goals of companies, given its crucial role in shaping consumer decisions (Barreda *et al.*, 2015). Through authentic content and direct communication with their audience, influencers can contribute to spreading brand awareness, thereby increasing its visibility and strengthening its position in the market (Lou and Yuan, 2019). In accordance with this, the following hypothesis has been defined:

H_3. Consumer perceived influencer impact has a direct positive effect on sponsorship awareness.

Jin *et al.* (2019) identified that trust in influencers surpasses trust in traditional celebrities and that followers (consumers) have a more positive attitude toward a brand when exposed to influencer messages rather than traditional advertising. Furthermore, Balaban and Mustățea

(2019) identified that the expertise, credibility, and physical attractiveness of influencers can lead to more followers and greater trust in them, thus leading to a more positive opinion of the product, brand, or sponsor. Consequently, a higher level of trust in the influencer may influence the shaping of attitudes toward brands whose products/services influencers promote, based on which the following hypothesis has been defined:

H_4. Consumer perceived influencer impact has a direct positive effect on the consumers' attitude towards sponsorship and the sponsor.

3.5 Sponsorship presence on social media

Brand exposure refers to its continuous presentation to the target consumer group, stimulating recognition and increasing awareness of the brand, which can contribute to strengthening its perception and positioning in the market. In their research, Abdelmoety and Gounaris (2015) highlight a positive correlation between the presence and engagement of brands on social media and the level of consumer awareness about them. This connection is explained by more intensive communication among consumers, the spreading of information through word-of-mouth, and the ability of brands to actively participate in interactions with users. Accordingly, it can be assumed that a higher degree of brand presence and engagement on digital platforms positively influences consumer recognition, leading to the formulation of the following hypothesis:

H_5. Consumer perceived sponsorship presence on social media has a direct positive effect on sponsorship awareness.

Studies examining the role of social media in sports have highlighted their effectiveness in building and enhancing relationships between brands and consumers, as they facilitate communication, interaction, and the assessment of values (Williams and Chinn, 2010). Additionally, from the consumer's perspective, research suggests that engagement on social

media contributes to a more positive perception of brands (Eagleman and Krohn, 2012). Based on these findings, it is relevant to examine the potential impact of social media usage by sponsors on shaping consumer attitudes towards them. The following hypothesis was formulated:

H_6. Consumer perceived sponsorship presence on social media has a direct positive effect on the consumers' attitude towards sponsorship and the sponsor.

3.6 Attitude

According to the research by Ko et al. (2008), key sponsorship objectives include enhancing brand recognition, strengthening corporate image, and increasing market share. This statement is based on the belief that increasing awareness of sponsorship has a positive impact on attitudes toward the sponsor and its image. In later research, Ko and Kim (2014) identified recognition as one of the significant outcomes of sponsorship, confirming that it plays a key role in shaping consumer perceptions of the sponsor. This conclusion aligns with a previous study, which suggests that increase in brand awareness, has a significant impact attitude toward the brand attitude (Jalleh *et al.*, 2002). Based on this, the following hypothesis was developed:

H_7. Consumer awareness has a direct positive effect on the consumers' attitude towards sponsorship and the sponsor.

The primary goal of sponsorship is to create a positive consumer attitude toward the sponsor, which directly influences the purchasing decision regarding the sponsor's products/services (Ajzen, 2001). In the literature on brand management, brand attitude is often considered a key predictor of consumer behaviour (Chang and Ko, 2014), which is why it is important to investigate how and on what basis attitudes toward sponsors are formed. According to Madrigal (2001), beliefs are central to attitude theory because attitudes are formed based on these beliefs, and they are considered the foundation for guiding attitudes toward specific behaviours. Thus,

a positive experience with a sponsored event is seen as a factor that favourably influences the development of an attitude toward the sponsor, which can later affect the purchasing decision. In line with the above presented, the following hypothesis has been defined:

H_8. Consumers' attitude towards sponsorship and the sponsor has a direct positive effect on purchase intention

3.7 Purchase intention

Increasing sales is often considered one of the primary outcomes of corporate engagement in sponsorships (Turco, 1994). Purchase intention, according to Spears and Singh (2004), represents an individual's conscious plan to exert effort with the aim of purchasing a product/service of a specific brand. Studies focused on predicting human behaviour are based on the theory of planned behaviour (Ajzen, 1991) and the theory of reasoned action (Ajzen, 1980). In relation to research on purchase intention as an effect of sponsorship, many studies have used it as a key indicator for evaluating success (Alexandris *et al.*, 2007; Biscaia *et al.*, 2013). Therefore, purchase intention is one of the outcome variables of the proposed model.

After all the constructs have been defined and hypotheses presented, the visualisation of the proposed conceptual model is given in Figure 1.

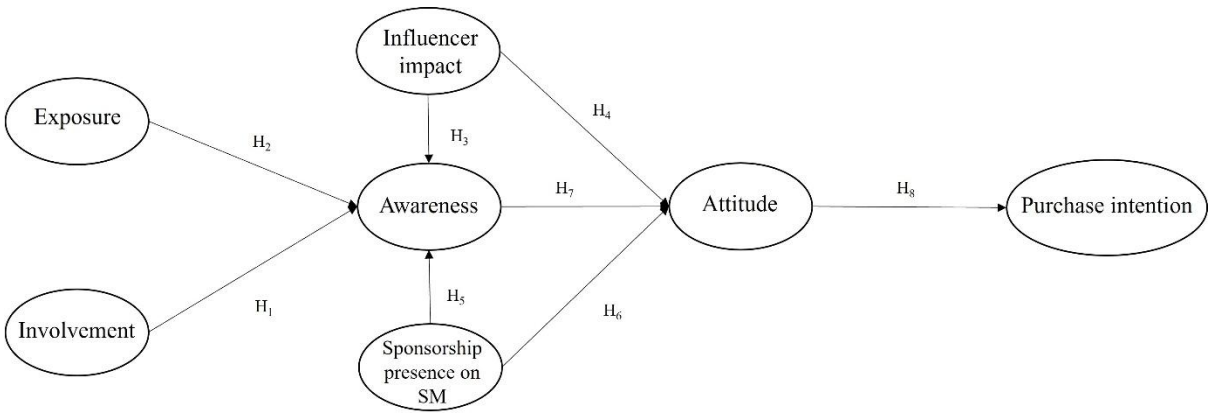


Figure 1 should be here

4. Research methodology

4.1. Tribalion OCR

The Tribalion OCR race is the largest obstacle race in Serbia and the Balkan region. It consists of two annual events, the May and September races, with approximately 3,000 participants and several thousand spectators supporting the competitors per race. Each race is dedicated to a protected animal species found in the Tara National Park, where the OCR takes place, and the race t-shirts are specially designed to reflect this theme. By participating, each competitor helps raise awareness about the significance of the natural heritage of this region. In May 2025, the 13th edition of the race will be held. Furthermore, it is worth noting that Tribalion OCR has five official ambassadors, two of whom are recognised sports influencers, while the other three are micro-influencers.

Regarding the sponsors of Tribalion OCR, the sponsorship structure has remained consistent over the past few years, with strong and loyal relationships built over time. The sponsors of Tribalion OCR for the last three years have been Beosport, Frutabela, Delta Agrar, Aqua Gala, Pansport, Skullcandy and Zottprotein and media partners Sport Klub and Super FM. The sponsorship strategy of Tribalion OCR emphasises exclusivity with a selected group of trusted sponsors. As Maricic *et al.* (2019) pointed out, by maintaining a limited number of partners, the event ensures that each sponsor receives significant visibility and the opportunity to build a strong connection with the participants and spectators, thereby creating lasting and meaningful relationships. Also, to improve the effectiveness of sponsorship, brand-sponsor fit is considered when deciding on the sponsors (Mazodier and Quester, 2014). Namely, all the listed sponsors are sport equipment companies, sport supplements, water, and healthy food productions, which is in line with the race and what the race aims at promoting.

4.2 Devised survey instrument and survey dissemination

An online survey created in GoogleForms was conducted from 13th February until 5th March 2025. The survey was distributed on Instagram and Facebook profiles of the Tribalion OCR, as well as to direct e-mails to previously registered Tribalion participants. The ethical approval for conducting the survey was obtained from the authors' institution. The total population observed was around 3,000 individuals – those who have actively engaged with the OCR. Afterwards, the statistical analysis of the collected data was performed using SPSS 28, AMOS 22 and R.

The survey consisted of questions regarding nine areas: demographic information, previous interaction with the Tribalion OCR, Involvement, Exposure, Awareness, Influencer Impact, Sponsorship presence on SM, Attitude and Purchase Intention. The first section of the survey asked the respondents basic demographic information, which included gender, age, residence, highest completed degree and personal income. Next, we asked several questions related to previous Tribalion participation. All questions in the following six scales were on a Likert scale from 1 – I completely disagree to 5 – I completely agree, with 3 being the mid-neutral point. To measure *Involvement,* we used six questions modified from scales used by Maricic *et al.* (2019). The example statement is: "I enjoy discussing OCR with my friends". Exposure was measured using the shortened two-item scale proposed by Walraven *et al.* (2014) with the sample item "I am interested in the Tribalion OCR". *Awareness* was measured using aided recall and recognition questions (Maricic *et al*., 2019). The standard recall question was omitted intentionally, as there are just two Tribalion races during the year, and we believed that a bi-annual two-day exposure at the event is quite short for developing recall. To measure *Influencer impact,* we used seven items from the scale proposed by Le *et al*. (2021). The sample item is "I follow influencers who promote sport brands and products". *Sponsorship presence on social media* has the goal of measuring the perception of the respondents regarding Tribalion sponsor

messages. Questions from the studies of Demirel and Erdogmus (2016) and Gillooly et al. (2017) were used. The sample item is "I notice the Tribalion sponsors' posts on social media". To measure the next construct, *Attitude*, we modified the scales introduced by Tsiotsou and Alexandris (2009) and Maricic *et al*. (2019). One of the items was "Due to sponsorship, I like more the products/services of the Tribalion OCR sponsors". Finally, the *Purchase Intention* was quantified using five statements adapted from Maricic *et al.* (2019).

4.3 Applied statistical methods

Before assessing the conceptual model, the reliability and validity of the constructs should be explored. In this study, we used Cronbach's alpha and Composite reliability (CR) to assess reliability and Average Variance Extracted (AVE) to assess convergent validity. Cronbach's alpha measures how well items within a scale measure the underlying phenomenon (Cronbach, 1951). Values above 0.7 are interpreted as adequate. CR is a somewhat better measure of reliability than Cronbach's alpha, as it does not require equivalent factor loadings across items (Cheung *et al.*, 2024). Values of CR above 0.7 indicate good reliability. AVE, on the other hand, represents the average amount of variance that a construct explains in its indicators relative to the overall variance of its indicators (Cheung *et al.*, 2024). The acceptance threshold for AVE is above 0.5.

After the scales have been validated, a SEM algorithm is applied. The researcher should choose between CB-SEM and PLS-SEM (Partial Least Squares - SEM). CB-SEM is primarily used for confirmation of established theory. In contrast, PLS is a prediction-oriented approach to SEM, primarily used for exploratory research (Hair *et al.*, 2017). CB-SEM is observed as a parametric SEM, as it has assumptions on data distribution, while the PLS-SEM is a non-parametric SEM, which holds no assumptions and can be conducted on a smaller sample size with solid results (Hair *et al.*, 2017). Considering the goal of the paper, which is to confirm the model, the sample size and model complexity, we opted for CB-SEM.

NCA follows the necessity logic, which implies that an outcome, or a certain level of an outcome, can only be achieved if the necessary cause is in place or is at a certain level (Dul, 2016). The NCA is conducted on latent variable scores obtained in the SEM analysis (Richter *et al.*, 2020). For each latent construct impacting the outcome variable the effect size *d* should be estimated and a bootstrap permutation test conducted to assess its statistical significance. The NCA is graphical and provides scatter plots of the latent construct impacting the outcome variable. On the scatter plot, ceiling lines are constructed: ceiling envelopment-free disposal hull (CE-FDH), which is a non-decreasing step-wise linear line and ceiling regression-free disposal hull (CR-FDH), which is a simple linear regression line through the CE-FDH line (Richter *et al.*, 2020). Based on the ceiling results, a bottleneck table can be produced, which provides information on the condition(s) that must be satisfied to achieve the outcome. The effect size *d* is calculated by dividing the 'empty' space (called the ceiling zone) by the entire area that can contain observations (called the scope). According to Dul (2016), the *d* takes values from 0 to 1. The closer *d* is to one, the larger the effect.

5. Research results

5.1 Sample description

After closing the survey, 650 answers were collected. Considering the initial population, the response rate is approximately 22%, which is satisfactory. The gender structure of the sample is slightly imbalanced towards men (59.5%) than women (40.5%). Most respondents are from Belgrade, Serbia's capital (50.5%). However, all other regions of Serbia are covered with at least 5% of the sample. The respondents are highly educated, with 75.1% of the sample having a BSc or higher degree. The sample's largest share are those with more than 1000 EUR personal income, which is considered above the Serbian average income. Most respondents (41.8%) spend between 50 and 100 EUR on sport and recreation per month. There is a visible group of

those who spend more than 150 EUR as well (10.8%). Regarding the previous participation in the Tribalion OCR, just 10 respondents have never taken part in a race. Most of the respondents participated in one to three races (67.2%), followed by those who participated up to six times (23.4%). Usually, the respondents participate in the shorter Green race (70.6%) and have participated in both spring and autumn Tribalion races (52.8%). Looking at the sample characteristics, we can say that we have captured experienced Tribalion racers who have been exposed to the race multiple times.

5.2 Conceptual model verification

As the literature suggests, the first step prior to conducting the SEM analysis is the internal consistency and reliability analysis of model constructs. To do so, we employed three metrics (Table 1). The measured Cronbach's alpha ranges from 0.718 (*Exposure*) to 0.893 (*Purchase intention*). Based on this metric, all constructs have a satisfactory internal consistency. The two constructs, which have two items (*Exposure* and *Awareness*), have somewhat lower consistency, but that was not perceived as an issue, keeping in mind that Cronbach's alpha is sensitive to the number of items within a scale. All the measured AVEs are above 0.5, while all the CRs are above the 0.7 threshold. Therefore, based on three metrics, all seven model elements are suitable for further analysis. The CB-SEM was employed in the next step.

Table 1 should be here

The initial model yielded solid results (Chi square=3189.986, df=487, CFI=0.808, TLI=0.779, RMSEA=0.092). All items within latent constructs were statistically significant and their factor loadings were above 0.5. Therefore, the results indicated no need for changing the structure of model elements. To fine-tune the model, modification indices were used. The final model shows better results (Chi square=2488.643, df=470, CFI=0.857, TLI=0.829, RMSEA=0.081). The value of the Chi-square statistics decreased significantly (Chi-square difference test,

p<0.001), the CFI and TLI are closer to the 0.9 thresholds, while the RMSEA also decreased. Considering the model size and sample size, the model can be assessed as of good quality. In Table 2, we provide the detailed model assessment – constructs, predictors, standardised and unstandardised coefficients, critical ratio (C.R.), as well as the R squared (R^2).

Table 2 should be here

Within the model, three equations have been estimated. In the equation of the construct *Awareness,* all four predictors proved to be statistically significant and positive. Therefore, all related hypotheses were accepted. The formed model is of solid quality based on the R^2, having in mind that 10.7% of variability can be explained. In the second model, all three predictors have a statistically significant impact on *Attitude* and explain as much as 46.1% of the variability. Lastly, *Purchase intention* can be modelled using *Attitude* with high success, as this predictor explains 69.0% of its variability.

5.3 Results of the NCA

To conduct and evaluate the NCA results, we followed the guidelines by Richter *et al.* (2020). Visualisation of the NCA conducted for each of the three outcome constructs is given in Appendix 1.1-1.3. We evaluated the effect sizes (d) and conducted a permutation test with the recommended random sample size of 10,000 to determine the statistical significance. The results are presented in Table 3. Looking at the construct *Awareness,* all four conditions are necessary and statistically significant. It should be noted that *Involvement* and *Exposure* have a medium effect size above 0.2. Interestingly, all three conditions of *Attitude* are significant but are small or trivial. Finally, the sole condition of *Purchase intention, Attitude,* is a significant and largest measured effect with a *d* above 0.3. Visual inspection of the ceiling plots given in the Appendix confirms the presented results.

Table 3 should be here

More detailed insights can be provided by analysing the bottleneck tables. Tables 4-6 present the bottleneck tables for three dependent constructs. Bottleneck tables provide information on the percentage of each aspect necessary for a certain perceived outcome. The grey shaded area shows the minimum percentage of each aspect necessary for a high perceived outcome. Table 4 shows that for high *Awareness,* respondents should be exposed to and involved in the competition, while influencer presence and social media presence are not detrimental. The results show that to achieve high awareness (80%), it is necessary that the respondents are involved in the sport (45.7%) and exposed to the sponsored competition (60.1%). The grey-marked values indicate that if these threshold values are not met, respondents are unlikely to experience sponsorship awareness.

Table 4 should be here

Table 5 shows that for a high attitude towards sponsors, *Influencer impact* is not necessary, while sponsorship presence on social media and awareness do not need to be high. Knowing that all three predictors are necessary but with trivial impact is valuable.

Table 5 should be here

Finally, the bottleneck table for *Purchase intention* showed that to achieve high values, the level of *Attitude* should also be high, above 59.2% (Table 6). This indicates that to create a positive purchase intention among consumers it is necessary for them to have a positive attitude towards the sponsors.

Table 6 should be here

The joint SEM-NCA analysis revealed that all exogenous constructs are significant determinants of the outcome variables and, at the same time, are a necessary condition for the outcome. An increase in the exogenous construct will increase the outcome. However, a certain

level (see NCA bottleneck tables 4-6) of the exogenous construct is necessary for the outcome to manifest.

6. Discussion and managerial implications

The proposed model focused on modelling impacts on *Awareness, Attitude,* and *Purchase intention* in the context of sports sponsorship campaigns. Examining the model of sponsor awareness revealed that higher involvement in the sport, specifically OCR, is associated with a higher level of recognition of Tribalion sponsors. This finding aligns with the results of Walraven *et al.* (2014). Additionally, it was found that higher exposure to the sport competition, specifically Tribalion OCR, enhances the effectiveness of sponsorship. Hypotheses H_1 and H_2 are in line with the "spill-over" effect suggested by Krugman (1983). The findings also highlight the role of both influencer engagement and social media presence in enhancing sponsorship awareness. The confirmation of hypothesis H_3 aligns with the study by Chung *et al.* (2023), while hypothesis H_5 follows the work by Naraine *et al.* (2022). In the case of Tribalion OCR, the four predictors explained 10.7% of the variability of awareness, which is noticeably lower than in the case of the UEFA Champions League, where 33.3% of the variability was explained (Maricic *et al.,* 2019). The lower explanatory power of the predictors can be attributed to the sponsorship approach and the specificities of the competition. Tribalion is a bi-annual competition with a number of sponsors. The racers' exposure time to sponsorship messages is limited and not sufficient to build recognition. Looking at it from another perspective, considering the short exposure time and the limited number of sponsored posts on social media, the obtained result is encouraging. The additional analysis revealed that influencer and social media presence are not detrimental to building awareness. Therefore, organisers of the OCR should focus more on community building, direct consumer engagement, and on-site sponsor advertising to improve sponsorship effectiveness.

The impacts of three constructs were explored on attitudes towards sponsorship and the sponsor. *Influencer impact* proved to have a positive impact on the observed attitudes, indicating that including influencers in the sponsorship campaign can have a positive impact on the opinions of consumers (Balaban and Mustățea, 2019). This result goes in line with H_4. Turning to social media as a channel of communicating sponsorship messages is a good strategy, as hypothesis H_6 is confirmed. Our result aligns with Hazari (2018), who showed that social media consumption positively relates to attitude toward events and sports patronage. Being top-of-the-mind in the consumer's mind and being associated with the competition leads to improved sponsor's image, confirming H_7 (Maricic *et al.,* 2019). In the observed case, the three predictors explained 41.6% of the variability of *Attitude*, which is noticeably higher than in the case of the UEFA Champions League, where only 1.4% of the variability was explained (Maricic *et al.,* 2019). Again, the event and participants' specificities should be taken into account. In the conducted study, almost all respondents participated in the race, experienced the competition, and were exposed to sponsorship messages in person, unlike the UEFA Champions League study, where respondents were only involved virtually. The suggested interpretation goes in line with the conclusion of Naraine *et al.* (2022) who state that the sponsors "*need to be more cognizant that simply sponsoring content in an inauthentic, forceable manner may not yield the results they are seeking through their association*".

Finally, the model observed how attitude towards sponsors and sponsorship impacts purchase intention. Both SEM and NCA showed a strong impact of positive attitude towards sponsors on buying and using sponsors' products and/or services. Nguyen and Vu (2022) analysed the same path in their model and came to the same results. *Attitude* proved to be a necessary condition for the development of purchase intention. At the same time, *Attitude* is a strong predictor of purchase intention, with 69.0% of its variability explained. Practical managerial implication would be that the current Tribalion sponsorship communication strategy, which

encompasses influencers, social media usage, community building, long-lasting sponsorships, product/service try-outs and samples at the racing event, is giving promising results.

7. Concluding remarks

This study aimed to identify sufficient and necessary factors affecting consumers' awareness, attitude towards sponsorship and purchase intention. The proposed conceptual model measured the effect of influencer marketing and sponsor activities on the effectiveness of sponsorship (awareness) and attitude towards sponsorship. Additionally, the effects of involvement and exposure were included in the model. The data on which the model was verified is based on the responses of sports competition participants, Tribalion obstacle course racing (OCR) organised in Serbia.

Two complementary analyses were performed to assess the model: SEM and NCA. CB-SEM explored the relationships between the defined constructs, while NCA provided an understanding of how the predictor variables constrained the outcome constructs. The first analysis showed that all eight devised hypotheses should be accepted, confirming the proposed impacts. The second analysis indicated that all constructs are necessary to achieve the desired outcome constructs, as well as the size of their impact and the needed level of accomplishment for the outcome variable to occur. The two-fold approach allowed the identification of general effects between model constructs and outlined the necessary prerequisites for the outcome constructs (Sukhov *et al.*, 2023).

The presented study and its model are not without limitations, which should be mentioned. The study's limitations somewhat prevent a wider generalisation of results and implications but do not diminish their contributions to practitioners and academics. The first limitation is that the conceptual model has been verified solely on one sport competition, Tribalion OCR. The model provides insights into the mechanisms related to OCR sponsorship, which can be of interest,

keeping in mind the rise of OCR popularity (BBC, 2023). However, it would be practical to explore the model in other sports events or competitions, such as football, basketball or tennis. Comparing the results of the models across different sports would reveal nuanced differences in sponsorship mechanisms between sports. The second limitation is that the study was conducted on a sample and a competition organised in one country, the Republic of Serbia. A future direction of the study could encompass a joint survey among Tribalion participants and participants of a regional or European OCR (for example, Toughest – OCR in Sweden and Norway). Comparing the results of the models between competitions and their sponsorship strategies would give insights into the effect of socio-cultural differences on the effectiveness of sports sponsorship and influencer engagement. A research direction that could also be implemented is delineating the impact of different influencers: mega, macro and micro-influencers (Hernández-Méndez and Baute-Díaz, 2024). In this model, influencer impact was explored through one construct. In the expanded model, the impact of influencers based on the number of their followers can be quantified using separate constructs, which could provide valuable information on the types of influencers that specific target groups react to more positively. Knowing that would allow sponsoring companies to choose whether to have one macro influencer or more micro-influencers to maximise the transmission of their promotional message.

We believe that both objectives of this research have been fulfilled. The study enlarges the current body of literature on the assessment of sponsorship awareness, especially the role of influencer and social media marketing. The study also identified sufficient and necessary factors affecting consumers' awareness, attitude towards sponsorship, and purchase intention and showed that both influencer marketing and sponsorship marketing on social media are not that crucial in forming awareness and positive opinions on sponsors. It is hoped that this research will act as an impetus for further research on the effectiveness of influencer marketing,

sponsorship effectiveness, specificities of marketing in OCR, as well as the joint application of SEM and NCA in marketing research.

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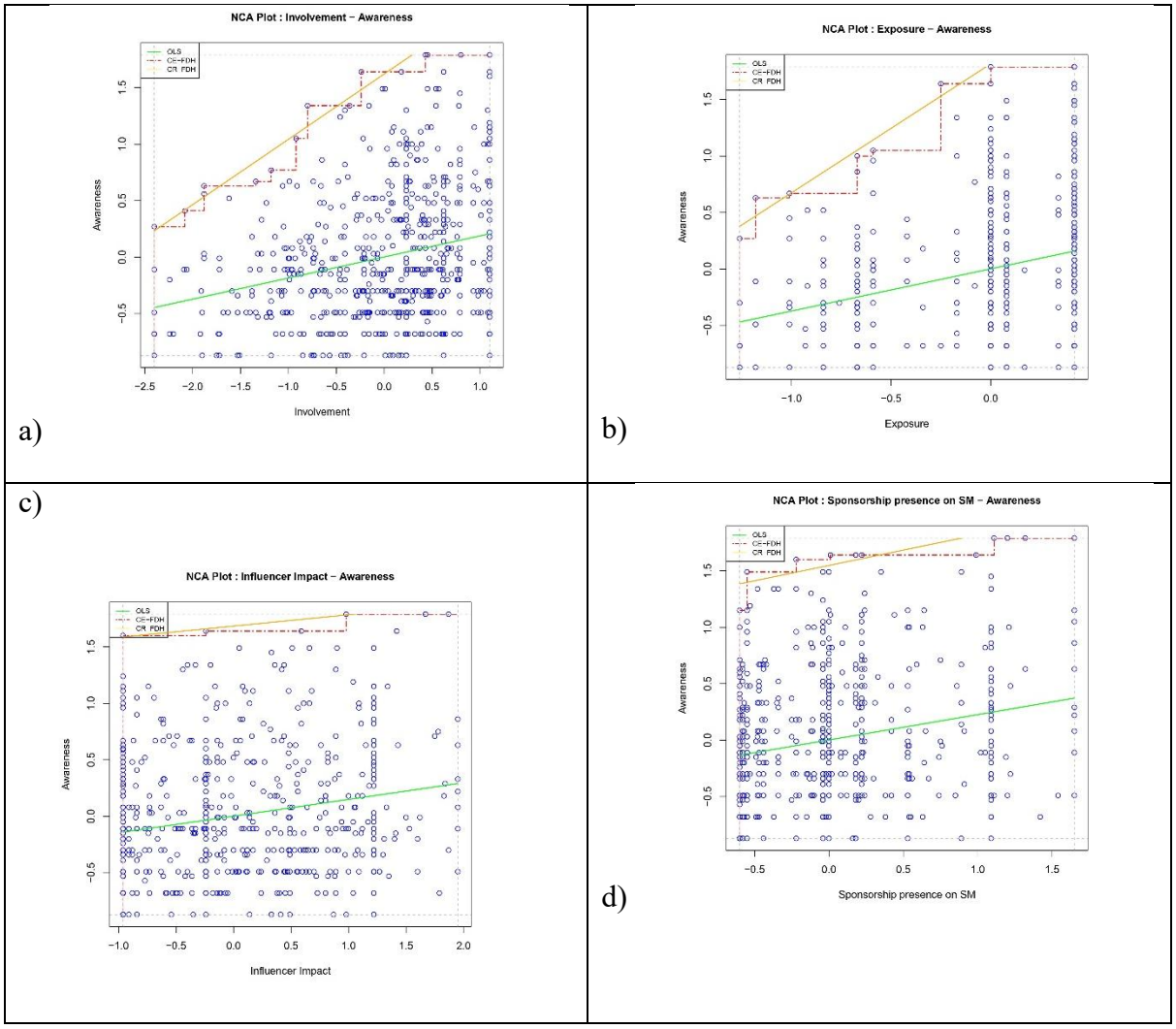
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Appendix 1: NCA scatter plots

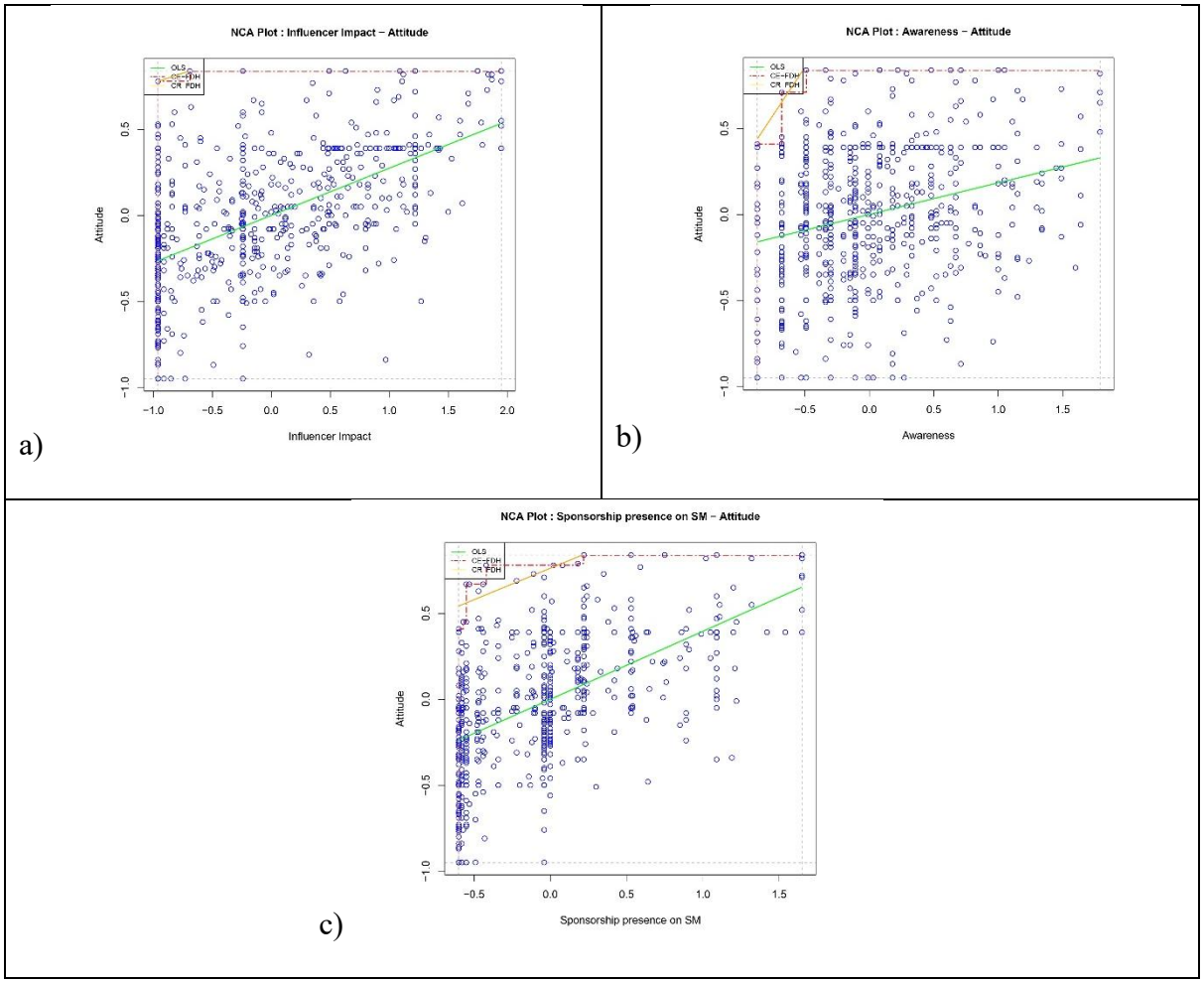
Appendix 1.1: NCA scatter plots for the dependent construct *Awareness*

Figures 2a-2d



Appendix 1.2: NCA scatter plots for the dependent construct *Attitude*

Figures 3a-3c



Appendix 1.3: NCA scatter plot for the dependent construct Purchase Intention

Figure 4

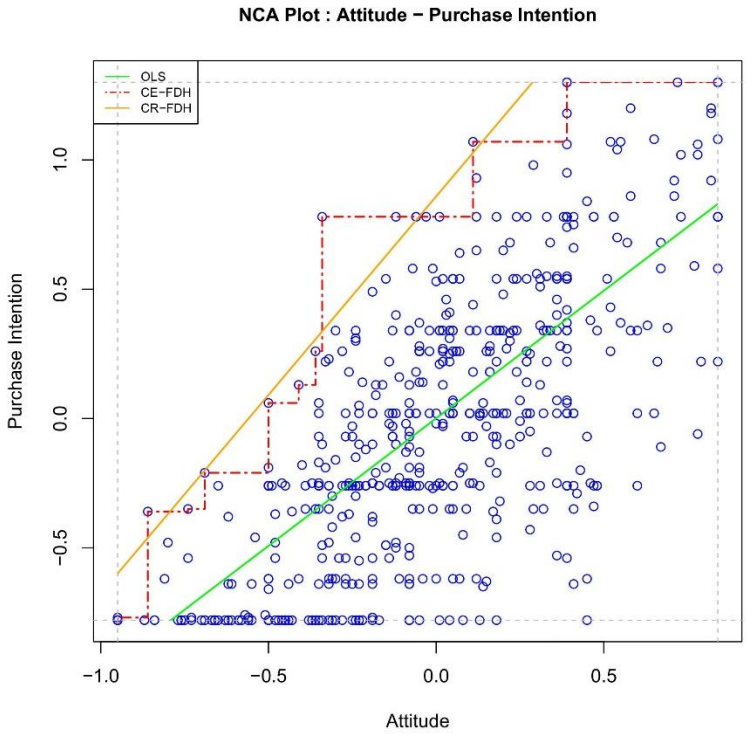

NCA Plot : Attitude − Purchase Intention
OLS
CE−FDH
CR−FDH
Purchase Intention
1.0
0.5
0.0
−0.5
−1.0
−0.5
0.0
0.5
Attitude

Table 1: Internal consistency and reliability of the proposed conceptual model constructs – Cronbach's alpha, AVE and CR (Source: Authors' own work)

Construct	Number of items	Cronbach's Alpha	AVE	CR
Involvement	6	0.845	0.565	0.886
Exposure	2	0.718	0.792	0.883
Awareness	2	0.748	0.803	0.890
Influencer impact	7	0.938	0.732	0.950
Sponsorship presence on SM	4	0.840	0.692	0.899
Attitude towards sponsors	7	0.870	0.570	0.902
Purchase intention	5	0.893	0.701	0.921

Table 2: Detailed final model assessment (Source: Authors' own work)

Construct	Predictor	Unstd. Coeff.	Std. Coeff.	C.R.	p-value	R^2
Awareness	Involvement	0.206	0.153	3.185	0.001	10.7%
	Exposure	0.579	0.239	4.683	0.000	
	Influencer impact	0.110	0.092	2.013	0.044	
	Sponsorship presence on SM	0.270	0.133	2.823	0.005	
Attitude	Influencer impact	0.217	0.442	10.002	0.000	46.1%
	Sponsorship presence on SM	0.376	0.453	8.498	0.000	
	Awareness	0.068	0.165	4.008	0.000	
Purchase intention	Attitude	1.269	0.831	12.559	0.000	69.0%

Table 3: NCA effect sizes (Source: Authors' own work)

Predictor	Awareness		Attitude		Purchase intention	
	Effect size (*d*) CR-FDH	p-value	Effect size (*d*) CR-FDH	p-value	Effect size (*d*) CR-FDH	p-value
Involvement	0.244	0.000**	/	/	/	/
Exposure	0.235	0.000**	/	/	/	/
Sponsorship presence on SM	0.057	0.000*	0.020	0.000*	/	/
Influencer impact	0.041	0.002*	0.003	0.021*	/	/
Awareness	/	/	0.022	0.013*	/	/
Attitude	/	/	/	/	0.334	0.000***

Note: *** large effect size ($0.3 \leq d < 0.5$), ** medium effect size ($0.1 \leq d < 0.3$), * small/trivial effect size ($0 < d < 0.1$)

Table 4: Bottleneck table – Awareness (percentages) (Source: Authors' own work)

Awareness	Involvement	Exposure	Influencer Impact	Sponsorship presence on SM
0	NN	NN	NN	NN
10	NN	NN	NN	NN
20	NN	NN	NN	NN
30	NN	NN	NN	NN
40	NN	NN	NN	NN
50	14.9	4.8	NN	NN
60	34.9	35.1	NN	NN
70	42.3	35.1	NN	NN
80	45.7	60.1	NN	2.2
90	61.7	60.1	NN	16.9
100	80.9	75.0	66.7	76.0

Table 5: Bottleneck table – Attitude (percentages) (Source: Authors' own work)

Attitude	Awareness	Influencer Impact	Sponsorship presence on SM
0	NN	NN	NN
10	NN	NN	NN
20	NN	NN	NN
30	NN	NN	NN
40	NN	NN	NN
50	NN	NN	NN
60	NN	NN	NN
70	NN	NN	NN
80	7.1	NN	2.2
90	7.1	NN	2.2
100	14.3	9.3	36.4

Table 6: Bottleneck table – Purchase Intention (percentages) (Source: Authors' own work)

Purchase intention	Attitude
0	NN
10	5.0
20	5.0
30	25.1
40	25.1
50	33.0
60	34.1
70	34.1
80	59.2
90	74.9
100	74.9