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Determinants of Future Intentions in a Virtual Career: The Role of Brand Variables

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Abstract

This study aims to analyze, through structural equation modelling, the interaction between the variables of congruence, trust, commitment, satisfaction and word of mouth (WOM) in the context of a virtual sporting event, determining the significant relationships between these variables and their ability to predict participants' future intentions. A structured questionnaire based on previously validated scales was applied to a sample of participants of the Medellín Virtual Marathon. The data obtained were analyzed using structural equation modelling to examine the relationships between the variables studied. The results confirm that congruence significantly influences trust and commitment, while trust mediates its relationship with commitment, satisfaction and WOM. Furthermore, it is observed that commitment has a direct impact on satisfaction and WOM, with satisfaction being the most relevant predictor of recommendation intentions. The model used showed an adequate fit, and the instrument used presented satisfactory psychometric properties. These findings underline the importance of strengthening the congruence between participants' identity and event branding, promoting trust through positive experiences and leveraging WOM as a key promotional tool for e-sport events. This study contributes to academic knowledge by exploring the interactions between these variables in the context of virtual sport events, offering valuable information for decision-making in the management and promotion of this type of event.

Keywords: congruence; brand trust; commitment; satisfaction; sporting events; word of mouth (WOM)



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1. Introduction

In recent years, there has been a marked increase in participation in sport and exercise activities, with a particular emphasis on running. This phenomenon is reflected in the growing interest in popular races, which have experienced a steady increase over the last ten years. This growth has driven not only the number of participants but also the proliferation of available races, the supply of specialized equipment and the evolution of organizational components. Also, the perception of safety at these events has improved significantly, favoured by the low rate of reported incidents among amateur runners, which

reinforces their attractiveness and popularity compared to other types of sporting events (Manzano & Ruiz, 2023; Peterson et al., 2022).

In this context, sporting event attendees and participants are key stakeholders in the success of sporting events. Analyzing and understanding their perceptions and behaviours is crucial to ensure the adoption and effective implementation of practices aimed at improving the customer experience and, ultimately, the success of events (Huang & Chiu, 2024). Sport event experience has emerged as a theoretical concept of increasing relevance within sport management (Theodorakis et al., 2015), with an approach that aligns closely with the dynamics of consumer behaviour in marketing. This concept derives from experiential marketing and is based on customer experience, defined as the result of a series of personal and emotional interactions between the consumer, the main product or service and the service providers. These interactions are determinants for the perception of trust and satisfaction, key variables for designing marketing strategies in the context of sport events (Theodorou et al., 2024).

Marathons have established themselves as urban symbols that not only attract runners but also organizations and governments, due to their accessibility and the economic impact they generate through tourism and indirect employment. In this sense, Hallmann and Breuer (2010) highlight that marathons not only boost tourism activity but also contribute significantly to the image and international positioning of the cities that organize them. Community participation and cooperation between actors, such as public and private organizers or associations, are key factors to ensure a cohesive and successful experience (Desbordes & Falgoux, 2006; Gursoy & Kendall, 2006).

Over time, marathons have experienced a remarkable growth in global participation. During the first wave of popularity in the 1980s, North America led the way with an 82% participation in finishes and 52% of events organized. In the second wave, Europe emerged as a leading player, reaching a 42% share of arrivals and 46% share of events (Scheerder et al., 2015). Asia is now showing steady growth, accounting for one-fifth of arrivals and hosting approximately 10% of global events. Despite this, North America still stands out in terms of relative participation, with 1034 marathon finishers per million inhabitants, compared to 221 recorded in the rest of the world (Scheerder et al., 2015). However, Andersen (2019) notes that global participation has decreased by 13% since 2016, although Asia continues to record steady growth.

In South America, marathons have gained remarkable popularity, establishing themselves in 2023 as events that offer unique experiences for international runners. Notable examples include the Buenos Aires Marathon, recognized as the fastest course in the region (Buenos Aires Herald, 2023), and the Medellín Marathon, which provides a chance to qualify for the iconic Boston Marathon (Medellín Marathon, 2024).

In recent years, there has been a significant increase in participation in sport and exercise activities, with running being one of the most popular practices. This increase can be explained by the accessibility that characterizes this activity, which requires a low financial investment, a minimal learning curve and basic equipment, facilitating its adoption by a wide variety of individuals (Chowdhary et al., 2024; DeJong Lempke & Hertel, 2022). The COVID-19 pandemic, characterized by social distancing mandates and the temporary closure of numerous fitness facilities, led to a significant increase in running as a form of exercise. This phenomenon was observed among both novice and experienced runners, establishing itself as an accessible and adaptable alternative in a context of health constraints (A. F. DeJong et al., 2021a; Holmes et al., 2021). This growth has been accompanied by a massive adoption of related technologies, especially fitness tracking devices (Chowdhary et al., 2024), which are an important basis for targeted monitoring in virtual running.

In response to the disruption caused by the pandemic, virtual races emerged as a viable alternative that enabled the continuation of running practices despite public health restrictions. This adaptation involved the implementation of technological platforms equipped with geolocation and timing systems, which facilitated remote participation by runners from their own environments without diminishing the competitive and symbolic essence of the event (Marcu et al., 2021). Events such as the Comrades Marathon in South Africa demonstrated that, beyond a temporary contingency, virtual formats generated meaningful user experiences, preserved a brand connection, and fostered new forms of participation and social engagement (Woyo & Nyam&1, 2022; M. DeJong et al., 2021b).

From a relational and technological standpoint, the integration of mobile applications and digital tools has enhanced the runner's experience in virtual environments, reinforcing dimensions such as trust, brand congruence, and word-of-mouth intentions (Phua, 2024). Although virtualization presents challenges—such as the absence of non-verbal cues and limited physical interaction—evidence suggests that well-structured virtual events can sustain community engagement, participant motivation, and perceived satisfaction (McIntyre, 2022). Therefore, virtual races should not be viewed merely as a temporary response but rather as a sustainable model with enduring potential within the digital sports ecosystem.

In this context, the present study seeks to analyze participants' perceptions in the context of events such as virtual races. These competitions, conducted alone, but guided by precise indications, raise questions about the existence of congruence, trust and commitment on the part of participants, and how these factors influence their overall satisfaction. Furthermore, the possibility that these positive experiences promote favourable word of mouth, thus contributing to the dissemination and popularity of such sporting events, is examined.

2. Theoretical Framework

2.1. Brand-Consumer Congruence: Evolution and Applications in Consumer Behaviour

This theoretical framework builds upon the principles of congruence theory and consumer–brand relationships, with the goal of explaining how psychological and perceptual variables interact within the context of virtual running events. The constructs analyzed have been widely explored in physical sports environments; however, their application to digitally mediated experiences is still evolving. The present section introduces the literature on brand–consumer congruence and its relationship with trust—one of the key links hypothesized in the proposed model.

Congruence is defined as the degree to which a brand aligns with the user's image, i.e., how consumers perceive a brand to reflect their own identity. Studies have shown that products that reflect the user's image and match the user's self-concept are more likely to be purchased or consumed (Sirgy, 1982). Following the same author's line, congruence can be classified into four categories: current congruence, ideal congruence, social congruence and ideal social congruence. Actual congruence refers to the relationship between the brand image and the user's actual perception of the brand. Ideal congruence is based on the comparison between the attributes of a typical brand user and the image that consumers wish to project. Social congruence assesses the relationship between the brand image and the perception that consumers believe the important people around them have of them. Finally, ideal social congruence focuses on the relationship between brand image and the way consumers wish to be seen by others.

From a more recent perspective, Martínez-Cevallos et al. (2020) define congruence as the degree of coincidence or fit between the brand image and the user's own image. In this sense, the greater the match, the more likely consumers are to make positive evaluations and develop a high preference for the brand (Hee Kwak & Kang, 2009).

2.1.1. Evolution of the Concept of Congruence and Its Impact on Consumer Behaviour

The study of the link between consumer image and brands has its theoretical roots in the contributions of [Levy \(1959\)](#), who found that consumers are not solely oriented by practical functions, but that their behaviour is influenced by the symbols of products and brands present on the market. This approach allowed researchers to better understand consumer behaviour in relation to self-concept and product consumption.

One of the first empirical studies in this line was that of [Dolich \(1969\)](#), who found that individuals tend to prefer brands that resemble their own image, rather than those with less recognition. In addition, he identified differences in the perception of the real image and the ideal image when it comes to prominent brands but not for less relevant ones. [Sirgy \(1986\)](#) later extended the concept of congruence and developed the theory of self-congruence, which holds that consumer behaviour is influenced by the psychological comparison between the product–user image and the consumer’s self-concept. This comparison involves the user’s actual image, his ideal image and his social image. According to this theory, self-congruence can be classified as high or low, depending on the degree of fit between the product image and the consumer’s perception. High self-congruence occurs when the consumer perceives that the product matches his or her own image, while low self-congruence occurs when this relationship is weak or non-existent.

Self-congruence theory posits that consumers are motivated to engage with brands that reflect and reinforce their personal identity ([Sirgy et al., 1997](#)). However, this relationship may also be moderated by contextual or emotional factors ([Grace & O’Cass, 2005](#)).

2.1.2. New Perspectives on Congruence Research

[Hee Kwak and Kang \(2009\)](#) note that several marketing studies have based their research on George Mead’s self theory, identifying a similar phenomenon called self-image congruence. According to these authors, self-concept helps explain product symbolism, suggesting that consumers are more attracted to products that resemble their identity. Similarly, [Yim et al. \(2007\)](#) found that self-congruence between consumers’ self-image and their perception of a service is associated with a higher likelihood to repurchase and a lower propensity to switch suppliers. From a strategic perspective, [Su and Reynolds \(2017\)](#) argue that consumers tend to prefer brands that reflect their personal identity, suggesting that companies should focus their efforts on their target market to enhance consumer loyalty. This view is supported by [Keller \(1993\)](#), who analyzes congruence from the perspective of brand associations and concludes that when there is congruence between these associations, attitudes towards the brand are more positive, which in turn can increase purchase intention.

Other studies reinforce this idea. [Dees et al. \(2010\)](#), [Papadimitriou et al. \(2016\)](#) and [Rodgers \(2007\)](#) found that congruence significantly influences purchase intent, highlighting the importance of companies correctly identifying and segmenting their market to maximize the connection between brand and consumer. More recently, [Nguyen et al. \(2023\)](#) investigated the relationship between brand personality and the intention to revisit hotels, highlighting that congruence with the tourist’s self-image plays a key mediating role in this process. These findings reinforce the notion that perceived congruence not only influences the initial purchase but also consumer loyalty within the hospitality industry. On the other hand, [Li et al. \(2022\)](#) proposed a moderated mediation model in which the congruence of consumer self-image and brand influence brand preference.

Finally, [Chandra and Adam \(2024\)](#) analyzed the impact of corporate brand credibility, brands’ origin and self-image congruence on purchase intention, using the case of Pt Mustika Ratu TBK in Indonesia. Their results indicated that a greater congruence between consumer self-image and corporate brand reinforces trust and willingness to purchase,

which has important implications for branding and marketing strategies in emerging markets. These studies confirm that the congruence between consumer self-image and brand image remains a key determinant of purchase intent, trust and customer loyalty.

2.1.3. Congruence in the Context of Sport

Congruence has been extensively studied in the sport domain because of its impact on consumer perception, attitude and behaviour. In this context, congruence refers to the degree of alignment between consumer self-image and the characteristics of a sport brand, event or product, which can influence consumer decision-making, loyalty and satisfaction. According to [Y. Zhang et al. \(2021\)](#), congruence between the image of a sport event and that of the host city significantly influences attendees' attitudes and behaviours by generating a stronger emotional connection to the event and its surroundings. This phenomenon has also been analyzed from the perspective of sponsorship strategies and partnerships with sports celebrities. [Rai et al. \(2021\)](#) highlight that congruence between the personality of a sports celebrity and the brand he or she represents can strengthen brands' credibility and enhance consumers' purchase intent, especially when there is a clear identification between the athlete's values and the brand's attributes.

In a more recent study, [Mal et al. \(2023\)](#) examined how congruence between user identity and the characteristics of a virtual environment significantly influences perceptions of plausibility, presence and connection to the experience. Their research suggests that a greater congruence between consumer self-image and product image can lead to greater brand identification and a stronger preference, positively impacting consumer behaviour and purchase decisions. These findings can be extrapolated to the sports domain, where perceived congruence between the consumer and a sports brand can intensify the fan experience and their willingness to recommend the event or product.

One of the areas where congruence has proven to be key is sports sponsorship. [Ko and Kim \(2014\)](#) found that congruence between the sponsor and the sponsored product has a significant effect on consumer perception, improving their attitude towards the brand and their purchase intention. Sponsorship congruence is a fundamental element in sports marketing strategies, as it directly influences consumers' perceptions, attitudes and behaviour towards brands associated with sporting events ([Meenaghan, 2001](#)). [Wang \(2017\)](#) analyzed the effects of different types of congruence on the brand equity of sponsors, concluding that when there is a clear perception of alignment between the brand and the event, the perception of quality and the intention to recommend the brand increases. This phenomenon underlines the importance of a consistent association between sponsor attributes and event characteristics to generate a positive and consistent image in the consumer's mind.

In a complementary manner, [Alonso Dos Santos et al. \(2024b\)](#) evaluated the effectiveness of sponsorship congruence through self-reported responses and the use of electroencephalography. Their study found that increased alignment between sponsor and event identity activates brain regions associated with plausibility and emotional connection, which strengthens the brand–consumer relationship. This finding suggests that congruence not only acts on a cognitive level but also has a significant emotional impact on consumer behaviour. Along the same lines ([Alonso Dos Santos & Calabuig, 2018](#); [Alonso Dos Santos et al., 2019](#)) applied neuroscientific techniques to measure brain activity in response to stimuli related to brand congruence in sports contexts. These studies revealed that a positive perception of congruence increases consumers' self-confidence and their willingness to purchase products licensed by sports teams. In this way, congruence not only favours purchase intention but also strengthens the emotional attachment to the brand and generates a greater willingness to recommend the brand in their social environment.

In digital sports contexts, where symbolic and identity cues must be communicated virtually, perceived congruence contributes to building a coherent and believable brand experience (Phua, 2024). In the case of virtual marathons, elements such as the application's design, social connection tools and personalized digital content may enhance the alignment between participants' self-concept and the event, fostering greater emotional involvement and reinforcing perceived authenticity (Woyo & Nyam&1, 2022). Similarly, studies in immersive virtual environments suggest that congruence between user identity and digital context can strengthen feelings of plausibility and presence, which are key for engagement (Mal et al., 2023). Based on the evidence reviewed, perceived congruence has shown a consistent effect on attitudinal variables such as brand trust. In digital sports contexts, where symbolic and identity cues must be communicated virtually, congruence remains essential in building a coherent and believable brand experience (Phua, 2024). Therefore, in the context of virtual races, we hypothesize that perceived congruence positively influences participants' trust in the event.

H1. *Brand–event congruence positively influences trust.*

H2. *Brand–event congruence influences commitment.*

2.2. Trust in Consumer Behaviour

Trust has been extensively studied in the field of consumer behaviour and is considered a key determinant of purchase decisions and brand loyalty. Howard and Sheth (1969) identified it as a key element in purchase intention, observing that consumers who trust a brand are more willing to buy its products. Subsequent research has reinforced this relationship, showing that trust influences both quality perception and consumer preference for a specific brand (Laroche & Brisoux, 1989). In digital contexts, trust becomes even more relevant due to the lack of physical interaction, requiring users to rely on the perceived consistency and credibility of the brand's digital presence (Natarajan et al., 2024).

In this sense, trust in a brand is based on the expectation that the brand will deliver on its promises, providing a secure transaction and reducing uncertainty (Natasiah, 2024). Dawar and Pillutla (2000) define brand trust as an overall positive evaluation of brand reliability, while Howard (1989) argues that brand trust arises when the consumer perceives that the brand maintains consistently high standards of quality. Ferro-Soto et al. (2024) emphasize that trust is built through the consumer's previous experience with the brand, its reputation in the marketplace and the consistency of its communication and values. Trust also serves as a cognitive shortcut in online settings, where consumers cannot validate information through sensory cues and must instead rely on brand signals mediated by technology (Phua, 2024).

2.2.1. Trust and Relationship Marketing

In relationship marketing, trust is considered a fundamental building block for the creation of long-lasting relationships between brands and consumers. Moorman et al. (1992) describe trust as the willingness to depend on a trusted exchange partner, highlighting its role in cementing long-term relationships. Morgan and Hunt (1994) argue that trust and commitment are essential to building successful business relationships, noting that the perceived credibility and integrity of a brand influences consumers' willingness to continue the relationship. From this perspective, trust also plays a key role in customer loyalty. Storbacka et al. (1994) and Castro and Armario (1999) identify trust as an essential factor in maintaining stable relationships between suppliers and customers. In this line, Roberts (2005) suggests that trust in a brand is built through the fulfilment of promises, innovation, value creation, reputation and accountability in the provision of quality.

This is especially important in virtual ecosystems where relational continuity must be sustained without face-to-face contact, making perceived brand integrity critical for digital loyalty (Pan & Phua, 2021). Recent studies have reinforced these findings, highlighting the importance of trust in generating brand loyalty and recommendations. Ball et al. (2004) and Kenning (2008) argue that greater brand trust increases customer satisfaction and reduces the propensity to switch supplier. More recently, Natarajan et al. (2024) highlighted that trust and engagement are determinants of customer retention in digital environments, where the absence of physical interaction makes the perception of trust even more relevant.

2.2.2. Trust in the Business and Inter-Organizational Context

In business, trust is defined as the expectation that a firm will perform as expected in an exchange relationship, resulting in better long-term performance and competitive advantage (Doney & Cannon, 1997; Geyskens et al., 1998). This trust is not only manifested in the relationship with consumers but also at the inter-organizational level, where it facilitates cooperation and resource sharing between entities (Schilke & Lumineau, 2023).

Recent research has explored the importance of trust in inter-organizational relationships and its impact on the success of strategic alliances. Vargas-González and Toro-Jaramillo (2022) argue that trust is a key factor in the sustainability of organizations, as perceived trustworthiness influences cooperation and the reduction of uncertainty in the market. In the same vein, Ferro-Soto et al. (2024) highlight that trust influences the performance and success of inter-organizational strategies, with effective communication in distribution channels being very important.

On the other hand, in the context of collaborative innovation, trust has proven to be a key facilitator in the creation of joint projects and knowledge sharing. Pino García et al. (2018) analyzed how trust impacts the effectiveness of innovation projects, concluding that its presence reduces the perception of risk and fosters a greater willingness to share resources and knowledge among strategic partners.

2.2.3. Trust in Sport and Its Relationship with Engagement, Satisfaction and WOM

Trust in sport is a key factor in the connection between consumers and event brands, influencing loyalty, engagement and word of mouth (WOM). In sports marketing, trust in a sports brand or sponsor is built on perceived credibility, integrity and consistency (Pan & Phua, 2021). This also applies to virtual sports environments, where trust enables the transition from physical to digital engagement, preserving identification with the brand despite spatial dislocation (Phua, 2024).

In the context of sporting events, trust drives participant engagement, reinforcing their identification with the brand and increasing the likelihood of recurrent participation (Martínez-Cevallos et al., 2020). It has also been shown that trust in the brand of an event has a direct impact on consumer satisfaction, as it generates security in the experience and fulfilled expectations (Martínez-Cevallos et al., 2024). This perceived reliability becomes essential when the event occurs remotely, and participants must rely on digital platforms and communication to guide their experience.

In turn, this satisfaction translates into positive WOM, as consumers who are satisfied with an event they trust are more likely to recommend it. Filo et al. (2008) highlighted that trust acts as a mediating mechanism between brand associations and loyalty in the sport context, suggesting that greater trust generates more stable relationships with consumers and reinforces their recommendation behaviour. In this way, trust is consolidated as a key element that enhances brands' image, loyalty and social influence of participants (Deheshti et al., 2016).

H3. *Trust positively influences commitment with the virtual sporting event.*

H4. *Consumer trust in the virtual sporting event has a positive effect on their level of satisfaction.*

H5. *Trust positively influences word-of-mouth intention.*

2.3. Commitment to the Brand

Brand commitment has been extensively studied in the consumer behaviour and relationship marketing literature and is considered a key factor in building long-lasting consumer–brand relationships. Moorman et al. (1992) conceptualize it as an enduring desire to maintain a valued relationship, while Morgan and Hunt (1994) understand it as the intention to maintain a long-term bond with a brand. Similarly, Dwyer et al. (1987) describe it as an implicit or explicit promise of continuity in the relationship, underlining the relevance of commitment within relationship marketing. Brand commitment not only reinforces consumers' affective attachment to a brand but also strengthens their resistance to competing alternatives, especially when there is a perceived alignment with personal values and lifestyle choices (Fullerton, 2003; Banerjee & Chaudhuri, 2022).

From a psychological perspective, Traylor (1981) posits that brand commitment reflects the degree to which a consumer perceives a brand as his only acceptable choice, which reinforces his loyalty and reduces his propensity to switch to competitors. O'Reilly and Chatman (1986) define it as a psychological bonding force, emphasizing the emotional nature of the link between the consumer and the brand. In virtual sports contexts, these emotional bonds are often intensified by digital touchpoints that offer continuous interaction, personalized feedback, and gamified milestones that enhance engagement (Phua, 2024).

2.3.1. Dimensions of Engagement: Assessment and Emotional Connection

Brand engagement is not only based on the consumer's experience but also on their emotional connection to the brand. Banerjee and Chaudhuri (2022) argue that this bond acts as a driver of loyalty, influenced by both rational evaluations and affective factors. Bari and Shahzadi (2022) reinforce this idea by pointing out that engagement develops when there is a positive and consistent perception of the brand, ensuring its sustainability over time. In digitally mediated events, engagement is sustained through technologies that provide real-time performance tracking, social sharing functionalities and digital rewards, which enhance both affective and calculative commitment (Liu et al., 2024).

Gundlach et al. (1995) and Pritchard et al. (1999) explain that brand commitment is composed of social and psychological factors that motivate consumers to maintain a stable relationship. Along these lines, Geyskens et al. (1996) identify two types of commitment: calculated commitment, based on the convenience and perceived cost–benefit of maintaining the relationship with the brand, and affective commitment, based on emotional attachment, which generates identification with the brand and long-term loyalty. These two types of engagement can coexist to varying degrees depending on the type of product or service, as well as the relationship that the consumer establishes with the brand (Chatzopoulou & Tsogas, 2017; Gullupunar & Gulluoglu, 2013).

2.3.2. Engagement and Switching Costs: The “Dark Side” of Relationship Marketing

While brand engagement is generally associated with loyalty and satisfaction, some authors warn about the negative effects of forced engagement. Fullerton (2005) mentions the concept of continuity commitment, based on Becker's (1960) parallel stakes theory, according to which consumers stay in a relationship to avoid the loss of extra-relational benefits.

Fournier et al. (1998) describe this dynamic as the “dark side” of relationship marketing, where engagement is not exclusively due to a valuable relationship with the brand but to factors such as a lack of viable alternatives, high switching costs or an established depen-

dence on the company. In these cases, engagement ceases to be voluntary and becomes an obligation, which can affect consumer satisfaction and perception in the long run.

2.3.3. Congruence, Trust and Commitment in Sporting Events

Beyond sponsorship and sport product consumption, congruence plays a central role in the relationship between participants and sport events. It has been shown that when runners perceive a strong congruence between their personal identity and the image of the event, emotional bonds are generated that strengthen their trust in the organization, their commitment to the event and their satisfaction with the experience (Martínez-Cevallos et al., 2020).

In the sports context, trust in an event is influenced by the perceived congruence between the sponsoring brands and the characteristics of the event. Biscaia et al. (2014) analyzed the effectiveness of sponsorship in professional football, concluding that a greater congruence between the sponsor and the event favours recall, recognition and, consequently, a stronger perception of the organization's credibility. This alignment generates a sense of coherence that reinforces attendees' confidence in the quality and professionalism of the event.

In terms of engagement, Kaplanidou (2010) highlighted that the congruence between the image of the event and the identity of the participants significantly influences their loyalty. In prestigious events, such as the New York Marathon, runners who identify with the history and values of the event show greater commitment, reflected in their recurrent participation and the purchase of official products. In the case of virtual races, the perception of congruence drives the dissemination of the event on social networks and increases the intention to participate in future editions. Also, such as digitally mediated marathons, participants' emotional and social connection to digital platforms (through features like leaderboards, in-app communication, and virtual communities) has been shown to significantly increase brand commitment and repeat participation (Waśkowski & Jasiulewicz, 2022).

Finally, in terms of satisfaction, Martínez-Cevallos et al. (2024) found that when runners perceive that the image of the event aligns with their personal values, their satisfaction with the experience increases significantly. This congruence reinforces their intention to recommend the event and to repeat their participation in future editions.

These findings highlight that congruence not only impacts consumers' initial perception but also influences their trust, engagement and satisfaction in the long term. In this sense, Alguacil et al. (2019) highlights the importance of implementing branding strategies aligned with the identity of participants, in order to optimize their experience and foster their loyalty at sporting events.

2.3.4. Relationship Between Commitment, Trust and Satisfaction

Trust and commitment are two interconnected pillars of relationship marketing. Morgan and Hunt (1994) demonstrated that trust directly influences commitment, which in turn impacts consumer behaviour. In the same vein, Sargeant and Lee (2004) argue that commitment is a mediating construct derived from satisfaction and trust, facilitating customer retention.

From a marketing channel perspective, Morgan and Hunt (1994) and Kumar et al. (1994) argue that commitment is an indicator of solidarity and cohesion, encouraging firms to prioritize long-term benefits over short-term opportunistic strategies. Similarly, Geyskens et al. (1996) suggest that interaction and constant exchanges strengthen trust and commitment, leading to more sustainable business relationships.

2.3.5. Engagement in Sport: Impact on the Recommendation

Engagement in sport is a key factor in the relationship between consumers and sport events, as it influences participants' loyalty, satisfaction and willingness to recommend the event (word of mouth, WOM). In this context, engagement not only translates into recurrent participation in sport events but also into emotional connection with the brand identity (Pan & Phua, 2021).

Martínez-Cevallos et al. (2020) found that the brand image of a sporting event significantly influences the level of engagement of its participants, highlighting that a positive perception of the brand translates into greater loyalty and a greater willingness to recommend the experience. Similarly, J. L. Chen and Wang (2021) note that brand positioning and event marketing strategies have a direct impact on consumer loyalty, mediated by brand identification and brands' personality.

Another key aspect of engagement in sport is its differentiation by demographic and emotional factors. Amor et al. (2022) analyzed the influence of gender on brand recommendation in e-sports events, concluding that the level of engagement varies according to the consumer profile, which implies that loyalty strategies should be adapted to the characteristics of the target audience.

This means that engagement in sport not only drives participant loyalty and satisfaction, but also acts as a catalyst for positive WOM, strengthening the event's image and relationship with sponsors.

H6. *Brand commitment positively influences satisfaction in virtual sporting events.*

H7. *Brand commitment positively influences WOM intention in virtual sporting events.*

2.4. Satisfaction

2.4.1. Conceptualization and Theories of Satisfaction

The study of customer satisfaction has been developed since the late 1960s, establishing itself as a key concept in research on service quality and customer loyalty. Pioneering research such as that of Cardozo (1965) and Howard and Sheth (1969) explored its impact on purchasing behaviour, laying the foundations for its subsequent study.

Oliver (1981) conceptualized satisfaction as the evaluation of the surprise inherent in obtaining a product and the consumption experience, understanding it as an emotional and cognitive phenomenon. Later studies extended this definition: Fornell (1992) and Olsen et al. (2005) agreed that satisfaction is an overall evaluation made by the consumer after the purchase, describing it as a positive emotional state associated with the product or service experience.

The importance of satisfaction in business management has been widely documented. Llorens and Fuentes (2000) pointed out that high levels of satisfaction are directly related to businesses' success and profitability, making it a key indicator of organizational performance. Bitner (1990) and Claver et al. (1999) argued that satisfaction arises from the comparison between expectations and perceptions of the product or service performance, establishing that, if expectations are met or exceeded, satisfaction is generated; otherwise, dissatisfaction appears.

Satisfaction not only impacts the business–customer relationship but can also affect organizational performance in the long run. Moliner and Fuentes (2011) noted that a negative customer experience can reduce customer loyalty and have adverse effects on corporate profitability. Similarly, Elasri Ejjaberi et al. (2015) found that a satisfactory experience increases customer loyalty and repurchase intention.

2.4.2. Satisfaction and Marketing

The concept of satisfaction has been integrated into marketing strategies as a fundamental pillar in customer retention and building sustainable customer relationships. Celestino and Biencinto (2012) emphasize that satisfaction should be at the heart of marketing strategies, as it is not only about making sales but also about ensuring that products and services meet the needs of users.

Luna-Arocas and Mundina (1998) argue that satisfaction should be part of the company's philosophy, influencing strategic planning and marketing decision-making. Along these lines, Calabuig et al. (2010) argue that knowing the elements that generate consumer satisfaction allows organizations to improve their value proposition and strengthen customer loyalty.

Positive WOM (word of mouth) is one of the clearest manifestations of the impact of satisfaction in marketing. Morales and Hernández (2004) argue that user loyalty is directly affected by their level of satisfaction, implying that a positive experience encourages brand recommendations, while a negative experience may deter new customers.

In terms of perceived quality, Chelladurai and Chang (2000) and Kang and James (2004) emphasize that consumer satisfaction is closely linked to service quality, making it a key criterion in business management and strategic decision-making.

2.4.3. Satisfaction in Virtual and Technologically Mediated Sporting Events

With the advent of digital platforms and the rise of virtual marathons during the COVID-19 pandemic, the concept of satisfaction has expanded beyond physical event experiences. Phua (2024) notes that technological mediation through mobile applications, GPS tracking and virtual social interactions have significantly shaped user satisfaction in virtual marathons, enabling a continuity of emotional engagement and perceived authenticity despite the absence of in-person competition.

Similarly, Woyo and Nyamandı (2022) found that satisfaction in virtual race environments is linked to elements such as symbolic engagement, flexibility of participation and the sense of community fostered by digital tools. In this sense, Kim et al. (2018) state that both social presence and digital interaction can improve satisfaction as they align identity with personal achievements. However, they also indicate that virtual interaction does not always bring favourable experiences, since it is necessary to make participant feel truly connected, in line with the previously commented sense of community.

2.4.4. Relationship of Satisfaction with Trust, Commitment and WOM

Satisfaction is a key variable in customer relationship management, and its impact extends to multiple dimensions, especially trust, commitment and WOM. Giese and Cote (2000) argue that satisfaction is an emotional state derived from the consumer's interaction with the brand, suggesting that it influences the building of long-term trust.

The link between satisfaction and engagement has also been extensively documented. Elasri Ejjaberi et al. (2013) argue that satisfaction is a key determinant of consumer engagement with the brand, as a positive experience reinforces the perception of value and fosters continuity in the relationship. Sarstedt et al. (2014) reinforce this idea, noting that satisfaction drives repurchase intention and customer loyalty. This becomes even more relevant in virtual sports settings, where traditional interpersonal trust cues are replaced by technological reliability and perceived brand integrity.

In the context of WOM, Okayasu et al. (2016) explain that satisfaction influences the spread of opinions among consumers. Studies such as those by Albayrak and Caber (2015) and Oliver (2010) have confirmed that satisfied customers are more willing to recommend a brand or event, which generates an organic and effective marketing strategy.

2.4.5. Satisfaction in the Sport Context

The study of satisfaction has become particularly relevant in sport management, where it has become a key indicator of spectator and participant experience in sport events. [Biscaia et al. \(2023\)](#) and [Calabuig et al. \(2021\)](#) highlight that satisfaction in this field is understood as the customer's evaluation of the fulfilment of their expectations in relation to the sport event or service. From a more specific perspective, [Yoshida and James \(2010\)](#) define satisfaction in sport as a "pleasurable and satisfying response to the entertainment of a sport competition and/or the ancillary services provided during an event" (p. 340). This satisfaction can be determined both by the quality of the spectacle and by ancillary elements such as the logistics of the event, the comfort of the facilities and interaction with the event community.

The impact of satisfaction on sport marketing is significant. [Morales et al. \(2009\)](#) argue that competitiveness in sport organizations requires the development of differentiation strategies focused on user satisfaction. [Dorado \(2006\)](#) highlights that satisfaction in sport events is closely related to the perceived quality of the event, influencing the loyalty of attendees and their intention to participate in future editions. In terms of promotion and recommendations, [Martínez-Cevallos et al. \(2024\)](#) have found that satisfaction at sporting events not only impacts repurchase intention but also acts as a key factor in generating positive WOM. Studies such as [Okayasu et al. \(2016\)](#) reinforce the importance of satisfaction in spectator retention, suggesting that a positive experience increases the likelihood that attendees will share their experience and recommend the event to others.

Finally, [Oliver \(2010\)](#) stresses that satisfaction at sporting events must be managed strategically, ensuring that the user experience is consistent with the image of the brand or event. This involves detailed planning in terms of service, spectator experience and brand communication, thus ensuring user loyalty and strengthening the identity of the sporting event.

H8. *Satisfaction with the event has a positive effect on consumers' intention to recommend the event (WOM).*

2.5. Future Intentions—WOM: Concepts and Theories

The concept of word of mouth (WOM) has been extensively studied in the consumer behaviour and marketing literature, standing out as one of the main forms of interpersonal communication that influences purchase decision-making ([Triantafyllidou & Siomkos, 2014](#)). WOM can be manifested orally or in writing, with the rise of social media enhancing its reach through electronic word of mouth (eWOM) ([Tsai & Bui, 2021](#)).

Future intentions, on the other hand, refer to the consumer's predisposition to repeat a purchase, attend an event again or recommend a product or service ([Vegara-Ferri et al., 2020](#)). [Han and Hyun \(2013\)](#) argue that the congruence between brand image and consumer perception is key in generating loyalty and recommendations, as it directly influences perceived quality and user satisfaction. From a psychological perspective, [Ismail \(2022\)](#) explains that consumers trust the recommendations of their acquaintances more than companies' own marketing strategies, making WOM a determining factor in repurchase and loyalty intentions.

2.5.1. Relationship Between WOM and Marketing

In marketing, WOM is considered an essential factor in building brand reputation, as recommendations from other consumers have a stronger impact on the perceived value of products than traditional advertising ([You & Hon, 2021](#)). [Tsai and Bui \(2021\)](#) highlight that WOM through social media has changed the dynamics of consumption, as purchase

decisions are increasingly influenced by virality and digital feedback. Furthermore, the intention to share opinions about a product or service is not only motivated by customer satisfaction but also by perceived brand identity and congruence (Maisam & Mahsa, 2016). When consumers feel that a brand represents their values and lifestyle, they are more willing to share their experience with others, generating a positive WOM and contributing to long-term loyalty (Šegota et al., 2022).

2.5.2. Relationship of WOM to Congruence, Commitment, Trust and Satisfaction

WOM is closely linked to variables such as congruence, commitment, trust and satisfaction: Šegota et al. (2022) found that a self-image congruent with a brand or tourism destination increases the likelihood of generating positive WOM. In the consumer domain, Han and Hyun (2013) argue that perceived congruence strengthens the customer's relationship with the brand, leading to trust and more frequent recommendations. Amenuvor and Tark (2020) argue that pre-consumption information seeking reinforces WOM intention, as consumers who are committed to a brand tend to share their experience to influence the decisions of others. Ismail (2022) reinforces this idea by noting that love for and trust in a brand drives consumers to generate positive WOM.

Satisfaction is another key factor in WOM intention. Triantafyllidou and Siomkos (2014) showed that consumers satisfied with an experience are more likely to share positive recommendations, while dissatisfied consumers tend to generate negative WOM. Du et al. (2020) argue that the impact of social networks on satisfaction with a sport event amplifies WOM communication, which influences the perception of future consumers.

2.5.3. WOM and Future Intentions in the Sport Context

WOM also plays a key role in the sport industry, particularly in sport event management and spectator experience. Vegara-Ferri et al. (2018) note that the factors influencing sports tourists' intention to attend an event again are directly related to previous experience and recommendations from other attendees. The role of eWOM is increasingly relevant in this context. Lai et al. (2022) found that trust in digital sport events and community membership influence the intention to share WOM on social networks. Newland and Yoo (2021) argue that active participants of sport events are more likely to recommend the experience through WOM, which has an impact on the growth and sustainability of the event. Another important aspect is the effect of sport nostalgia on WOM. Rajendran and Arun (2021) found that positive emotions derived from sport nostalgia increase the intention to share experiences through eWOM and the intention to return to future events.

2.5.4. Hypothesis and Structural Model

The general objective is to examine the relationships between brand–consumer congruence, trust, commitment, satisfaction and word-of-mouth intentions in the context of a virtual marathon, using structural equation modelling (SEM) as the analytical technique (see Figure 1). This model proposes eight hypotheses that constitute the specific objectives of the research. On the one hand, it is intended to test whether the relationships established between congruence, trust and commitment show a significant influence, constituting an antecedent to subsequently see whether trust and commitment are capable of significantly predicting both satisfaction and event recommendations, and finally, to test whether event participant satisfaction is capable of significantly predicting event recommendations, and if so, to what extent it does so.

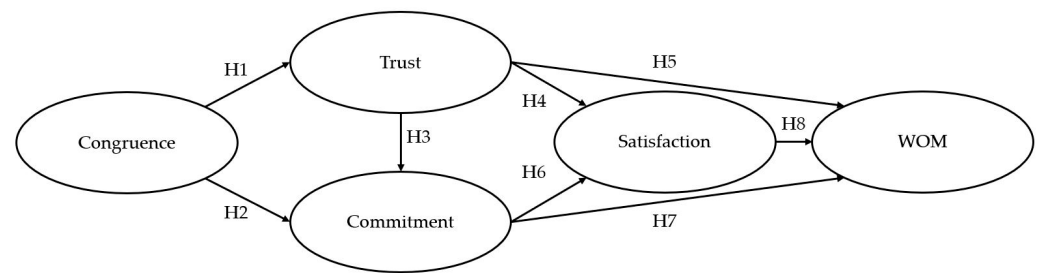


Figure 1. Structural model.

3. Materials and Methods

3.1. Sample

The target population of this study is the 2400 participants of the Medellín-Colombia Virtual Marathon. Virtual races are organized sporting events in which participants complete the race distance independently using mobile applications or GPS-enabled devices to track their performance. These events allow runners to participate from different locations and at flexible times, while still being part of a shared experience through leaderboards or common result platforms (Phua, 2024; Woyo & Nyam&1, 2022). Given the nature of the event and the relevance of its participants to the research objectives, purposive non-probability sampling was employed. This approach enabled the researchers to access a specific and accessible population aligned with the study's focus on virtual sporting experiences.

To achieve the objective of the study, quantitative research was carried out by means of a questionnaire, which was administered to the participants, obtaining 1339 responses, of which 1039 were valid. The data were obtained by means of purposive probability or convenience sampling, and a confidence level of 95% was estimated, with a sampling error of $\pm 4.05\%$. Of the total sample, 69.5% ($n = 712$) were men and 30.5% women ($n = 317$), aged between 18 and 80 years and with a mean of 40.4 (± 10.57) years. Regarding their employment status, 896 participants were employed, representing 88.30%, followed by 45 participants who were retired (4.30%), as well as 43 participants, representing 4.10%, who were unemployed and 34 who were students (3.30%). The Medellín-Colombia Virtual Marathon was organized as a virtual edition of the traditional Medellín Marathon, held annually in Colombia. This virtual format allows runners to complete their races individually using GPS-enabled tracking apps, while still participating in a coordinated and branded competition.

3.2. Instrument

A questionnaire composed of different dimensions related to the brand perception of the event participants was used for data collection. Five study variables were defined for this research: congruence, commitment, trust, satisfaction and recommendation (WOM). Validated scales, existing in the scientific literature, were used and adapted for this research (see Table 1). Specifically, for the measurement of congruence, the Grace and O'Cass (2005) scale was used, which consists of a total of 4 items, and for the study of trust, 1 item was taken from the study by Caceres and Paparoidamis (2007) and 1 item from the study by Donio et al. (2006). On the other hand, to assess commitment, the Fullerton (2005) and Hennig-Thurau (2004) scales were used, extracting 2 items and 3 items, respectively. For satisfaction, the scale of Hightower et al. (2002) was used, consisting of 3 items, as was the scale for assessing recommendation by Zeithaml et al. (1996). This selection of items was made under the criteria of a selection of sports management and marketing experts, based on previous research and doctoral theses. The scales used in the study were shown to be reliable, with Cronbach's alpha values far exceeding the established criterion by Hair et al. (2006), which indicates that the Cronbach's alpha value should be greater

than 0.70 (α Congruence = 0.88; α Trust = 0.88; α Commitment = 0.95; α Satisfaction = 0.90; α WOM = 0.87). The adaptation of the items simply consisted of indicating the name of the event in the corresponding place, substituting other names used in the original scale. For instance, in the trust scale, the original items read “my supplier really takes care of my needs as a customer” and “I feel that I completely trust these firm activities and its products”. In this case, as shown in Table 1, instead of “My supplier” and instead of “This firm”, the Medellín Marathon was indicated, which is the name of the service brand.

Table 1. Instrument.

Variable	Statement
Congruence (Grace & O’Cass, 2005)	The image of this brand is in accordance (congruent) with my own image. Participating in this race reflects who I am. People similar to me participate in this race. The type of person who usually participates in this race is very similar to me.
Trust (Caceres & Paparoidamis, 2007; Donio et al., 2006).	The Medellín Marathon cares about my needs as a customer. I feel that I have full confidence in the activities and services of the Medellín Marathon.
Commitment (Fullerton, 2005; Hennig-Thurau, 2004).	I feel emotionally attached to the Medellín Marathon. The Medellín Marathon means a lot to me. I feel strongly identified with the Medellín Marathon. My relationship with the Medellín Marathon is important to me. If the Medellín Marathon were to cease to exist, it would be a great loss to me.
Satisfaction (Hightower et al., 2002).	I am happy with the experiences I have had in this race. I have been satisfied with my experiences in this race. I really enjoy participating in this race
WOM (Zeithaml et al., 1996).	I will participate in the Medellín Marathon next year. I will recommend participation in the Medellín Marathon. I will speak well of the Medellín Marathon to other people if they ask me.

In all cases, the scales had a 5-point Likert-type response option, where 1 showed strong disagreement and 5 showed strong agreement. The data were collected through a digital questionnaire administered via the LimeSurvey platform, which was distributed immediately after the virtual race. The event organizers used their official communication channels to email the survey link to their participant database, allowing respondents to complete it online independently and securely. This study did not require IRB approval due to the anonymous and non-invasive nature of the survey, in accordance with the regulations of the host institution. All participants gave informed consent before participating in the online questionnaire.

3.3. Statistical Analysis

The data analyses were carried out using EQS version 6.4 structural equation modelling software. Firstly, the measurement model was analyzed by means of a confirmatory factor analysis, to check that the factors that make up this model met the reliability and validity criteria recommended in the literature. Afterwards, the structural model was analyzed to check whether the proposed relationships were significant and, if so, to what extent they were established. The aim was to determine the extent to which the proposed model is capable of predicting the variables of interest.

4. Results

4.1. Measurement Model

In order to create the measurement model, a confirmatory factor analysis was carried out to verify that the instrument used obtained adequate values in terms of psychometric

properties (see Table 2). With this, it could be observed that the values of the fit indices exceeded the standard of 0.90 established by [Hu and Bentler \(1999\)](#) as a criterion, which reflects adequate values (NFI = 0.93; NNFI = 0.93; CFI = 0.94; IFI = 0.94). Likewise, with respect to the root mean squared error of approximation (RMSEA) value, this reflected a value of 0.06 below the line of the criterion set at 0.08 by [Browne and Cudeck \(1992\)](#). Regarding the reliability and validity values for each construct, the reliability values showed that both the composite reliability and Cronbach's alpha were above the established criterion of 0.70 ([Hair et al., 2006](#)), in the same way that the average variance extracted (AVE) values exceeded the value of 0.50 in each factor ([Fornell & Larcker, 1981](#)) in the congruence variable (FC = 0.87 and AVE = 0.68), the trust variable (FC = 0.91 and AVE = 0.82), the commitment variable (FC = 0.95 and AVE = 0.84), the satisfaction variable (FC = 0.92 and AVE = 0.76) and the WOM variable (FC = 0.88 and AVE = 0.73). In terms of convergent validity, we also see how the factor weights of each factor were above the criterion of 0.60 ([Bagozzi & Yi, 1988](#)).

Table 2. Reliability and validity of latent constructs.

Construct	Items	β	FC	AVE	R ²
Congruence (F1)	1	0.789	0.87	0.68	0.627
	2	0.862			0.769
	3	0.843			0.778
	4	0.756			0.623
Trust (F2)	5	0.844	0.91	0.82	0.784
	6	0.933			0.852
Commitment (F3)	7	0.896	0.95	0.84	0.812
	8	0.925			0.869
	9	0.965			0.898
	10	0.946			0.865
	11	0.787			0.523
Satisfaction (F4)	12	0.940	0.92	0.76	0.812
	13	0.896			0.803
	14	0.866			0.645
WOM (F5)	15	0.733	0.88	0.73	0.543
	16	0.942			0.834
	17	0.898			0.776

4.2. Structural Model

With regard to the structural model, brand variables such as congruence, trust and commitment have been introduced as independent variables. To these, satisfaction was added as an antecedent outcome variable of WOM. Therefore, the model was made up of five factors (see Figure 2), with the purpose of testing the hypotheses that were put forward, among the different relationships of the variables. The first factor was congruence (F1), then trust (F2), commitment (F3), satisfaction (F4), and WOM (F5). The results indicate that congruence (F1) is an antecedent element of trust (F2) (H1), and on commitment (F3) (H2), also, it is corroborated that trust (F2) significantly influences the commitment felt by the participants of the event (F3) (H3). It is also confirmed that both trust (F2) (H4) and commitment (F3) (H6) significantly influence the satisfaction of event participants (F4). And that these two elements, both trust (F2) (H5) and commitment (F3) (H7), also have a significant influence on WOM (F5). Finally, it is confirmed that satisfaction (F4) (H8) is also an antecedent element of WOM (F5).

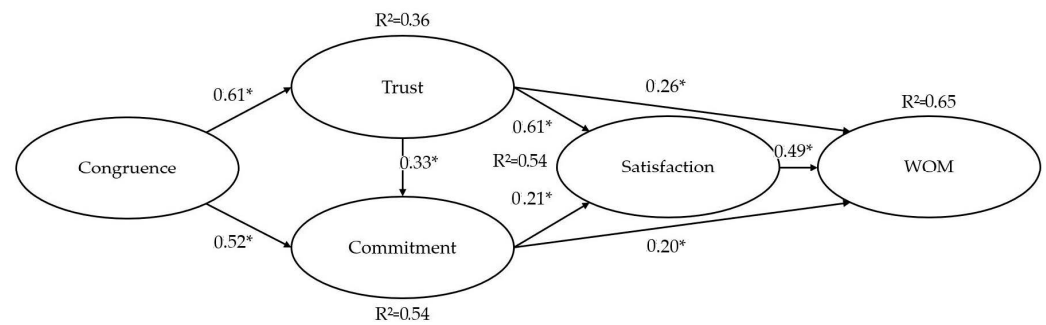


Figure 2. Model of causal relationships. Note. * = Statistically significant value.

As for the structural equation modelling (SEM), the following indicators assessing the goodness of fit of the models have been considered: Satorra–Bentler adjusted Chi-square ($S-B\chi^2$), $S-B\chi^2$ divided by degrees of freedom, the root mean square error of approximation (RMSEA, values below 0.08 indicate adequate fit), the non-normalized fit index (NNFI) and the comparative fit index (CFI). For all indices except RMSEA, values above 0.90 indicate an adequate fit (MacCallum & Austin, 2000). The results [$S-B\chi^2$ (df) = 523.46 (111); NNFI = 0.936, CFI = 0.948, RMSEA = 0.061] imply an adequate model fit. The model explains 65% of the variance of WOM ($R^2 = 0.65$, $p < 0.01$). Analysing the importance of each of the variables, it is noticeable that all variables have a positive effect on the dependent variables (see Table 3). With regard to the first part of the model, which concerns the brand variables, it can be seen that all of them significantly predict the dependent variable. Thus, congruence ($\beta = 0.61$; $p < 0.05$) has a strong predictive effect on broker confidence, explaining 36% of its variance. Similarly, congruence is a predictor of runners' commitment to the marathon organization ($\beta = 0.52$, $p < 0.05$). In turn, trust significantly predicts commitment ($\beta = 0.33$, $p < 0.05$). Commitment is 54% explained by the contributions of trust and congruence. In terms of runner satisfaction with the marathon experience, both trust ($\beta = 0.61$, $p < 0.05$) and commitment ($\beta = 0.21$, $p < 0.05$) are good predictors. It clearly stands out how trust exerts a very strong weight in this relationship. Finally, the runners' future behavioural intentions (WOM) are explained ($R^2 = 0.65$) by a strong effect of satisfaction ($\beta = 0.49$, $p < 0.05$). This is followed by trust ($\beta = 0.26$, $p < 0.05$) and commitment ($\beta = 0.20$, $p < 0.05$).

Table 3. Results of the structural model.

Hypothesis	β	T Value	Significance
H1: Congruence–Trust	0.61	22.30 **	Supported
H2: Congruence–Commitment	0.52	12.07 **	Supported
H3: Trust–Commitment	0.33	7.95 **	Supported
H4: Trust–Satisfaction	0.61	13.99 **	Supported
H5: Trust–WOM	0.21	13.95 **	Supported
H6: Commitment–Satisfaction	0.26	5.87 **	Supported
H7: Commitment–WOM	0.20	6.760 **	Supported
H8: Satisfaction–WOM	0.49	10.80 **	Supported

Note. β = Standardized Coefficient; ** = $p < 0.01$.

5. Discussion

In the field of sport management, brand variables such as congruence, trust and commitment have been little studied. However, in recent years, these variables have gained interest, especially in sport marketing (Martínez-Cevallos et al., 2020; Lai et al., 2022; Sotiriadou et al., 2025). The same applies to the field of virtual sporting events, which is

a little-studied area that is becoming increasingly important due to the commitment of many organizers to bring their services to the virtual environment, making it increasingly attractive for analysis (S. S. Chen & Zhang, 2025; Chung et al., 2025; Helsen et al., 2022). This study attempts to validate the appropriateness of the scales used, given that understanding these variables is essential to analyze consumer behaviour in sport events and their impact on satisfaction and word of mouth (WOM) (Alonso Dos Santos et al., 2024a; Newl& & Yoo, 2021; Vegara-Ferri et al., 2020).

Within the sports marketing context, the congruence between consumer identity and event brand has shown a significant relationship with participant trust and engagement. These findings are consistent with those reported by Pan and Phua (2021), who note that strong brand identification at sporting events increases trust and, consequently, engagement with the event. Likewise, Koo and Lee (2019) found that congruence between the sponsor and the event significantly influences consumers' perceptions, especially when there is a high level of sport involvement. These authors highlight that perceived congruence strengthens trust in the event and fosters recommendation intention, highlighting the importance of aligning brand values with participants' expectations. Furthermore, Šegota et al. (2022) found that congruence between self-image and brand directly influences WOM intention, demonstrating its importance in marketing strategies. Previous research, such as that of Sirgy et al. (1997), already suggested that self-image congruence is a determining factor in consumer preference, an idea that has more recently been corroborated in the context of sport (Gulavani et al., 2025; C. Zhang & Chen, 2020).

The results show that trust is a key mediating variable between congruence and commitment, as well as between commitment and satisfaction. This finding is consistent with Martínez-Cevallos et al. (2024), who found that trust in a sport event is not only built through the direct experience of the runner but also through the perception of professional and reliable event management. Similarly, recent research such as that of Lai et al. (2022) highlights the importance of trust in strengthening emotional and cognitive attachment to the event. In the same vein, Ismail (2022) mentions that trust influences repurchase intention through WOM, suggesting a direct relationship between these variables. Additionally, Delgado-Ballester and Munuera-Alemán (2012) argue that trust is a key determinant of consumer loyalty, which has also been confirmed in the context of sport services (Akoglu & Özbek, 2021; Cuesta-Valiño et al., 2023; Deng et al., 2025).

The relationship between congruence, trust and WOM has been evidenced in this study, showing that a positive perception of congruence increases both trust and the willingness to recommend the event. This result is consistent with the findings of Han and Hyun (2013), who highlight that congruence between brand image and consumer perception boosts trust and promotes WOM. Furthermore, Šegota et al. (2022) identified that a high congruence not only improves trust but also significantly increases the intention to recommend the event. This relationship has also been highlighted in the study by Ekinci and Hosany (2006), where a higher congruence in sports tourism was found to increase recommendation and satisfaction rates among attendees.

Likewise, trust and commitment are closely related in the sport context, with a direct impact on WOM intention. Pan and Phua (2021) found that trust acts as an antecedent to engagement and that both factors are determinants of intentions to recommend the event. Ismail (2022) argues that trust in a brand becomes a driver for engagement and WOM, especially when consumers feel that the brand meets their expectations. Similarly, in the context of sporting events and brands, it has been found that participants who trust a brand are more loyal to it (Deng et al., 2025) and are also more likely to recommend it (Martínez-Cevallos et al., 2020). Morgan and Hunt (1994) had already suggested that trust

is one of the bases for developing a stable relational commitment, an approach that finds support in recent studies, such as that of [Nguyen et al. \(2021\)](#), on virtual sporting events.

It is also the case that engagement has been shown to be a determining factor in participants' satisfaction and WOM. [Triantafillidou and Siomkos \(2014\)](#) argue that emotional engagement with a sport experience increases satisfaction and, therefore, the willingness to recommend it. [Vegara-Ferri et al. \(2020\)](#) concluded that sport event attendees who experience a high satisfaction tend to share their experience with others, which reinforces positive WOM. In this study, it was observed that participants engaged in the Medellín Virtual Marathon showed high levels of satisfaction and a strong intention to recommend it. This relationship aligns with [Bowden \(2009\)](#), who describes engagement as an intermediate phase between satisfaction and future behavioural intention and who has been recently corroborated by studies on mass events such as [García-Fernández et al. \(2021\)](#).

Finally, satisfaction has emerged as a determinant variable in the intention to recommend the event, which coincides with the studies of [Vegara-Ferri et al. \(2020\)](#), who point out that a satisfactory experience significantly increases the likelihood of positive WOM. Similarly, [Triantafillidou and Siomkos \(2014\)](#) indicate that satisfaction acts as a direct predictor of the desire to share positive experiences, particularly in the context of sporting events that provide memorable and personalized experiences. Furthermore, [Lai et al. \(2022\)](#) found that WOM generated from satisfaction has a direct impact on future participation, highlighting the importance of continuously monitoring this variable. Previous research such as [Oliver \(1997\)](#) and more recent research such as [Y. Chen et al. \(2022\)](#) have identified that satisfaction not only predicts WOM but also increases repurchase intentions and emotional engagement with the brand.

6. Conclusions

This study has allowed us to analyze the influence of the variables of congruence, trust, commitment, satisfaction and WOM in the context of virtual sporting events, using the Medellín Virtual Marathon as a case study. The results obtained confirm that these variables maintain significant relationships with each other, which underlines their relevance for understanding and managing the behaviour of participants in this type of event.

Congruence between the image of the participant and the image of the event has been found to be a determining factor in the development of trust and commitment. Trust, on the other hand, acts as a mediating variable in the relationships between congruence and commitment, as well as between commitment and satisfaction. It has also been shown that engagement has a direct influence on WOM, encouraging runners to share their experience with others.

Satisfaction is presented as a direct determinant of WOM, showing that a satisfactory experience not only generates a positive perception of the event but also increases the likelihood that participants will recommend it. These findings confirm the dynamic inter-relationship between the variables analyzed, highlighting their importance in predicting participants' future intentions.

The instrument used in this study has been shown to be adequate in its psychometric properties, which supports the reliability and validity of the measurements made. Similarly, the structural model proposed has shown a satisfactory fit, allowing a clear understanding of the relationships between the variables studied.

7. Implications, Limitations and Future Lines of Research

In terms of the implications that can be drawn from the study, we find both theoretical and practical ones. First, on a theoretical level, the study contributes to the scientific literature on sporting events and more specifically on virtual sporting events. A measurement

model has been provided that has been shown to have adequate psychometric properties to explain the future intentions of participants in virtual sporting events. This is a field that has been little explored to date, so it provides relevant information for sports managers to understand consumer behaviour in this context. Continuing with these theoretical contributions, the model also shows the role of congruence in improving trust, as well as the role of congruence and trust in improving commitment. These variables of trust and commitment are fundamental for consumers to have a good experience with the organization. In addition, it has been verified that participant/event congruence is a good starting variable for triggering the rest of the variables, which supports theoretical frameworks based on theories such as Festinger's cognitive dissonance theory (Festinger, 1957).

Secondly, on a practical level, this study provides relevant information for sports managers. Given the importance of consistency, organizers must create a brand image aligned with the values and aspirations of their participants, which means they must develop well-researched communication campaigns based on an understanding of their interests. This should improve their trust and commitment, contributing to their satisfaction and willingness to recommend the event. This would benefit participants by providing them with a better experience and would benefit organizers by increasing recommendations for their event, contributing to its success. In relation to trust, this is even more relevant in a virtual context where there is no physical contact. Therefore, organizers should focus on creating a user-friendly and comfortable online environment, where aspects such as the registration or payment process convey security. Commitment is also an aspect that can be promoted by the organization, allowing participants to be part of the decision-making process. In this sense, co-creation or corporate social responsibility actions can be useful. Altogether, this should improve satisfaction and recommendations, serving as a powerful tool that ensures the viability and stability of the event.

As for the limitations of the study and future lines of research, analyzing a single virtual event reduces its generalizability. It would be interesting to replicate the study in other virtual events, both in similar disciplines and in others, as well as in hybrid events that combine face-to-face attendance with online access. This would allow us to see how the variables behave based on these characteristics. Another positive point could be to carry out longitudinal measurements, in which the perception of participants before and after the event can be assessed to see what changes the event brings about. Regarding the study variables, new ones could be included, as well as new approaches to analysis, combining quantitative and qualitative methods, which can provide valuable information from another perspective. Based on the results of the model, it would also be good to analyze in depth the possible mediating effect of trust and commitment, as they seem to play a key role in the relationship between brand perceptions and satisfaction in virtual events. Finally, actions can be carried out by the organization related to the co-creation and communication of appropriate corporate social responsibility.

Author Contributions: Conceptualization, D.M.-C. and M.A.; Methodology, F.C. and M.A.; Software, D.M.-C. and F.C.; Resources, D.D.-B. and J.C.-H.; Data curation, D.M.-C.; Writing—original draft, D.M.-C. and M.A.; Writing—review & editing, F.C., D.D.-B. and J.C.-H.; Supervision, F.C.; Project administration, D.M.-C. and M.A.; Funding acquisition, D.D.-B. and J.C.-H. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: This study is of a non-profit nature and has exclusively academic purposes. Prior to conducting the survey, all respondents completed an informed consent form. This consent was given to the organization, which was responsible for administering it prior to collecting the survey data. This consent clearly specifies the objective of the study, as well as the use

to be made of the data. It also guarantees the anonymity and only academic treatment of the data. This is the right thing to do in accordance with the principles of the research but also with Colombian legislation regarding the treatment of survey participants' data.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data is unavailable due to privacy or ethical restrictions.

Conflicts of Interest: The authors declare no conflicts of interest.

References

- Akoglu, H. E., & Özbek, O. (2021). The effect of brand experiences on brand loyalty through perceived quality and brand trust: A study on sports consumers. *Asia Pacific Journal of Marketing and Logistics*, 34(10), 2130–2148. [CrossRef]
- Albayrak, T., & Caber, M. (2015). Prioritisation of the hotel attributes according to their influence on satisfaction: A comparison of two techniques. *Tourism Management*, 46, 43–50. [CrossRef]
- Alguacil, M., Parra-Camacho, D., & Mundina, C. (2019). Brand personality for loyalty enhancement in sport services: The role of congruence. *SPORT TK-EuroAmerican Journal*, 8(1), 51–56.
- Alonso Dos Santos, M., Aguado Berenguer, S., Calabuig Moreno, F., & Alguacil, M. (2024a). Predicting loyalty and word-of-mouth at a sports event through a structural model and posteriori unobserved segmentation. *Event Management*, 28(3), 401–419. [CrossRef]
- Alonso Dos Santos, M., & Calabuig, F. (2018). Assessing the effectiveness of sponsorship messaging: Measuring the impact of congruence through electroencephalogram. *International Journal of Sports Marketing and Sponsorship*, 19(1), 25–40. [CrossRef]
- Alonso Dos Santos, M., Calabuig Moreno, F., & Crespo-Hervás, J. (2019). Influence of perceived and effective congruence on recall and purchase intention in sponsored printed sports advertising: An eye-tracking application. *International Journal of Sports Marketing and Sponsorship*, 20(4), 617–633. [CrossRef]
- Alonso Dos Santos, M., Torres-Moraga, E., Calabuig Moreno, F., & Llanos Contreras, O. (2024b). Self-reported and electroencephalogram responses to evaluate sponsorship congruence efficacy. *Journal of Neuroscience, Psychology, and Economics*, 17(1), 46. [CrossRef]
- Amenuvor, F. E., & Tark, L. H. (2020). The effect of pre-purchase WOM seeking behavior on the WOM intention. *Journal of Marketing Studies*, 28(2), 15–30.
- Amor, J. S., Alguacil, M., & Gómez-Tafalla, A. M. (2022). Gender influence on brand recommendation at an esports event. *Journal of Physical Education and Sport*, 22(1), 231–238.
- Andersen, J. (2019, July 16). *The state of running 2019*. International Association of Athletics Federations. Available online: <https://runrepeat.com/state-of-running> (accessed on 1 February 2025).
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. [CrossRef]
- Ball, D., Coelho, P. S., & Machás, A. (2004). The role of communication and trust in explaining customer loyalty: An extension to the ECSI model. *European Journal of Marketing*, 38(9/10), 1272–1293. [CrossRef]
- Banerjee, S., & Chaudhuri, B. R. (2022). Brand love and party preference of young political consumers (voters). *International Review on Public and Nonprofit Marketing*, 19(3), 475–503. [CrossRef]
- Bari, M. W., & Shahzadi, I. (2022). Employee-based brand equity and factors of employee-brand association. In *Antecedents and outcomes of employee-based brand equity* (pp. 1–15). IGI Global.
- Becker, H. S. (1960). Notes on the concept of commitment. *American Journal of Sociology*, 66(1), 32–42. [CrossRef]
- Biscaia, R., Correia, A., Ross, S., & Rosado, A. (2014). Sponsorship effectiveness in professional sport: An examination of recall and recognition among football fans. *International Journal of Sports Marketing and Sponsorship*, 16(1), 2–18. [CrossRef]
- Biscaia, R., Yoshida, M., & Kim, Y. (2023). Service quality and its effects on consumer outcomes: A meta-analytic review in spectator sport. *European Sport Management Quarterly*, 23(3), 897–921. [CrossRef]
- Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *The Journal of Marketing*, 54, 69–82. [CrossRef]
- Bowden, J. L. H. (2009). The process of customer engagement: A conceptual framework. *Journal of Marketing Theory and Practice*, 17(1), 63–74. [CrossRef]
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230–258.
- Buenos Aires Herald. (2023). *Buenos Aires: Marathon the fastest 42k in Latin America takes place this weekend*. Available online: <https://www.buenosairesherald.com> (accessed on 17 March 2025).
- Caceres, R. C., & Paparoidamis, N. G. (2007). Service quality, relationship satisfaction, trust, commitment and business-to-business loyalty. *European Journal of Marketing*, 41(7/8), 836–867. [CrossRef]
- Calabuig, F., Mundina, J., & Crespo, J. (2010). Eventqual: A measure of the quality perceived by spectators of sporting events. *Retos. New Trends in Physical Education, Sport and Recreation*, 18, 66–70.

- Calabuig, F., Prado-Gascó, V., Núñez-Pomar, J., & Crespo-Hervás, J. (2021). The role of the brand in perceived service performance: Moderating effects and configurational approach in professional football. *Technological Forecasting and Social Change*, 165, 120537. [\[CrossRef\]](#)
- Cardozo, R. N. (1965). An experimental study of customer effort, expectation, and satisfaction. *Journal of Marketing Research*, 2(3), 244–249. [\[CrossRef\]](#)
- Castro, C. B., & Armario, E. M. (1999). *Relational marketing*. ESIC.
- Celestino, A., & Biencinto, C. (2012). External customer satisfaction in fitness organisations. Empirical study in centres in the community of Madrid. *Motricidad. European Journal of Human Movement*, 29, 115–132.
- Chandra, A., & Adam, M. R. R. R. (2024). The impacts of corporate-brand credibility, corporate-brand origin, and self-image congruence on purchase intention: The case of PT Mustika ratu TBK Indonesia. In *5th International Conference on Global Innovation and Trends in Economy 2024 (INCOGITE 2024)* (pp. 477–490). Atlantis Press.
- Chatzopoulou, E., & Tsogas, M. (2017). The role of emotions to brand attachment and brand attitude in a retail environment: An extended abstract. In M. Stieler (Ed.), *Creating marketing magic and innovative future marketing trends. Developments in marketing science: Proceedings of the academy of marketing science* (pp. 43–47). Springer.
- Chelladurai, P., & Chang, K. (2000). Targets and standards of quality in sport services. *Sport Management Review*, 3(1), 1–22. [\[CrossRef\]](#)
- Chen, J. L., & Wang, S. W. (2021). The influence of brand positioning and event marketing on brand loyalty-The mediation roles of brand identification and brand personality: The case of spectator sport. *Journal of Business Administration*, 46(4), 47–66. [\[CrossRef\]](#)
- Chen, S. S., & Zhang, J. J. (2025). Market demand for metaverse-based sporting events: A mixed-methods approach. *Sport Management Review*, 28(1), 121–147. [\[CrossRef\]](#)
- Chen, Y., Wang, L., & Liu, X. (2022). The impact of brand satisfaction on electronic word-of-mouth intention: The mediating role of brand commitment. *Journal of Consumer Marketing*, 39(5), 725–739.
- Chowdhary, K., Crockett, Z., Chua, J., & Soo Hoo, J. (2024). Exploring the relationship between running-related technology use and running-related injuries: A cross-sectional study of recreational and elite long-distance runners. *Healthcare*, 12(6), 642. [\[CrossRef\]](#)
- Chung, K. S., Goebert, C., & Johnson, J. D. (2025). Sport spectatorship in a virtual environment: How sensory experiences impact consumption intentions. *International Journal of Sports Marketing and Sponsorship*, 26(2), 305–324. [\[CrossRef\]](#)
- Claver, E., Llopis, J., & Tarí, J. J. (1999). *Calidad y dirección de empresas*. Civitas.
- Cuesta-Valiño, P., Loranca-Valle, C., Núñez-Barriopedro, E., & Penelas-Leguía, A. (2023). Model based on service quality, satisfaction and trust, the antecedents of federated athletes' happiness and loyalty. *Journal of Management Development*, 42(6), 501–513. [\[CrossRef\]](#)
- Dawar, N., & Pillutla, M. M. (2000). Impact of product-harm crises on brand equity: The moderating role of consumer expectations. *Journal of Marketing Research*, 37(2), 215–226. [\[CrossRef\]](#)
- Dees, W., Bennett, G., & Ferreira, M. (2010). Personality fit in NASCAR: An evaluation of driver-sponsor congruence and its impact on sponsorship effectiveness outcomes. *Sport Marketing Quarterly*, 19(1), 25–35.
- Deheshti, M., Adabi Firouzjah, J., & Alimohammadi, H. (2016). The relationship between brand image and brand trust in sporting goods consumers. *Annals of Applied Sport Science*, 4(3), 27–34. [\[CrossRef\]](#)
- DeJong, A. F., Fish, P. N., & Hertel, J. (2021a). Running behaviors, motivations, and injury risk during the COVID-19 pandemic: A survey of 1147 runners. *PLoS ONE*, 16(2), e0246300. [\[CrossRef\]](#)
- DeJong, M., Brenner, J., & Fogg, L. (2021b). Virtual races and digital participation: Engagement patterns in mass sporting events. *Journal of Sport Management*, 35(4), 354–367.
- DeJong Lempke, A. F., & Hertel, J. (2022). Influence of the COVID-19 pandemic on running behaviors, motives, and running-related injury: A one-year follow-up survey. *PLoS ONE*, 17(3), e0264361. [\[CrossRef\]](#)
- Delgado-Ballester, E., & Munuera-Alemán, J. L. (2012). Does brand trust matter to brand equity? *Journal of Product & Brand Management*, 20(3), 156–172.
- Deng, Y., Wang, X., & Li, D. (2025). How does brand authenticity influence brand loyalty? Exploring the roles of brand attachment and brand trust. *Asia Pacific Journal of Marketing and Logistics*, 37(5), 1255–1279. [\[CrossRef\]](#)
- Desbordes, M., & Falgoux, J. (2006). *Management and organization of a sporting event*. Inde.
- Dolich, I. J. (1969). Congruence between self-image and product brands. *Journal of Marketing Research*, 6(1), 80–84. [\[CrossRef\]](#)
- Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, 61(2), 35–51.
- Donio, J., Massari, P., & Passiante, P. (2006). Customer satisfaction and loyalty in a digital environment: An empirical test. *Journal of Consumer Marketing*, 23(7), 445–457. [\[CrossRef\]](#)
- Dorado, A. (2006). *Análisis de la satisfacción de los usuarios: Hacia un nuevo modelo de gestión basado en la calidad para los servicios deportivos municipales*. Economic and Social Council of Castilla-La Mancha.
- Du, J., Chen, M. Y., & Wu, Y. F. (2020). The effects of social media on sporting event satisfaction and word of mouth communication: An empirical study of a mega sports event. *Information*, 11(10), 482. [\[CrossRef\]](#)

- Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of Marketing*, 51(2), 11–27. [\[CrossRef\]](#)
- Ekinci, Y., & Hosany, S. (2006). Destination personality: An application of brand personality to tourism destinations. *Journal of Travel Research*, 45(2), 127–139. [\[CrossRef\]](#)
- Elasri Ejjaberi, A., Triadó i Ivern, X. M., & Aparicio Chueca, M. (2015). Customer satisfaction in municipal sports centres in Barcelona. *Apunts. Educació Física i Esports*, 119(1), 109–117. [\[CrossRef\]](#)
- Elasri Ejjaberi, A., Triadó i Ivern, X. M., & Chueca, P. A. (2013). *Evolution of customer satisfaction factors in sports centres between 1996 and 2013: How have users' perceptions changed? Discovering new horizons in management: XXVII AEDEM Annual Congress* (p. 96). Escuela Superior de Gestión Comercial y Marketing, ESIC.
- Ferro-Soto, C., Padín, C., Svensson, G., & Høgevold, N. M. (2024). The sequential logic of quality constructs in sales business relationships: Model and findings. *International Journal of Procurement Management*, 19(4), 473–498. [\[CrossRef\]](#)
- Festinger, L. (1957). *A theory of cognitive dissonance*. Row, Peterson & Company.
- Filo, K., Funk, D. C., & Alexandris, K. (2008). Exploring the role of brand trust in the relationship between brand associations and brand loyalty in sport and fitness. *International Journal of Sport Management and Marketing*, 3(1–2), 39–57. [\[CrossRef\]](#)
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing*, 56(1), 6–21. [\[CrossRef\]](#)
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. [\[CrossRef\]](#)
- Fournier, S., Dobscha, S., & Mick, D. (1998). Preventing the premature death of relationship marketing. *Harvard Business Review*, 76(1), 42–51.
- Fullerton, G. (2003). When does commitment lead to loyalty? *Journal of Service Research*, 5(4), 333–344. [\[CrossRef\]](#)
- Fullerton, G. (2005). How commitment both enables and undermines marketing relationships. *European Journal of Marketing*, 39(11/12), 1372–1388. [\[CrossRef\]](#)
- García-Fernández, J., Gálvez-Ruiz, P., Fernández-Gavira, J., & Vázquez-Fernández, E. (2021). The role of brand commitment and satisfaction in predicting word-of-mouth intentions in fitness centers. *European Sport Management Quarterly*, 21(4), 567–586.
- Geyskens, I., Steenkamp, J. B., & Kumar, N. (1998). Generalizations about trust in marketing channel relationships using meta-analysis. *International Journal of Research in Marketing*, 15(3), 223–248. [\[CrossRef\]](#)
- Geyskens, I., Steenkamp, J. B., Scheer, L. K., & Kumar, N. (1996). The Effects of trust and interdependence on relationship commitment: A transatlantic study. *International Journal of Research in Marketing*, 13, 303–317. [\[CrossRef\]](#)
- Giese, J. L., & Cote, J. A. (2000). Defining consumer satisfaction. *Academy of Marketing Science Review*, 1(1), 1–24.
- Grace, D., & O'Cass, A. (2005). Service branding: Consumer verdicts on service brands. *Journal of Retailing and Consumer Services*, 12(2), 125–139. [\[CrossRef\]](#)
- Gulavani, S. S., Dai, S., Du, J., Sato, M., & Newman, J. (2025). Associative personalities: Investigating the impact of gender personality congruence between sport brands and individuals on life satisfaction. *International Journal of Sports Marketing and Sponsorship*, ahead of print. [\[CrossRef\]](#)
- Gullupunar, H., & Gulluoglu, O. (2013). Voter's loyalty to a political party in terms of organizational commitment factor: A research on voters living in big cities in Turkey. *E-Journal of New World Sciences Academy (NWSA)*, 8(1), 82–99.
- Gundlach, G. T., Achrol, R. S., & Mentzer, J. T. (1995). The structure of commitment in exchange. *Journal of Marketing*, 59(1), 78–92. [\[CrossRef\]](#)
- Gursoy, D., & Kendall, K. W. (2006). *Hosting mega events: Modeling locals' support*. Washington State University.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Pearson-Prentice-Hall.
- Hallmann, K., & Breuer, C. (2010). Image fit between sport events and their hosting destinations from an active sport tourist perspective and its impact on future behaviour. *Journal of Sport & Tourism*, 15(3), 215–237.
- Han, H., & Hyun, S. S. (2013). Image congruence and relationship quality in predicting switching intention: Conspicuousness of product use as a moderator variable. *Journal of Hospitality & Tourism Research*, 37(3), 303–329.
- Hee Kwak, D., & Kang, J. H. (2009). Symbolic purchase in sport: The roles of self-image congruence and perceived quality. *Management Decision*, 47(1), 85–99. [\[CrossRef\]](#)
- Helsen, K., Derom, I., Corthouts, J., Bosscher, V. D., Willem, A., & Scheerder, J. (2022). Participatory sport events in times of COVID-19: Analysing the (virtual) sport behaviour of event participants. *European Sport Management Quarterly*, 22(1), 35–54. [\[CrossRef\]](#)
- Hennig-Thurau, T. (2004). Customer orientation of service employees: Its impact on customer satisfaction, commitment and retention. *International Journal of Service Industry Management*, 15(5), 460–478. [\[CrossRef\]](#)
- Hightower, R., Brady, M. K., & Baker, T. L. (2002). Investigating the role of the physical environment in hedonic service consumption: An exploratory study of sporting events. *Journal of Business Research*, 55(9), 697–707. [\[CrossRef\]](#)
- Holmes, H. H., Monaghan, P. G., Strunk, K. K., Paquette, M. R., & Roper, J. A. (2021). Changes in training, lifestyle, psychological and demographic factors, and associations with running-related injuries during COVID-19. *Frontiers in Sports and Active Living*, 3, 637516. [\[CrossRef\]](#)
- Howard, J. A. (1989). *Consumer behavior in marketing strategy*. Prentice Hall.

- Howard, J. A., & Sheth, J. N. (1969). *The theory of buyer behavior*. Wiley.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. [CrossRef]
- Huang, Y., & Chiu, W. (2024). Let's run green! Impact of runners' environmental consciousness on their green perceived quality and supportive intention at participatory sport events. *International Journal of Sports Marketing and Sponsorship*, 25(3), 541–559. [CrossRef]
- Ismail, I. J. (2022). I trust friends before I trust companies: The mediation of WOM and brand love on psychological contract fulfilment and repurchase intention. *Management Matters*, 19(2), 167–186. [CrossRef]
- Kang, G., & James, J. (2004). Service quality dimensions: An examination of Grönroos's service quality model. *Managing Service Quality*, 14(4), 266–277. [CrossRef]
- Kaplanidou, K. (2010). Active sport tourists: Sport event image considerations. *Tourism Analysis*, 15(3), 381–386. [CrossRef]
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22. [CrossRef]
- Kenning, P. (2008). The influence of general trust and specific trust on buying behaviour. *International Journal of Retail & Distribution Management*, 36(6), 461–476.
- Kim, J., Song, H., & Lee, S. (2018). Extrovert and lonely individuals' social TV viewing experiences: A mediating and moderating role of social presence. *Mass Communication and Society*, 21(1), 50–70. [CrossRef]
- Ko, Y. J., & Kim, Y. K. (2014). Determinants of consumers' attitudes toward a sport sponsorship: A tale from college athletics. *Journal of Nonprofit & Public Sector Marketing*, 26(3), 185–207.
- Koo, J., & Lee, Y. (2019). Sponsor-event congruence effects: The moderating role of sport involvement and mediating role of sponsor attitudes. *Sport Management Review*, 22(2), 222–234. [CrossRef]
- Kumar, N., Hibbard, J. D., & Stern, L. W. (1994). *The nature and consequences of marketing channel intermediary commitment* (pp. 94–115). Marketing Sciences Institute.
- Lai, M. Y., Fotiadis, A. K., Abu-ElSamen, A., & Beede, P. (2022). Analysing the effect of membership and perceived trust on sport events electronic word-of-mouth (eWOM) intention. *Tourism Recreation Research*, 47(1), 91–104. [CrossRef]
- Laroche, M., & Brisoux, J. E. (1989). Incorporating competition into consumer behavior models: The case of the attitude-intention relationship. *Journal of Economic Psychology*, 10(3), 343–362. [CrossRef]
- Levy, S. J. (1959). Symbols for Sale. *Harvard Business Review*, 34(4), 117–124.
- Li, Y., Zhang, C., Shelby, L., & Huan, T. C. (2022). Customer self-image congruence and brand preference: A moderated mediation model of self-brand connection and self-motivation. *Journal of Product & Brand Management*, 31(5), 798–807.
- Liu, C. W., Wang, W., Gao, G., & Agarwal, R. (2024). The value of virtual engagement: Evidence from a running platform. *Management Science*, 70(9), 6179–6201. [CrossRef]
- Llorens, F. J., & Fuentes, M. (2000). *Total quality*. Fundamentos e Implantación. Pirámide.
- Luna-Arocas, R., & Mundina, J. (1998). The strategic marketing of sport: Satisfaction, motivation and expectations. *Revista de Psicología del Deporte*, 7(2), 171–177.
- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, 51(1), 201–226. [CrossRef]
- Maisam, S., & Mahsa, R. D. (2016). Positive word of mouth marketing: Explaining the roles of value congruity and brand love. *Journal of Competitiveness*, 8(1), 19–37.
- Mal, D., Wolf, E., Döllinger, N., Wienrich, C., & Latoschik, M. E. (2023). The impact of avatar and environment congruence on plausibility, embodiment, presence, and the proteus effect in virtual reality. *IEEE Transactions on Visualization and Computer Graphics*, 29(5), 2358–2368. [CrossRef]
- Manzano, M. J. L., & Ruiz, J. L. C. (2023). Socio-educational potential of participation in popular races: A systematic review. In *Metodologías activas e innovación docente para una educación de calidad* (pp. 875–885). Dykinson.
- Marcu, D., Tudor, V., Borz, C., & Mărgărit, I. (2021). Conducting sports street running events in virtual and physical space: A comparative study. *Marketing—From Information to Decision*, 13(1), 31–39. [CrossRef]
- Martínez-Cevallos, D., Alguacil, M., Calabuig, F., & Duclos-Bastías, D. (2024). Brand perception and its relationships to satisfaction with a virtual sporting event. *International Journal of Sports Marketing and Sponsorship*, 25(5), 1059–1078. [CrossRef]
- Martínez-Cevallos, D., Alguacil, M., & Calabuig Moreno, F. (2020). Influence of brand image of a sports event on the recommendation of its participants. *Sustainability*, 12(12), 5040. [CrossRef]
- McIntyre, L. (2022). Adapting practice during the COVID-19 pandemic: Experiences, learnings, and observations of a music therapist running virtual music therapy for trafficked women. *Approaches: An Interdisciplinary Journal of Music Therapy*, 14(1), 91–94. [CrossRef]
- Medellín Marathon. (2024). *Maratón Medellín the pioneer of street events in Colombia 30 years of glory and growth for local athletics*. Available online: <https://maratonmedellin.com/blogs/comunicados-de-prensa-maraton-medellin/maraton-medellin-la-pionera-de-las-pruebas-de-calle-en-colombia-30-anos-de-gloria-y-crecimiento-para-el-atletismo-local#:~:text=La%20Marat%C3%B3n%20Medell%C3%ADn%20naci%C3%B3n%20hace,con%20una%20carrera%20de%2042K> (accessed on 9 December 2024).

- Meenaghan, T. (2001). Understanding sponsorship effects. *Psychology & Marketing*, 18(2), 95–122.
- Moliner, B., & Fuentes, M. (2011). Causes and consequences of consumer dissatisfaction with external attributions. *Cuadernos de Gestión*, 11(1), 37–58. [CrossRef]
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, 29(3), 314–329. [CrossRef]
- Morales, V., & Hernández, A. (2004). *Quality and satisfaction in services: Conceptualisation*. Available online: <http://efdeportes.com/> (accessed on 12 January 2025).
- Morales, V., Hernández-Mendo, A., & Blanco, Á. (2009). Quality assessment in sport organisations: Adaptation of the SERVQUAL model. *Journal of Sport Psychology*, 18(2), 0137–0150.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20–38. [CrossRef]
- Natarajan, T., Veera Raghavan, D. R., & Jayapal, J. (2024). How does channel integration quality promote omnichannel customer citizenship behavior? The moderating role of the number of channels used and gender. *Kybernetes*, 53(10), 3133–3159. [CrossRef]
- Natasiah, U. (2024). Brand image, brand trust, and brand ambassador on purchase decisions of Shopee e-commerce users in Pekanbaru city. *Jurnal Manajemen Bisnis*, 11(1), 120–134. [CrossRef]
- Newland, B. L., & Yoo, J. J. E. (2021). Active sport event participants' behavioural intentions: Leveraging outcomes for future attendance and visitation. *Journal of Vacation Marketing*, 27(1), 32–44. [CrossRef]
- Nguyen, D. T., Le, H. T., & Pham, T. T. (2021). Brand congruence and its impact on brand trust and loyalty: Evidence from sports fans. *International Journal of Sport Marketing & Sponsorship*, 22(3), 445–460.
- Nguyen, D. T., Nguyen, T. T. H., Nguyen, K. O., Pham, T. T. H., & Nguyen, T. H. (2023). Brand personality and revisit intention in the hotel industry: The mediating role of tourist self-image congruence. *Tourism and Hospitality Management*, 29(2), 235–248. [CrossRef]
- Okayasu, I., Nogawa, H., Casper, J. M., & Morais, D. B. (2016). Recreational sports event participants' attitudes and satisfaction: Cross-cultural comparisons between runners in Japan and the USA. *Managing Sport and Leisure*, 21(3), 164–180. [CrossRef]
- Oliver, R. (1981). Measurement and evaluation of the satisfaction process in retail settings. *Journal of Retailing*, 57, 25–48.
- Oliver, R. (1997). *Satisfaction: A behavioral perspective on the consumer*. McGraw-Hill.
- Oliver, R. (2010). *Consumer brand loyalty*. Wiley.
- Olsen, S. O., Wilcox, J., & Olsson, U. (2005). Consequences of ambivalence on satisfaction and loyalty. *Psychology & Marketing*, 22(3), 247–269.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3), 492. [CrossRef]
- Pan, P. L., & Phua, J. (2021). Connecting sponsor brands through sports competitions: An identity approach to brand trust and brand loyalty. *Sport, Business and Management: An International Journal*, 11(2), 164–184. [CrossRef]
- Papadimitriou, D., Kaplanidou, K., & Papacharalampous, N. (2016). Sport event-sponsor fit and its effects on sponsor purchase intentions: A non-consumer perspective among athletes, volunteers and spectators. *Journal of Business & Industrial Marketing*, 31(2), 247–259.
- Peterson, B., Hawke, F., Spink, M., Sadler, S., Hawes, M., Callister, R., & Chuter, V. (2022). Biomechanical and musculoskeletal measurements as risk factors for running-related injury in non-elite runners: A systematic review and meta-analysis of prospective studies. *Sports Medicine-Open*, 8(1), 38. [CrossRef]
- Phua, J. (2024). Integrating digital technology into marathon races with a mobile application: An empirical investigation. *Human Behavior and Emerging Technologies*, 6(2), 205–214. [CrossRef]
- Pino García, G., Aguilar Barajas, I., & Ayala Gaytán, E. A. (2018). The role of trust in collaborative innovation projects. A theoretical-methodological proposal. *Economía, Sociedad y Territorio*, 18(58), 629–655.
- Pritchard, M. P., Havitz, M. E., & Howard, D. R. (1999). Analyzing the commitment-loyalty link in service contexts. *Journal of the Academy of Marketing Science*, 27(3), 333–348. [CrossRef]
- Rai, J. S., Yousaf, A., Itani, M. N., & Singh, A. (2021). Sports celebrity personality and purchase intention: The role of endorser-brand congruence, brand credibility and brand image transfer. *Sport, Business and Management: An International Journal*, 11(3), 340–361. [CrossRef]
- Rajendran, R. P., & Arun, C. J. (2021). The effect of sport nostalgia on discrete positive emotions, positive eWOM, and revisit intention of sport tourists. *International Journal of Business & Economics*, 6(2), 232–248.
- Roberts, K. (2005). *Lovemarks: The future beyond brands*. Powerhouse books.
- Rodgers, S. (2007). Effects of sponsorship congruity on e-sponsors and e-newspapers. *Journalism & Mass Communication Quarterly*, 84(1), 24–39.
- Sargeant, A., & Lee, S. (2004). Trust and relationship commitment in the United Kingdom voluntary sector: Determinants of donor behavior. *Psychology & Marketing*, 21(8), 613–635.

- Sarstedt, M., Ringle, C. M., Raithel, S., & Gudergan, S. P. (2014). In pursuit of understanding what drives fan satisfaction. *Journal of Leisure Research*, 46(4), 419–447. [\[CrossRef\]](#)
- Scheerder, J., Breedveld, K., & Borgers, J. (Eds.). (2015). *Running across Europe: The rise and size of one of the largest sport markets*. Springer.
- Schilke, O., & Lumineau, F. (2023). How organizational is interorganizational trust. *Academy of Management Review*, 1–58. [\[CrossRef\]](#)
- Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9(3), 287–300. [\[CrossRef\]](#)
- Sirgy, M. J. (1986). *Self-congruity: Toward a theory of personality and cybernetics*. Praeger.
- Sirgy, M. J., Johar, J. S., Samli, A. C., & Claiborne, C. B. (1997). Self-congruity versus functional congruity: Predictors of consumer behavior. *Journal of the Academy of Marketing Science*, 25(4), 363–375. [\[CrossRef\]](#)
- Sotiriadou, P., Linsner, A., Hallmann, K., & Hill, B. (2025). Athlete brand congruence as a measure to evaluate brand identity and image fit. *Australasian Marketing Journal*, 33(1), 47–57. [\[CrossRef\]](#)
- Storbacka, K., Strandvik, T., & Gronroos, C. (1994). Managing customer relationship for profit: The dynamics of relationship quality. *International Journal of Service Industry Management*, 5(5), 21–38. [\[CrossRef\]](#)
- Su, N., & Reynolds, D. (2017). Effects of brand personality dimensions on consumers' perceived self-image congruity and functional congruity with hotel brands. *International Journal of Hospitality Management*, 66, 1–12. [\[CrossRef\]](#)
- Šegota, T., Chen, N., & Golja, T. (2022). The impact of self-congruity and evaluation of the place on WOM: Perspectives of tourism destination residents. *Journal of Travel Research*, 61(4), 800–817. [\[CrossRef\]](#)
- Theodorakis, N. D., Kaplanidou, K., & Karabaxoglou, I. (2015). Effect of event service quality and satisfaction on happiness among runners of a recurring sport event. *Leisure Sciences*, 37(1), 87–107. [\[CrossRef\]](#)
- Theodorou, S., Alexandris, K., & Ntovoli, A. (2024). The relationship between sport event experience and psychological well-being: The case of a “sailing marathon”. *Challenges: New Trends in Physical Education, Sport and Recreation*, (57), 484–493.
- Traylor, M. B. (1981). Product involvement and brand commitment. *Journal of Advertising Research*, 21, 51–56.
- Triantafyllidou, A., & Siomkos, G. (2014). Consumption experience outcomes: Satisfaction, nostalgia intensity, word-of-mouth communication, and behavioural intentions. *Journal of Consumer Marketing*, 31(6/7), 526–540. [\[CrossRef\]](#)
- Tsai, F. M., & Bui, T. D. (2021). Impact of word of mouth via social media on consumer intention to purchase cruise travel products. *Maritime Policy & Management*, 48(2), 167–183.
- Vargas-González, C., & Toro-Jaramillo, I. D. (2022). Trust in organisations: Reflection on its meaning and scope. *CEA Journal*, 8(18), 1–22.
- Vegara-Ferri, J. M., López-Gullón, J. M., Valantine, I., Díaz Suárez, A., & Angosto, S. (2020). Factors influencing the tourist's future intentions in small-scale sports events. *Sustainability*, 12(19), 8103. [\[CrossRef\]](#)
- Vegara-Ferri, J. M., Saura, E. M., López-Gullón, J. O. S. É., Sánchez, G. F. L., & Angosto, S. (2018). The touristic impact of a sporting event attending to the future intentions of the participants. *Journal of Physical Education & Sport*, 18(3), 1356–1365.
- Wang, M. C. H. (2017). Investigating the different congruence effects on sports sponsor brand equity. *International Journal of Sports Marketing and Sponsorship*, 18(2), 196–211. [\[CrossRef\]](#)
- Waśkowski, Z., & Jasiulewicz, A. (2022). Determinants of the engagement of virtual runs' participants in the co-creation of customer value during the pandemic. *Journal of Education, Health and Sport*, 12(5), 231–242. [\[CrossRef\]](#)
- Woyo, E., & Nyamandi, C. (2022). Application of virtual reality technologies in the Comrades Marathon as a response to the COVID-19 pandemic. *Development Southern Africa*, 39(1), 20–34. [\[CrossRef\]](#)
- Yim, C. K. B., Chan, K. W., & Hung, K. (2007). Multiple reference effects in service evaluations: Roles of alternative attractiveness and self-image congruity. *Journal of Retailing*, 83(1), 147–157. [\[CrossRef\]](#)
- Yoshida, M., & James, J. D. (2010). Customer satisfaction with game and service experiences: Antecedents and consequences. *Journal of Sport Management*, 24(3), 338–361. [\[CrossRef\]](#)
- You, L., & Hon, L. C. (2021). Testing the effects of reputation, value congruence and brand identity on word-of-mouth intentions. *Journal of Communication Management*, 25(2), 160–181. [\[CrossRef\]](#)
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *The Journal of Marketing*, 60(2), 31–46. [\[CrossRef\]](#)
- Zhang, C., & Chen, L. (2020). The effect of self-congruity on brand loyalty in sportswear consumption: The moderating role of psychological ownership. *International Journal of Sports Marketing & Sponsorship*, 21(4), 651–670.
- Zhang, Y., Kim, E., & Xing, Z. (2021). Image congruence between sports event and host city and its impact on attitude and behavior intention. *International Journal of Sports Marketing and Sponsorship*, 22(1), 67–86. [\[CrossRef\]](#)

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