

Exploring Indicators of Relational Capital and Environmental Forces in a Sports Sponsorship Marketing Measurement Model

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Abstract

Aim/Purpose: In a context where sports sponsorship has become an increasingly important strategic tool for businesses, this study aimed to explore and validate a set of relational capital and environmental force indicators that influence the effectiveness of a sports sponsorship marketing measurement model in Thailand. The key problem addressed in this paper is the lack of a comprehensive model that integrates relational capital and environmental dynamics in shaping corporate strategies for sports sponsorship, which can limit both marketing effectiveness and return on investment.

Introduction/Background: In today's competitive global economy, businesses are increasingly compelled not only to innovate, but also to develop sustainable and meaningful relationships with their internal and external stakeholders. Sports sponsorship has evolved into more than a branding tactic—it now serves as a strategic relational and environmental mechanism that enables organizations to project corporate values, engage diverse consumer bases, and cultivate long-term brand loyalty. Sponsorship can enhance brand image, stimulate emotional engagement, and foster mutual trust between sponsors and their audiences. However, despite the rising global emphasis on sports sponsorship, many Thai organizations continue to adopt inconsistent or ad-hoc sponsorship strategies that lack a theoretical foundation or empirical validation. This often results in fragmented collaboration, limited stakeholder impact, and suboptimal returns on investment. Recognizing these challenges, this paper aimed to fill the gap by developing a conceptual model of marketing relational capital and environmental forces, and testing its validity among a sample of marketing executives in varied industry sectors engaged in sports sponsorship within Thailand.

Methodology: In this study, a mixed-methods approach incorporating both qualitative and quantitative research was employed. Initially, in-depth interviews with nine experts were used to extract critical indicators. The core research instrument was a structured questionnaire composed of three parts: a) sponsor profiles, b) a 43-item survey of 12 constructs of relational capital and environment, and c) open-ended questions regarding sponsorship practices. The sample consisted of 645 marketing executives from eight industrial sectors in Thailand who were selected through stratified random sampling. Data analysis was conducted using SPSS 14.0 and AMOS 6.0, employing Confirmatory Factor Analysis (CFA) and Partial Least Squares (PLS) techniques to examine the reliability, validity, and fit of the proposed model.

Findings: The study confirmed that the relational capital and environmental forces model exhibited a good fit with empirical data. Forty-three indicators were validated across eight core elements: three from relational capital—moral and trustworthy appeal, emotional appeal, and logical reasoning—and five from environmental forces—marketing capability, customer orientation, societal impact, government support, and competitor invasion. Each factor demonstrated acceptable levels of reliability and construct validity, with factor loadings above .40 and construct reliability scores exceeding .70. The findings revealed that relational capital significantly contributed to sponsorship outcomes, particularly through emotional and moral appeals that resonate with stakeholders.

Additionally, environmental forces such as customer orientation and marketing capability emerged as major drivers that support sponsorship success. The research underscores that relational marketing is central to stakeholder engagement and long-term brand loyalty in sports sponsorship contexts.

Contribution/Impact on Society: This research contributes to the existing body of knowledge by providing a validated framework for assessing relational capital and environmental factors that influence sports sponsorship performance. The study offers insights into how businesses can strategically align sponsorship decisions with relational and environmental capabilities to optimize impact. Furthermore, it highlights the social value of ethical and emotionally resonant sponsorships, demonstrating how relational capital can extend beyond brand promotion to societal development, especially when aligned with national sporting initiatives and community engagement.

Recommendations: For practitioners, the study recommends adopting the proposed indicators as strategic benchmarks for planning and evaluating sports sponsorship campaigns. Companies should prioritize sponsorships that build emotional and moral connections with their target audiences while remaining sensitive to cultural and market-specific factors. It is crucial to establish transparent, long-term partnerships with sports entities and to invest in marketing capabilities that support relationship-building. For researchers, further exploration into the dynamic interplay between sponsorship effectiveness and emerging environmental pressures, such as digital transformation and shifting consumer values, is advised.

Research Limitations: Although the sample was drawn from a broad range of industries, it was geographically limited to Thailand, which may affect the generalizability of findings to other countries. Additionally, the reliance on self-reported survey data may introduce response bias. The use of CFA and PLS techniques, while robust, requires subjective decisions in model construction and indicator selection. The research also focused on business-to-sport relationships and did not capture consumer-side perceptions or outcomes, which could provide a more holistic view of sponsorship effectiveness.

Future Research: Future studies should investigate the causal relationships between relational capital and sponsorship outcomes across different cultural and industry contexts. Expanding the research to include consumer behavior, sponsor-consumer-brand alignment, and digital engagement strategies would offer valuable insights. Moreover, longitudinal studies examining the long-term impact of relational and environmental strategies on sponsorship Return on Investment and brand equity are warranted. Further exploration into local and national sponsorship models and their respective success factors can also contribute to developing a global framework for sports marketing.

Keywords: *Relational capital, sports sponsorship model, environmental forces*

Introduction

In the context of intense global competition, contemporary organizations must continuously refine their business strategies and marketing objectives while adhering to ethical standards and principles of good governance (Shaulska et al., 2021). As innovation cycles shorten and consumer behavior evolves rapidly, firms must adapt not only their products and services, but also their approaches to stakeholder engagement and accountability. Ethical business practices are no longer optional; rather, they are now fundamental to long-term sustainability, reputation management, and organizational legitimacy. From a broader perspective, ethical climates and governance structures can also be regarded as part of the environmental conditions that shape trust, transparency, and credibility in marketing activities.

In Thailand, the marketing ecosystem faces distinctive challenges, including declining consumer confidence in both domestic and international markets, as well as growing expectations regarding transparency and integrity in business practices. These challenges reveal a persistent gap between market potential and effective execution. Addressing such issues requires strong commitment from organizational leaders to cultivate ethical environments that emphasize responsibility not only toward

shareholders, but also toward employees, customers, and society at large. Prior research suggests that ethical workplace atmospheres contribute significantly to operational efficiency, employee morale, and brand integrity, thereby reinforcing sustainable marketing performance (Shaw, 2014). Thus, marketing ethics grounded in sound corporate governance form an essential foundation for effective sponsorship strategies and the development of relational capital in competitive economies.

Environmental forces represent critical external conditions that shape organizational marketing performance and sponsorship effectiveness. These forces encompass influences arising from customers, government agencies, societal expectations, employees, competitive intensity, and organizational marketing capability. Collectively, such environmental factors establish the institutional and market context within which trust, legitimacy, and acceptance of sponsorship activities are formed, thereby contributing to organizational efficiency and productivity (Shaw, 2014).

Within sports sponsorship, the effectiveness of relational capital is often contingent upon prevailing environmental conditions. Supportive government policies, favorable regulatory frameworks, and positive social perceptions of sports can enhance sponsorship outcomes, whereas limited institutional support or heightened competitive pressures may constrain marketing performance. Consequently, examining sports sponsorship solely through relational interactions may provide an incomplete understanding of sponsorship effectiveness. Instead, sponsorship outcomes should be viewed as emerging from the interaction between relational capital and broader environmental forces (Cornwell & Kwon, 2020).

This perspective is particularly relevant in the Thai sports context, where sports organizations frequently operate under close supervision and support from government agencies, and where sponsorship activities are influenced by public funding structures, policy directions, and social expectations. Integrating environmental forces into the sports sponsorship marketing framework therefore allows for a more accurate representation of real-world sponsorship dynamics in Thailand.

Sports sponsorship is closely aligned with market orientation, whereby business objectives are integrated with customer values and societal trends. Prior research has identified several indicators of effective sponsorship grounded in principles of good governance, including brand image enhancement (Wakefield et al., 2020), mutual event marketing that fosters brand–event synergy (Wiedmann et al., 2018), and effective communication strategies that sustain consistent engagement across multiple platforms (Cobbs et al., 2021). These elements contribute to increased enjoyment of sporting events, stronger fan engagement, and broader recognition of sponsoring brands. Furthermore, appropriate budget allocation and commercialization strategies are essential to ensure that sponsorship activities generate both emotional and financial returns. Unlike traditional advertising, sports sponsorship enables brands to embed themselves within consumer lifestyles, creating more authentic and memorable experiences. Strategic sponsorship has been shown not only to yield measurable returns, but also to strengthen long-term relational ties with consumers (Cornwell et al., 2016). Industry reports have further indicated that sports sponsorship represents one of the most promising growth areas within the global sports sector.

Creating competitive advantage and fostering inter-organizational collaboration through relational capital (RC) has become a strategic imperative in today's knowledge-driven economy. Relational capital encompasses networks, trust, loyalty, and shared understanding that sustain long-term relationships between organizations and stakeholders. These intangible assets are developed through responsiveness, reliability, and value co-creation, and have been widely recognized as a key component of intellectual capital influencing organizational performance (Korsakiene et al., 2017). In dynamic market environments, firms increasingly rely on relational knowledge embedded within organizational processes to support collaboration and decision-making, particularly in sponsorship partnerships. Customer engagement initiatives, for example, enhance brand visibility and trust, thereby strengthening relational capital (Calderón-Monge & Ramírez-Hurtado, 2022). Moreover, relational capital facilitates knowledge sharing, innovation, and organizational learning, which are essential for sustaining long-term partnerships in sports sponsorship contexts (Xue et al., 2017).

Despite the growing importance of sports sponsorship as a strategic marketing tool, there remains a significant research gap in understanding how relational capital and environmental forces jointly shape sports sponsorship marketing outcomes. Addressing this gap is particularly important in emerging and transitional markets such as Thailand, where sponsorship effectiveness is influenced by both relational dynamics and complex environmental conditions. Accordingly, this study sought to explore and validate key indicators of relational capital and environmental forces within a sports sponsorship marketing framework, providing a more comprehensive understanding of sponsorship dynamics in contemporary competitive environments.

Research Objective

To explore indicators of relational capital, moral and trustworthy appeal, emotional and logical appeal, and environmental forces such as marketing capability, customer orientation, societal impact, government support and competitor invasion in a sports sponsorship marketing measurement model.

Scope of the Study

This study focused on the development and validation of a sports sponsorship marketing measurement model that integrates indicators of relational capital and environmental forces influencing sports sponsorship in Thailand. The scope was limited to industrial business sectors that are actively involved in or have experience with sports sponsorship. Specifically, data was collected from 645 marketing executives across eight industries, including agro-food, consumer goods, finance, industrial products, real estate and construction, natural resources, services, and technology. The study emphasizes the identification of observable indicators from both relational and environmental dimensions that contribute to effective sponsorship outcomes. The scope also included examining the strategic implications of these indicators for marketing practices, stakeholder engagement, and brand development. Geographically, the research was confined to the Thai context, which may reflect localized business dynamics and sponsorship behaviors. Data collection was conducted from January to May 2024, with data analysis completed within the same period. Therefore, the findings reflect the prevailing marketing conditions and industry practices during that time.

Theoretical Framework

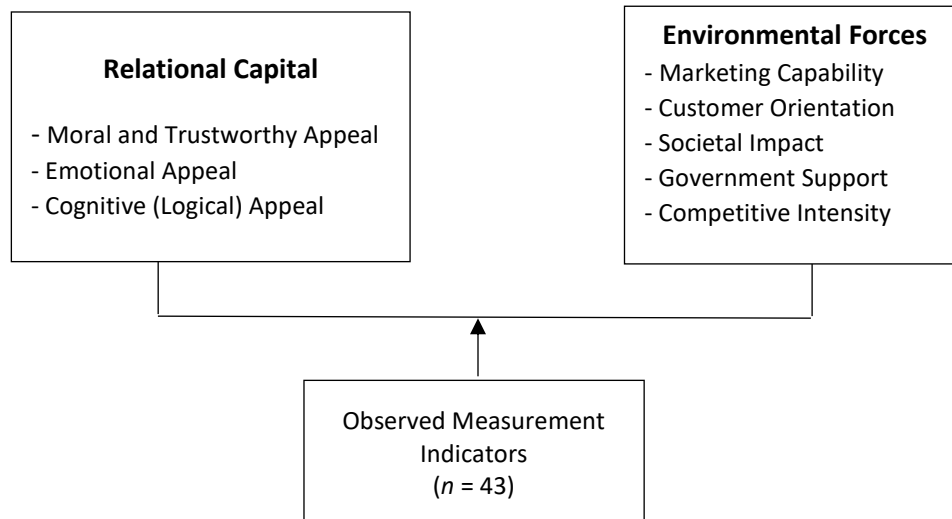
The theoretical framework of this study is grounded in the concepts of relational capital and environmental forces, which are key constructs in sports sponsorship marketing. Rather than emphasizing normative or ethical prescriptions, the framework focused on organizing and explaining the structural dimensions through which these constructs are conceptualized and measured within the sponsorship context.

Relational capital is understood as a strategic intangible resource that emerges from sustained interactions among stakeholders, including trust, cooperation, commitment, and shared understanding. Prior studies have identified relational capital as a critical component of intellectual capital that facilitates collaboration, knowledge sharing, and long-term partnership development, particularly in marketing and sponsorship activities (Xue et al., 2017). In sports sponsorship, relational capital enables organizations to strengthen relationships with sports institutions, partners, and consumers, thereby enhancing credibility and continuity in sponsorship engagements.

Environmental forces are conceptualized as external contextual conditions that shape the environment in which sports sponsorship activities operate. These forces include government involvement, societal expectations, competitive intensity, and organizational marketing capability. Such environmental conditions do not function as causal determinants in this study; rather, they provide the contextual framework within which relational capital is developed and sponsorship strategies are implemented. Prior research has suggested that marketing functions operate within these environmental conditions, and organizational practices must be aligned with broader social and institutional expectations (Walker & Hills, 2017).

Together, relational capital and environmental forces form an integrated theoretical structure that supports the development and validation of measurement indicators for sports sponsorship marketing. This framework, shown in Figure 1, provides a conceptual basis for examining the dimensions and indicators associated with sponsorship-related relationships and contextual conditions, serving as a foundation for the confirmatory factor analysis employed in this study.

Figure 1 *Conceptual Framework Illustrating the Measurement Structure of Relational Capital and Environmental Forces and Their Observed Indicators in Sports Sponsorship Marketing*



Note. The arrows represent structural relationships between latent constructs and their observed indicators within the measurement model and do not imply causal effects. The framework comprised 43 indicators and was validated using confirmatory factor analysis, demonstrating acceptable model fit with the observed data.

Literature Review

Sports sponsorship has emerged as one of the most prominent and effective marketing approaches in both the business and industrial sectors globally. According to the International Events Group Sponsorship Report (2020), approximately 69% of annual sponsorship budgets are allocated specifically to sports-related activities. This significant proportion reflects not only corporate marketing trends, but also a broader societal engagement with sports as a lifestyle and commercial platform. In Thailand, the public sector plays an important role in fostering this environment. The Sports Authority of Thailand (SAT), the main government body overseeing sports development, allocates a substantial annual budget—approximately 3,061 million Baht—to support a wide range of sports events, programs, and services. This institutional support provides critical infrastructure that enables both public and private entities to engage in collaborative sponsorship, thereby creating a well-established ecosystem for sports marketing and economic development.

Sports sponsorship focuses on marketing-oriented activities that enhance brand image, event visibility, and communication support (Wakefield et al., 2020), as well as competition and marketing opportunities (Cornwell et al., 2016).

Relational capital and environmental forces serve as the underlying mechanisms that connect product brands with consumers through strategic sponsorship—often via celebrity endorsements or high-profile sporting events. In the Thai context, the market is highly fragmented, with varying cultural and regional dynamics across the country. This makes sponsorship-based marketing particularly effective as it allows brands to establish direct emotional and symbolic connections with diverse consumer groups. Integrated sponsorship strategies can not only elevate brand visibility, but they also contribute to brand differentiation through creative use of media and interpersonal communication. Crompton (2015) emphasized that sports sponsorship, when executed effectively, provides firms with

a platform to enhance consumer purchase intention by leveraging trust and familiarity—advantages often inaccessible through conventional advertising. The dynamic nature of consumer behavior in Thailand, influenced by evolving health consciousness and interest in physical fitness, further underscores the relevance of sports sponsorship as a marketing tool. Nonetheless, there remains a research gap in fully understanding how these sponsorship activities translate into sustained brand equity and consumer loyalty.

The success of brand support through sports sponsorship depends heavily on clear marketing objectives, effective segmentation, and content strategies that align with the values of both the brand and its target audience. Bacon (2015) stressed that digital content design and data-driven sponsor selection are critical for enhancing consumer perception and increasing return on investment. However, in many cases, sponsors still struggle to establish a meaningful connection between the sponsored event and their brand identity, often viewing sponsorship purely as a financial transaction rather than as a relationship-building opportunity. Cultural context and consumer expectations play significant roles in how sponsorship messages are received. Research by Cheung et al. (2019) showed that consumers tend to rely on past positive experiences with brands when evaluating sponsorship value, emphasizing the importance of consistency and authenticity in sponsor messaging. Conversely, lack of transparency, sincerity, or mutual understanding can lead to contract breakdowns between sports institutions (often governmental) and corporate sponsors (Jensen & Cornwell, 2017). When sponsorship is strategically aligned and mutually beneficial, however, it fosters long-term relationships, improves brand recall, and builds consumer loyalty through repeated exposure across communication channels (Yang & Ha, 2014).

Relational Capital (RC) has become increasingly vital in today's knowledge-based and rapidly evolving business environment. Firms seek to develop RC as a strategic asset that complements technological advancement and drives competitive advantage (Kavida & Sivakoumar, 2009). RC encompasses the accumulated value of relationships with customers, partners, and stakeholders, and has been shown to directly influence marketing performance, sales potential, and even firm valuation in capital markets (Dženopoljac et al., 2016; Sardo & Serrasqueiro, 2017). These relational assets, though intangible, contribute to long-term value and reputation, which can significantly affect stock market confidence and brand equity (Vishnu & Gupta, 2014). Meles et al. (2016) further argued that RC plays a regulatory role in managing external forces, enabling firms to adapt, survive, and excel under shifting market conditions. This study thus emphasises identifying key indicators of RC and environmental forces relevant to the sports sponsorship context, especially for industries seeking to measure and enhance their marketing effectiveness.

This study conceptualized relational capital through three primary forms of appeal: a) moral and trustworthy, b) emotional, and c) logical. These appeals form the basis of consumer-brand relationships in sponsorship contexts. First, the moral and trustworthy appeal establishes credibility and authority, ensuring that sponsors are perceived as ethical, reliable, and aligned with public values (Han & Laurent, 2023). This is particularly critical in the digital era, where consumers are highly engaged and perceptive across online and offline media channels. Second, emotional appeal draws on personal sentiments, cultural values, and belief systems to form deep psychological bonds between brands and their audiences. Studies by Käpylä and Kennedy (2014) and Xie and Lou (2020) affirmed that emotional resonance plays a key role in fostering brand loyalty and increasing sponsorship effectiveness. Lastly, the logical reason appeal revolves around constructing rational, coherent messaging that is aligned with consumer expectations and enhances decision-making processes (Morrison, 2007; Tirkolaee et al., 2020). Shin et al. (2020) emphasized that a sound understanding of relational dynamics is essential for brands aiming to cultivate enduring customer relationships through sponsorship.

Research Methodology

In this research, a mixed-methods approach was employed, integrating qualitative and quantitative techniques to develop and validate a comprehensive sports sponsorship marketing measurement

model within the business context. The study focused on constructing and validating indicators associated with relational capital and environmental forces using survey-based instrument development and statistical modeling techniques. A structured questionnaire comprising both close-ended and open-ended items was designed. The close-ended items were used to collect quantitative data for confirmatory factor analysis (CFA), while the open-ended items provided qualitative insights into sponsorship practices and stakeholder perceptions.

The measurement model was developed through a multi-stage procedure. Initially, 43 observed indicators were generated based on an extensive review of relevant literature and expert consultations to ensure content validity and contextual relevance to sports sponsorship marketing. These indicators were preliminarily grouped into eight thematic elements reflecting key dimensions identified in prior studies.

Subsequently, the indicators were refined and reorganized into 12 first-order constructs based on conceptual similarity and empirical considerations. This refinement process aimed to enhance construct clarity and measurement precision while maintaining theoretical consistency. The 12 first-order constructs were then specified as components of two higher-order latent constructs, namely relational capital and environmental forces.

Confirmatory factor analysis (CFA) was conducted to validate both the first-order and second-order measurement structures. This analysis enabled the assessment of factor loadings, construct reliability, convergent validity, and overall model fit, thereby providing empirical support for the proposed measurement framework.

Population and Sample

The study's population comprised marketing executives from various industrial business sectors in Thailand who were involved in or had experience with sports sponsorship. The sample size determination followed the guidelines for Confirmatory Factor Analysis (CFA) using the Maximum Likelihood Estimation technique. According to Hair et al. (2019), an appropriate sample size for CFA should be at least 15 times the number of observed variables in the model.

In this research, a total of 43 observed variables were identified as part of the proposed relational capital and environmental force measurement model. Based on this calculation, the minimum required sample size was 645 respondents ($43 \text{ variables} \times 15 = 645$). This sample size met the recommended statistical threshold to ensure adequate power and model stability for CFA.

The sample was drawn from eight different industrial sectors using stratified random sampling, which ensured proportional representation across sectors. These sectors included agriculture and food, consumer products, finance, industrial products, real estate and construction, natural resources, services, and technology. The stratification provided a comprehensive cross-sectional view of sports sponsorship practices within the Thai industrial context, listed in the Stock Exchange of Thailand, thus enhancing the generalizability and relevance of the findings as shown in Table 1.

Table 1 Groups Surveyed from Industrial Businesses Supporting Sports Sponsorship in Thailand (n=645)

Industrial Business	Sample Size (Each)	Collected
1. Agro-food	73	55
2. Consumption	56	42
3. Finance	79	59
4. Industrial Products	130	98
5. Real Estate & Construction	204	153
6. Natural Resources	80	60
7. Services	177	133
8. Technology	59	45
Total	858	645

Source. Stock Exchange of Thailand

Research Tools

The research instrument employed in this study was a structured questionnaire, with items primarily adapted from established measurement scales used in previous studies (e.g., Bollen, 2014; Esteghamati et al., 2010; Hair et al., 2019). Content validity was ensured through nine expert reviews using the Item-Objective Congruence (IOC) Index, with all items achieving scores above .50. Reliability was assessed using Cronbach's alpha, with all constructs exceeding the recommended threshold of .70, indicating high internal consistency. Construct validity was examined through Confirmatory Factor Analysis (CFA), with results showing satisfactory factor loadings ($\lambda > .40$), Composite Reliability (CR $> .70$), and Average Variance Extracted (AVE $> .50$). Discriminant validity was further confirmed by comparing the square root of AVE for each construct with its inter-construct correlations.

Data Collection

The data collection process in this study began with the development of research instruments based on in-depth interviews with 9 experts in the businesses of agro and goods services, real estate and construction, technology, and one academician in the field of marketing and sports sponsorship. Insights from these interviews were synthesized to construct a comprehensive questionnaire designed to capture key dimensions of relational capital and environmental forces. The finalized instrument was distributed to 645 marketing executives using a self-administered format. The questionnaire was divided into three main parts. Part One gathered general information about the respondents, including sponsor characteristics and types of sports sponsorships, using a checklist format. Part Two consisted of 43 items measuring indicators of relationship marketing using a five-point Likert scale ranging from 1 (not practiced) to 5 (most frequent or important). Part three included open-ended questions that solicited respondents' perspectives and suggestions regarding relationship marketing strategies in their business sector and their involvement in sports sponsorship activities. This mixed-format structure ensured that both quantitative and qualitative data could be collected, offering a well-rounded view of current practices and perceptions in the Thai sports sponsorship landscape.

Data Analysis

Reliability was assessed using Cronbach's alpha coefficient, with a passing reliability value set at .70 and above. Analysis was conducted by using SPSS version 14.0 and AMOS version 6.0 on sports sponsorship and marketing relational capital with frequency descriptive analysis, skewness, and kurtosis. To analyze the modeling of marketing relational capital in Thai industries, secondary order confirmatory factor relationship analysis technique was performed by utilizing indices such as CMIN/DF, GFI, AGFI, NFI, CFI, RMR and RMSEA (Bollen, 2014). In summary, the eight variables of marketing relational capital were tested using confirmatory factor analysis (CFA) and the Partial Least Squares technique, with standardized factor loading (λ) and coefficient of determination (R^2) (Esteghamati et al., 2010).

Research Results

Confirmatory factor analysis (CFA) was conducted to evaluate the validity of the proposed measurement model comprising relational capital and environmental forces. The analysis followed a hierarchical approach, beginning with the assessment of first-order constructs and subsequently examining the second-order measurement structure.

At the first-order level, the 43 observed indicators were loaded onto their respective 12 constructs, with standardized factor loadings exceeding the recommended threshold of .40. These results indicated that the indicators adequately represented the underlying dimensions of sports sponsorship marketing and demonstrated satisfactory indicator reliability.

Table 2 *First-Order Constructs and Observed Measurement Indicators*

First-Order Construct	Number of Indicators
Moral and Trustworthy Appeal	5
Emotional Appeal	4
Logical (Cognitive) Appeal	4
Marketing Capability	4
Customer Orientation	4
Societal Impact	4
Government Support	3
Competitive Intensity	3
Brand Image Support	4
Event and Communication Support	4
Market Opportunity	2
Sponsorship Management Efficiency	2
Total Observed Indicators	43

Note. The allocated indicators reflect the finalized measurement structure used in confirmatory factor analysis.

As presented in Table 2, the 43 observed indicators were systematically grouped into 12 first-order constructs based on conceptual similarity and empirical refinement derived from expert interviews and an extensive review of the literature. These first-order constructs represent key dimensions of relational capital and environmental forces relevant to sports sponsorship marketing and served as the basis for the subsequent second-order confirmatory factor analysis.

Following validation of the first-order measurement structure, a second-order CFA was then performed to examine whether the 12 first-order constructs could be represented by two higher-order latent constructs, namely relational capital and environmental forces (see Figure 2).

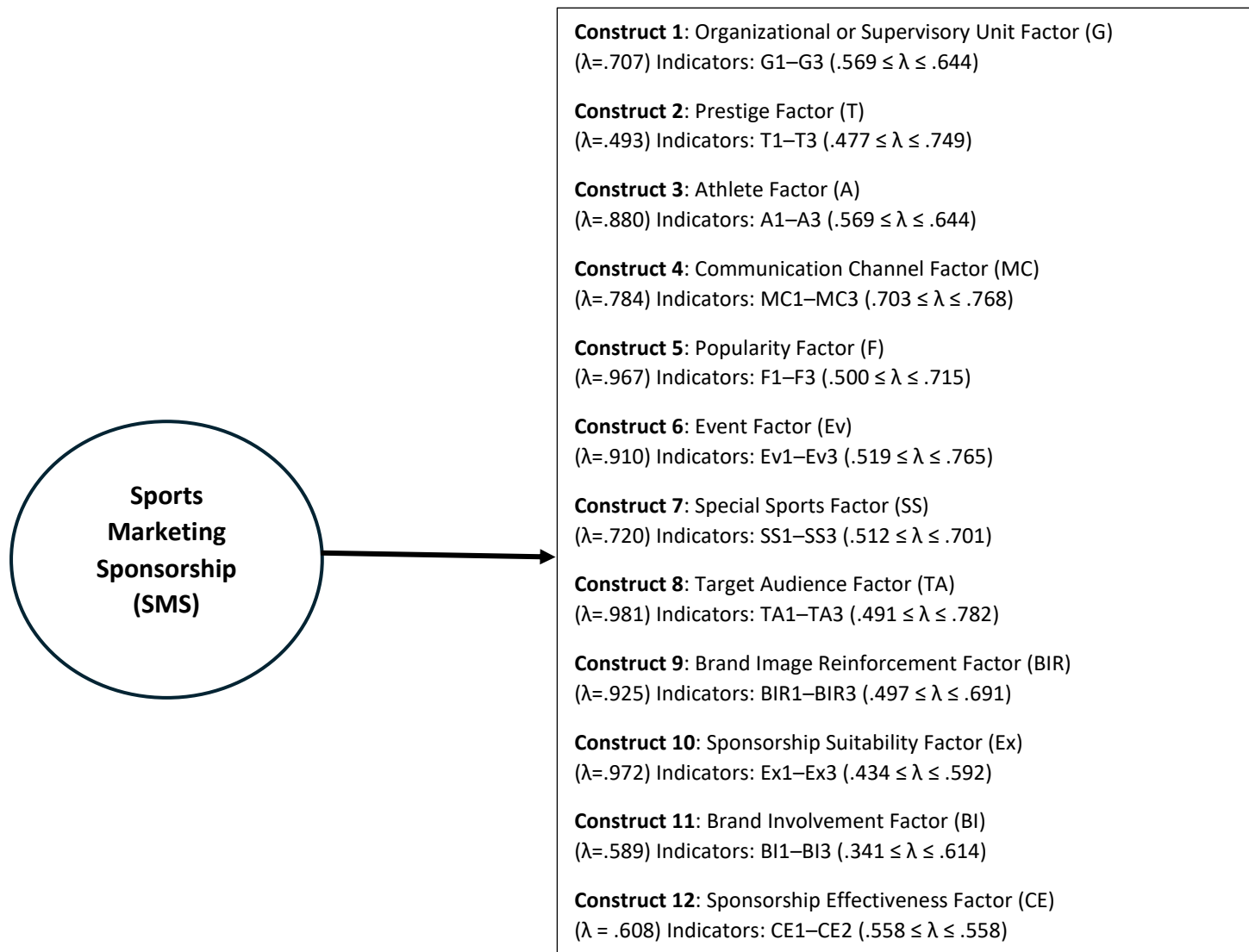
The overall measurement model demonstrated a good fit with the empirical data. The goodness-of-fit indices met recommended criteria ($\chi^2 = 1,464.372$, $df = 661$, CFI = .923, GFI = .995, RMR = .046, and RMSEA = .045), indicating that the specified model adequately represented the observed data structure. In addition, composite reliability (CR) values for all constructs exceeded acceptable thresholds, demonstrating satisfactory internal consistency.

Convergent validity was assessed using average variance extracted (AVE). Although several constructs exhibited AVE values below the recommended benchmark of .50, their composite reliability values were above .60. According to established guidelines, such results are acceptable in complex measurement models, particularly those involving higher-order factor structures, as sufficient reliability can compensate for lower AVE values.

Overall, the CFA results confirmed that the proposed measurement framework—consisting of 43 observed indicators, 12 first-order constructs, and two higher-order latent constructs—provides a valid and reliable representation of relational capital and environmental forces in the context of sports sponsorship marketing.

Relational capital was represented by three first-order constructs: a) moral and trustworthy appeal, b) emotional appeal, and c) logical (cognitive) appeal. Environmental forces comprised nine first-order constructs: marketing capability, customer orientation, societal impact, government support, competitive intensity, brand image support, event and communication support, market opportunity, and sponsorship management efficiency. Arrows indicate standardized factor loadings from first-order constructs to second-order latent constructs.

Figure 2 *Second-Order Confirmatory Factor Analysis Model of Relational Capital and Environmental Forces in Sports Sponsorship Marketing*



The results of CFA confirmed that the measurement model demonstrated satisfactory construct validity. As shown in Figure 2, all factor loadings were above the recommended threshold of .40, and the overall model fit indices ($\chi^2 = 1,464.372$, $df = 661$, CFI = .923, GFI = .995, RMR = .046, RMSEA = .045) indicated a good model fit, as illustrated in Figure 2.

Table 3 Composite Reliability (CR) and Average Variance Extracted (AVE) of Measurement Constructs

Construct	CR	AVE
Construct 1	.671	.417
Construct 2	.694	.439
Construct 3	.632	.365
Construct 4	.779	.540
Construct 5	.626	.363
Construct 6	.724	.473
Construct 7	.637	.373
Construct 8	.709	.457
Construct 9	.609	.346
Construct 10	.635	.281
Construct 11	.616	.273
Construct 12	.608	.311
Overall Results	.956	.638

Note. Although some AVE values were below the recommended threshold of .50, the corresponding composite reliability (CR) values exceeded acceptable levels, indicating adequate convergent validity for complex higher-order measurement models.

Discussion of Findings

This study validated a model of relational capital (RC) and environmental forces that significantly influences the effectiveness of sports sponsorship in Thailand. Emotional appeal and customer orientation demonstrated the highest factor loadings, confirming their strong role in shaping sponsorship success. Moral and trustworthy appeal, along with marketing capability, also emerged as critical drivers, underscoring that both relational and environmental dimensions are essential for achieving sustainable sponsorship outcomes. The model showed good fit indices, confirming the robustness of the proposed framework.

The findings reinforce previous research highlighting the importance of emotional engagement in sponsorship-linked marketing (Cornwell et al., 2016; Käpylä & Kennedy, 2014). They also confirmed Cornwell and Kwon (2020), who argued that sponsorship effectiveness is driven by relational ties rather than transactional exchanges. Conversely, our results partly challenge Crompton (2015), who emphasized the risks of negative sponsorship outcomes; while risks exist, this study suggests that well-managed relational capital indicators (trustworthiness, sincerity, and emotional appeal) can mitigate these risks. Moreover, alignment with customer orientation supports Pitts and Zhang's (2020) argument that sponsorship effectiveness is maximized when brand strategies reflect consumer and societal expectations.

This research extends the literature by integrating relational capital with environmental forces into a unified sponsorship model. While RC has traditionally been studied as an intangible asset, our results showed its interactive role with environmental factors such as competitor invasion and government support. This interaction contributes to a more comprehensive understanding of how sponsorship strategies operate within complex, multi-stakeholder environments. The study thus adds to intellectual capital theory by demonstrating that RC is not only a relational asset, but also a strategic buffer and amplifier of environmental pressures.

For marketing executives, these findings provide clear guidance. Sponsorship strategies should prioritize building emotional and moral connections with audiences while simultaneously investing in marketing capability and customer orientation. Transparent, long-term partnerships with sports organizations can enhance trust and credibility, while a strong customer orientation ensures that

sponsorship resonates with evolving consumer values. Firms should also monitor environmental dynamics such as competitor actions and policy changes, using the validated indicators as benchmarks for decision-making. The study results raise awareness of a trial and reinforcement model to compare the effects of generating levels of environment and relational capital. While both forces evoke response patterns, the fact is that organizers cannot expect to receive unlimited budgetary funds due to the need for return on investment.

The study was limited to the Thai context, which may restrict generalizability to other countries with different sponsorship ecosystems. Data were also self-reported by marketing executives, which may have introduced potential bias. Future research should include consumer perspectives to capture how sponsorship affects brand perception and loyalty more directly. Cross-cultural studies and longitudinal designs are also recommended to test the stability of relational and environmental indicators over time and across markets.

Recommendations

Academic Recommendations

Marketing relational capital activities should be supported through moral, trustworthy, emotional, and logical appeals of leading firms; this is crucial in relationship sports marketing. Another guideline is to consider leading relational marketing indicators as drivers for uncertain and diverse environments.

Future Research Recommendations

1. Develop a causal model of marketing relational capital global sports sponsorship success by analyzing competitiveness and market opportunities, including market structure.
2. Pay attention to sports sponsorship, the application of market development, consumer evaluation, and decision-making behavior.
3. Finally, a valid further study of sports sponsorship should focus on antecedents and successful outcomes of events through levels of local and national sponsors' analysis modeling approach.

Author Contributions

Ammara Phakdeeburi: Conceptualization, methodology, investigation, formal analysis, data curation, visualization, writing—original draft, and project administration; **Prin Laksitamas:** Supervision, validation, writing—review & editing, and final approval of the manuscript.

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