

Mapping modern sport sponsorship in men's professional sport: A social network analysis



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Abstract

Background: It is important to document sponsorship activity, its trends and patterns. Concurrently, there is a limited understanding of the modern sport sponsorship marketplace. The purpose of this study was to examine the current state of sport sponsorship by mapping the social network of brands (i.e., sponsors) and sport properties in a professional sport league.

Methods: Using the National Hockey League as a single-shot case study, over 206,000 sponsorships were identified with 2,073 brands engaged in sponsorship during the 2022 calendar year. Centrality measures were used to determine the strength of the connections with others in the network.

Results: The study revealed that although brands from traditional categories exist, there has been a increased proliferation of subcategories in order to maximize sponsorship inventory. Thus, there is a potential for growth and expansion in professional sport sponsorship, where non-traditional brands in subcategories can enter the space to achieve brand-focused objectives.

Conclusions: Through finding brands that are congruent with their organizational values, and are committed to investing in long-term relationships, properties can realize benefits of reduced sponsor turnover, and increased fan identification (Wakefield et al., 2020). Further, brands should seek creative ways to ensure congruence between brand and property, as congruence and endurance allow for a brand to more effectively achieve their marketing objectives of brand image, awareness, and equity.

Keywords: *sport marketing, National Hockey League, brands, professional sport*

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1. Mapping Modern Sport Sponsorship in Men's Professional Sport: A Social Network Analysis

Whether through sports, entertainment, arts, or events, brands and properties engage in sponsorship activities with the expectation of recognition or collaboration that supports marketing and revenue generation goals (Cornwell et al., 2005). While conventional sponsorship arrangements involved automotive, insurance, or alcohol brands partnering with sport and entertainment properties, in recent years, these industries have been supplanted by non-traditional categories that look to harness the breadth and expansive reach of sport to realize their own marketing goals (Naraine et al., 2022). Consequently, sponsors from non-traditional brand categories have incorporated modern activation strategies and rights inventory such as exclusive content, social media, and value-added experiences in order to effectively engage fans and build a positive brand-consumer relationship (Wakefield et al., 2020). Moreover, the ways in which sponsors get involved (or not) continues to evolve, with brands seeking category exclusivity and creative activations or potentially considering withdrawal and resource reallocation (Dees et al., 2019). Thus, it is important to document sponsorship activity, its trends and patterns.

Concurrently, there is a limited understanding of the modern sport sponsorship marketplace. Scholars thus far have researched the modern sport sponsorship marketplace in regard to how sponsorship is engaged with (Cornwell, 2019), as well as the effectiveness of sponsorship leveraging on social media (Naraine et al., 2022). Additionally, we have seen through the work of Dees et al. (2019) that the

type of sponsorship assets and intangible rights associated with a sponsorship deal (e.g., official status designation, vendor sponsorship, etc.) can have a significant impact on the desired effects for sponsors, such as brand awareness. However, there remains a deficiency in research regarding the design of the connections and ties of sponsor portfolios within sport sponsorship (Cornwell & Kwon, 2019). Pieters et al. (2012), providing a template for sponsorship network analysis, mapped the social network of Dutch soccer clubs and their sponsors, finding that actor embeddedness impacts upon commercial performance. Chadwick et al. (2022) similarly analyzed sponsorship networks within the context of soft power, noting that the structural embeddedness of sponsorship partners bears significant economic and non-economic benefits. Through understanding this evolution of the sport sponsorship marketplace, sport marketers can refine their sponsorship and marketing strategies, so that future decisions can be tailored to both the brand and properties desired outcomes.

Therefore, the purpose of this study was to examine the current state of sport sponsorship by mapping the social network of brands (i.e., sponsors) and sport properties in a professional sport league. Adhering to this purpose, the study sought to illuminate sponsorship in the National Hockey League (NHL), a North American sports league that operates primarily in two countries: Canada and the United States. Moreover, the study's purpose assists in the illumination of major categories and subcategories in the North American sport sponsorship ecosystem, specifically strong and weak ties between NHL teams and their sponsors.

With sponsorship continually diversifying and expanding in recent years (Naraine et al., 2022), this study will disclose critical information regarding the central figures in the modern sponsorship space, as well as the various ties that exist to maximize sponsorship effects. In this spirit, the following research questions are advanced:

RQ1 – What types of sponsorship activity exist in the modern professional sport environment?

RQ2 – What types of sponsoring brands, new or existing, exist in the modern professional sport ecosystem?

2. Literature Review

Sport Sponsorship

Contemporary understandings of sponsorship are founded on the potential strategic value present for brands to be derived through sponsorship relationships (Cousens et al., 2006; Mazodier & Merunka, 2011). Brands often sponsor sport properties due to a variety of effects that they seek, whether they be brand awareness, personality and image, loyalty, and/or goodwill (Cliffe & Motion, 2005). But, the brand must decide whether the sport sponsorship is “right” for them given contextual and other factors (e.g., resources; Cornwell et al., 2001).

Concomitantly, for most sport organizations, sponsorship transcends being an essential part of marketing strategies, as it serves as an essential funding mechanism (Jensen & Cornwell, 2017). Consider Shell’s 93-year long partnership of Scuderia Ferrari in Formula 1 (Wilde, 2021); sport sponsorship can be a staple revenue source that transcends transactional advertising relationships (Beck et al., 2015). Further, long-term relationships are highly valuable for the sport property as it helps its own

brand equity and impacts financial value (Cornwell et al., 2001).

Yet, sport properties are regularly faced with the struggles of preventing sponsor turnover, and in replacing departing sponsors (Delia, 2017). To combat this struggle, it is critical that congruence exist between brand and property (Jensen & Cornwell, 2017). Congruence is a key factor in the effectiveness of a sponsor-relationship, as increased congruence can positively influence sponsor credibility and sponsor-brand identification (Wang, 2017). Scholars have found that in order for a brand and property’s sponsorship relationship to be viewed as congruent or a “good fit” by consumers, the brand must: have a direct relationship with the sponsored sport (e.g., Nike shoes and soccer), be used or seen when watching televised sport events, and/or it must be consistent with an active sporting lifestyle (Cornwell et al., 2005). From the work of Dees et al. (2010), there is an understanding that congruence results in positive outcomes for the brand and sport property dyad. But, in order for congruence and “fit” to be assessed, it is critical to map out the brand-property dyad in sport.

Networks in Sport Management

In broad terms, a network is the web of relationships in which two or more people or entities are embedded (Quatman & Chelladurai, 2008). These connections, otherwise known as ties, exist within a network define relationships and can be produced in a variety of ways, whether it is through friendship, kinship, communication, and/or business processes (Borgatti et al., 2022). The ties that define the relationships between people/entities (also known as

nodes) thus reveal insights into how the social structure of these relationships influences beliefs and behaviors. This concept makes up the basis of network theory, as opportunities are constrained or provided to actors based on their relationships within the network.

Emerging from network theory, social network analysis (SNA) outlines the structure and positions of networks from node-level to dyad-level, and has been utilized by sport researchers to illuminate innovative activity (e.g., Naraine & Parent, 2016; Wäsche et al., 2017). The increased relevancy of SNA in sport management is largely attributed to the work of Quatman and Chelladurai (2008), emphasizing how the analysis can showcase both active and inactive collaborations, interactions, and coordination between actors within the sport industry (Dobbels et al., 2016).

Similar to other areas of sport-based research, SNA was severely underutilized in sport marketing, though recent studies show promise for the use of this innovative method in the field. For instance, the work of Katz et al. (2018) used SNA to examine relationships in a brand community triad as they relate to the behavior of sport consumers. Similarly, Schyvinck et al. (2022) used SNA to unpack cause-related marketing relationships and their impact on sport marketing strategy implementation. Likewise, within the context of sport sponsorship, social network analysis has been adopted to examine the economic and non-economic benefits of sponsorship for geopolitical actors (Burton et al., 2020; Chadwick et al., 2022). For sport managers, it is vital then that the relationships between brands and organizations be analyzed and understood, as these

ties can facilitate the success or failure of sport sponsorship relationships. While SNA within sport marketing is continually emerging, an opportunity to expand current academia exists through analyzing the relationships that define the evolving and volatile sponsorship industry.

3. Method

To address this study's purpose, a single-shot case study design was employed. Specifically, the NHL, its teams, and their sponsoring brands, were selected for examination. As one of the "Big Four" men's professional leagues in North America (O'Reilly et al., 2023), the NHL garner's significant media and sponsorship attention in both Canada and the United States. The decision to select the NHL as the site for examination was purposeful (due to its significant commercial activity), but also convenient given the availability of data (see the subsequent subsection).

Data Collection

To map the social network of brands and properties within a professional sport league, data were collected via Sponsor United, a sponsorship database platform. The platform collects and stores sponsorship information for multiple leagues, teams, and other entities around the world, but with a deliberate focus on commercial activity in North America. The research team were granted access to all sponsorship data points for the NHL's 32 teams in the 2022 calendar year. Specifically, the lead researcher exported all data to Microsoft Excel, where each relationship was parsed into multiple rows that identified the sponsoring brand and the team sponsee in a two-mode matrix. In a separate, but related Microsoft Excel sheet, all unique sponsoring brands

were listed with their applicable category/subcategory as recorded in the Sponsor United platform.

Data Analysis

To map, analyze, and assess the data, SNA techniques were employed using R (Borgatti et al., 2022). After parsing the data and creating the two-mode matrix, data were imported into RStudio along with the xUCINET package. Typically, in many sport management studies, UCINET's desktop version is utilized for SNA purpose (cf. Naraine & Parent, 2016; Schyvinck et al., 2022), however R's xUCINET has been shown to be more effective when analyzing larger and more expansive networks (Borgatti et al., 2022). The entire sponsor network was mapped into a sociogram (a visual representation to elucidate connections), as well as an additional sociogram to show connections between teams, whereupon more nuanced analyses were performed to examine measures of centrality within the network.

Indegree centrality of NHL team properties was executed (i.e., the number of sponsorships coming in), as was outdegree centrality on the brand side (i.e., the number of sponsorship going out). The Freeman betweenness centrality measure was then measured, indicative of which teams act as "gatekeepers" within the network, and who could potentially facilitate connections with other teams. Finally, Bonacich beta centrality was assessed to determine "powerful" or "major" actors in the network, as a measure of the strength of the connections with others in the network. All scores were

normalized and reported in this form thereafter.

4. Results

For the data collection period encompassed here (the 2022 calendar year), 2,073 brands were identified as an official sponsor to one or more of the 32 NHL Teams, yielding over 206,000 relationships (see Figure 1). Given the depth of the network, a team-only sociogram, indicative of shared sponsors, offered a visual depiction of sponsorship activity (see Figure 2). Specifically, Figure 2 reveals teams who are receiving unique, inbound sponsorships, denoted by their position on the boundaries of the sociogram, while teams within the middle of the diagram may not necessarily have unique brands sponsoring them, rather sharing inbound sponsorship brands with other teams (likely in the same category). Teams such as Anaheim Ducks, Arizona Coyotes, and Florida Panthers appear more inclined to have unique (potentially localized) sponsors than other teams that have greater (inter)national brand partnerships.

These details are further emphasized by the indegree centrality scores for NHL teams (see Table 1), where teams in major markets or with recent success like Dallas Stars and Tampa Bay Lightning yield the highest number of inbound sponsors. Furthermore, the network, from a team property perspective, can be split into teams who are "most active", through their connections to sponsors and their shared associations with other

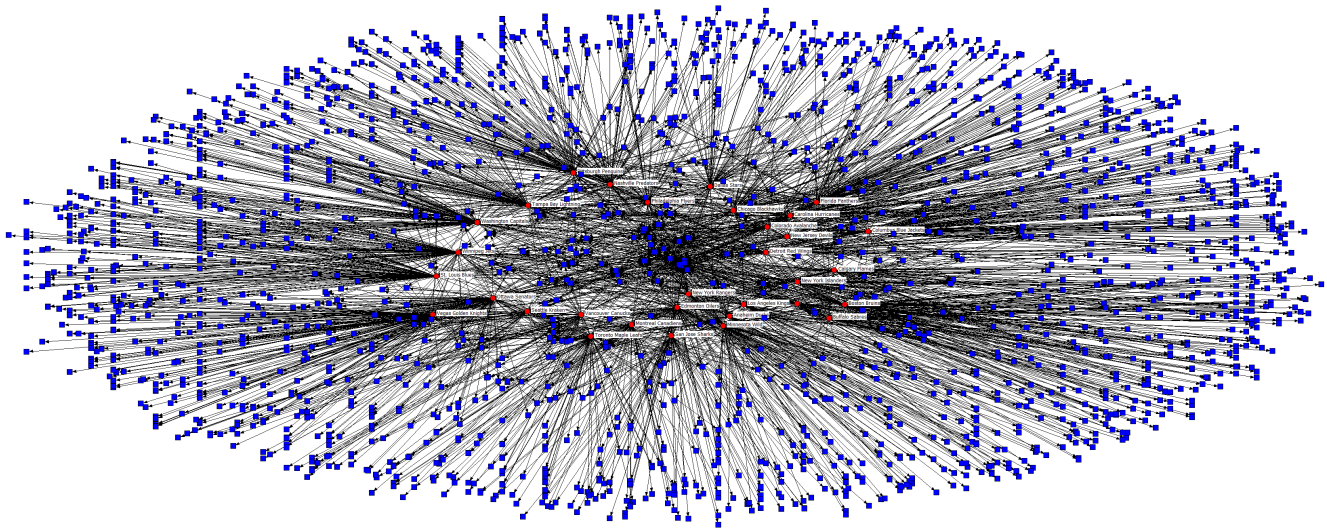


Figure 1 – NHL sponsorship sociogram

teams, and teams who are “not as active” via core-periphery SNA modeling (see Table 2). Unsurprisingly, those same teams (i.e., Dallas Stars and Tampa Bay Lightning) reappear in the core, and are joined by other teams such as Washington Capitals, Nashville Predators, Pittsburgh Penguins as most active in the sponsorship network. Conversely, teams like Anaheim Ducks, Arizona Coyotes, and Florida Panthers that are known to be less active appear, however major market teams like Toronto Maple Leafs and Seattle Kraken also appear lower on the list of active teams. Ultimately, the core-periphery reveals which teams are most active, and which teams could be more active to proliferate their property across various categories and subcategories.

In this spirit, outdegree centrality from sponsoring brands in the NHL sponsorship network reveal intriguing insights. As Table 3 highlights, there are prominent brands who are involved in the sponsoring of multiple team properties in this network. For instance, EA Sports in the video game category, Fanatics in the sports apparel category,

and Gatorade in the performance drink category are quite active in sponsoring multiple (if not all) teams in the network, as demonstrated by their outdegree centrality. Perhaps unsurprisingly, these “major players” and others in Table 3 are global brands recognizable to many consumers; whereas smaller, more localized official sponsors are those least central to the industry, as these brands typically only sponsor the team that is in close geographical proximity (see Table 4).

Relatedly, the beta centrality measures employed indicated the most influential brands within the sponsorship network, where a higher normalized value indicated an increased scope of influence. The average beta centrality score across all 2,073 brands was 0.57, which suggests that the majority of brands have little to no influence vis-à-vis their connections with multiple teams, and that only a small subgroup of the largest brands have influence due to their connections and position within sponsorship portfolios. Of the 2,073 brands that act as official sponsors within the NHL, only 125 had

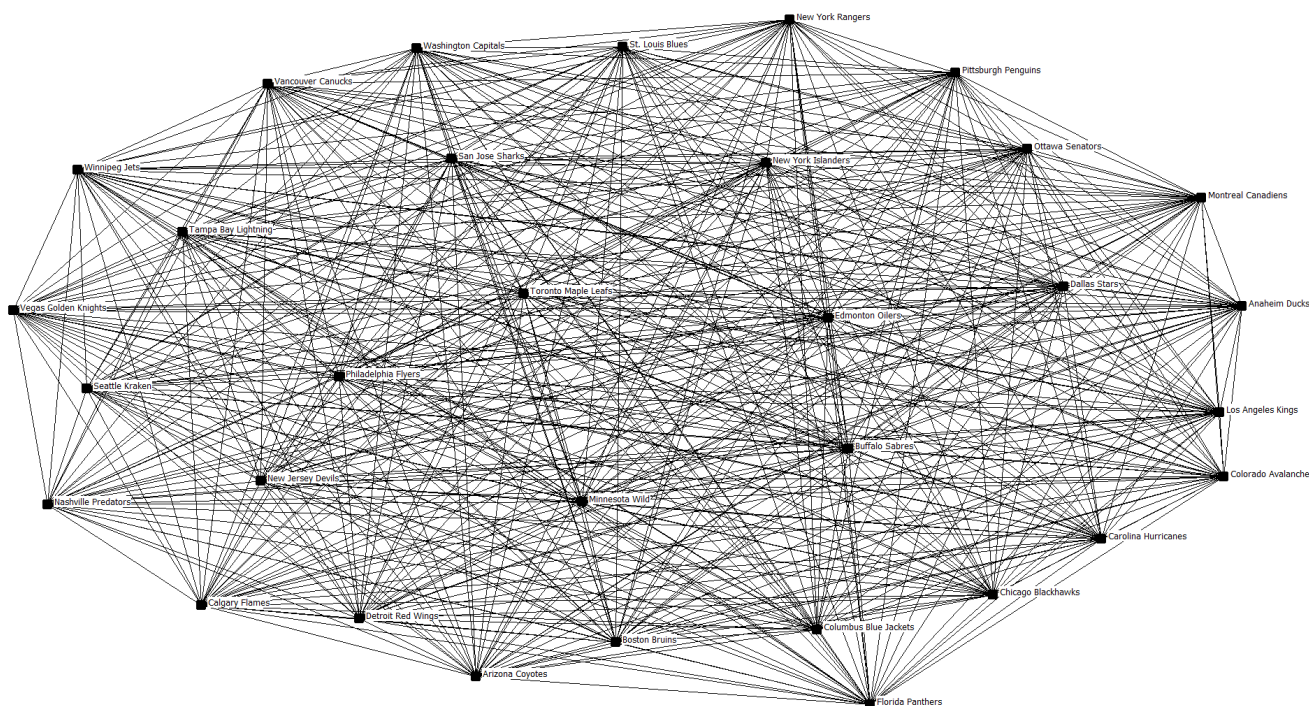


Figure 2 – NHL team shared inbound sponsorship sociogram

a beta centrality score above 1.0 (where higher values indicate more weight in the network), with five brands having centrality scores above 10; sponsorship strength in this network tends to concentrate amongst a few notable brands (see Table 5).

5. Discussion

Unsurprisingly, there is a large amount of activity that occurs in the sponsorship network of a professional sport league, and much of that activity manifests from traditional brand categories. For instance, sponsoring brands with high degrees of centrality represent the automotive (e.g., Toyota), insurance (e.g., Geico), and fast food (e.g., Dunkin’) categories, in addition to endemic partners in ticket sales (i.e., TicketMaster) and apparel (e.g., adidas). This aligns with Cornwell et al.’s (2005) assertion that sponsoring brands tend to align with the sport itself, the consumption of the sport, or, generally, an active sporting lifestyle (Cornwell et al., 2005). Indeed, the pervasiveness of these tradi-

tional brands to sponsor multiple (if not all of the) team properties in the NHL suggests a shift towards exclusivity, monopolizing consumer attention and generating positive brand image, awareness, and loyalty (Dees et al., 2019). However, large amounts of sponsorship activity is not solely limited to these traditional segments. The emergence of “new” brands like Socios.com and EA Sports indicates sport sponsorship continues to evolve (Naraine et al., 2022), particularly with relevant topics such as non-fungible tokens (Baker et al., 2022) and esports (Naraine, 2021).

Concurrently, the activity within this network was also congruent with Burton’s (2019) assessment that sport sponsorship is not always entirely effective. Although selected brands were shown to have beta centrality scores less than 1.0, 82% of brands in the network had scores below that threshold, indicative of their lack of connectivity to others. This point emphasizes that the vast majority of sponsors within professional sport industry have

Table 1 Indegree Centrality Measures within the Sponsorship Network

| NHL Team | Indegree Value |
|-----------------------|-----------------------|
| Anaheim Ducks | 9.935 |
| Arizona Ducks | 9.903 |
| Boston Bruins | 11.903 |
| Calgary Flames | 11.387 |
| Carolina Hurricanes | 10.387 |
| Chicago Blackhawks | 11.613 |
| Colorado Avalanche | 12.258 |
| Columbus Blue Jackets | 10.258 |
| Dallas Stars | 14.258 |
| Detroit Red Wings | 11.903 |
| Edmonton Oilers | 10.290 |
| Florida Panthers | 10.516 |
| Los Angeles Kings | 10.161 |
| Minnesota Wild | 11.097 |
| Montreal Canadiens | 10.226 |
| Nashville Predators | 14.032 |
| New Jersey Devils | 10.290 |
| New York Islanders | 11.097 |
| New York Rangers | 11.839 |
| Ottawa Senators | 12.065 |
| Philadelphia Flyers | 12.774 |
| Pittsburgh Penguins | 12.161 |
| San Jose Sharks | 11.387 |
| Seattle Kraken | 9.484 |
| St. Louis Blues | 10.903 |
| Tampa Bay Lightning | 14.742 |
| Toronto Maple Leafs | 9.387 |
| Vancouver Canucks | 10.387 |
| Vegas Golden Knights | 11.065 |
| Washington Capitals | 13.742 |
| Winnipeg Jets | 11.323 |

little influence and operate on the periphery. Although sponsorships can impress upon a consumer's memory (Dees et al., 2010), the lack of relevancy that these brands have within the space may inhibit their ability to fully realize the value of their agreements or mitigate competitive messaging (Burton, 2019). So, for a brand like Alaska Airlines which boasts limited NHL sponsorships (e.g., Seattle Kraken), the onus exists on them to consider how other competitor airlines like Delta, United, and Air Canada may receive greater awareness through their sponsorship of other entities in the network or by generating unofficial "buzz" in Seattle for their products. In essence, simply sponsoring one entity (altogether) may not be enough to achieve the impact the brand seeks such as awareness, image, and recognition (Dees et al., 2019). Consequently, brands may wish to reflect upon their congruence with the property, and consider strategies to promote achievement of the sponsorship objective(s) and to prevent dissolution (Jensen & Cornwell, 2017).

Furthermore, the proliferation of sub-brands present in the sponsorship network is notable. The subcategorization of more traditional sponsor sectors, such as "alcohol" being subdivided into domestic beer, imported beer, and specific spirits such as vodka and whiskey bourbon, highlights the challenges posed to sponsor partners in enforcing category exclusivity, as well as the rapid proliferation of new entrants into the sponsorship ecosystem. This trend of further dissecting categories into unique parts exists in other areas (e.g., non-alcoholic beverages, fast food), and should be considered as teams and brands evolve their approach to sponsorship. Finally, the modern sponsorship environment should not overlook the perspective of the sport properties themselves, or teams in this context. The wealth of sponsorship activity taking place, with many teams boasting over 100 sponsorships, is significant. Our findings affirm, however, that the quantity sponsorship is not necessarily

Table 2 Core-Periphery of Teams in the Sponsorship Network

| NHL Team | Value | NCorewithK |
|-----------------------|-------|------------|
| Core | | |
| Washington Capitals | 1.000 | 1 |
| Tampa Bay Lightning | 0.997 | 2 |
| Nashville Predators | 0.997 | 3 |
| Dallas Stars | 0.921 | 4 |
| Pittsburgh Penguins | 0.843 | 5 |
| Chicago Blackhawks | 0.822 | 6 |
| Ottawa Senators | 0.812 | 7 |
| Vegas Golden Knights | 0.805 | 8 |
| Boston Bruins | 0.784 | 9 |
| Philadelphia Flyers | 0.772 | 10 |
| Periphery | | |
| Carolina Hurricanes | 0.740 | 11 |
| St. Louis Blues | 0.715 | 12 |
| Detroit Red Wings | 0.715 | 13 |
| Winnipeg Jets | 0.710 | 14 |
| Colorado Avalanche | 0.708 | 15 |
| Minnesota Wild | 0.706 | 16 |
| New York Rangers | 0.687 | 17 |
| Buffalo Sabres | 0.671 | 18 |
| San Jose Sharks | 0.671 | 19 |
| New York Islanders | 0.656 | 20 |
| Florida Panthers | 0.649 | 21 |
| Columbus Blue Jackets | 0.648 | 22 |
| Edmonton Oilers | 0.622 | 23 |
| Calgary Flames | 0.616 | 24 |
| Vancouver Canucks | 0.615 | 25 |
| Montreal Canadiens | 0.599 | 26 |
| New Jersey Devils | 0.589 | 27 |
| Los Angeles Kings | 0.587 | 28 |
| Toronto Maple Leafs | 0.572 | 29 |
| Anaheim Ducks | 0.570 | 30 |
| Arizona Coyotes | 0.565 | 31 |
| Seattle Kraken | 0.549 | 32 |

most important, but rather the quality.

For example, the Toronto Maple Leafs, the NHL’s most commercially lucrative and successful team (O’Reilly et al., 2023), do not boast the greatest number of sponsorships (evidenced by their normalized indegree centrality scores). Moreover, their position in the sponsorship network is on the peripheral fringe, not sharing as many like brands with others. Rather, the Maple Leafs would appear to have prioritized a unique, differentiated sponsorship strategy, identifying brands and categories that may not be prominent in the network.

This contradicts most SNA work in sport (e.g., Pieters et al., 2012) where, perhaps, being more central or core is desired. In fact, there is advantage to both central and non-central actors in a sport network, particularly when considering value from the latter creates competitive advantage (Naraine & Parent, 2016). Thus, when the core of the sponsorship network includes a list of ten teams, one can deduce that many of those brand partnerships are being mimicked across one another. The periphery of the network is indicative of teams who are adopting a similar approach to the Maple Leafs (fewer overall sponsors, and unique brands) or perhaps adopting a different approach, such as a hyperlocal strategy where smaller, regionalized sponsors are the focus. Whatever the specific context, it is important to underscore that there is not a one-size-fits-all strategy to modern sport sponsorship (Cornwell, 2019). Moreover, both teams and brands need to consider their contexts, as well as the unique, innovative strategies they may employ to maximize partnership revenue and achieve mutually beneficial outcomes.

Practical Implications

Ultimately, the results of this study provide an avenue for future strategic sponsorship decision. Traditional sponsors perhaps unsurprisingly, are most central to the industry, with the most active brands being enduring sponsors.

Table 3 Selected High Outdegree and Beta Centrality Scores for Sponsoring Brands

| Sponsoring Brand | OutDegree Value | Beta Centrality Value |
|-------------------------|------------------------|------------------------------|
| EA Sports | 1.426 | 11.433 |
| Fanatics | 1.426 | 11.433 |
| Gatorade | 1.422 | 11.398 |
| adidas | 1.406 | 11.286 |
| Enterprise Rent-A-Car | 1.367 | 10.860 |
| Geico | 1.091 | 9.126 |
| TicketMaster | 1.132 | 9.033 |
| Bud Light | 0.851 | 7.144 |
| New Amsterdam Vodka | 0.841 | 6.966 |
| Coca-Cola | 0.793 | 6.082 |
| Budweiser | 0.695 | 5.925 |
| Lexus | 0.733 | 5.789 |
| Socios.com | 0.702 | 5.719 |
| Ford Motor Company | 0.697 | 5.390 |
| Toyota | 0.654 | 5.260 |
| Dunkin' | 0.642 | 5.035 |
| Bud Light Seltzer | 0.596 | 5.035 |
| Jack Daniel's | 0.580 | 4.852 |
| Coors Light | 0.583 | 4.774 |
| Coca-Cola Zero Sugar | 0.594 | 4.673 |
| Pepsi Zero Sugar | 0.528 | 4.386 |
| Progressive Insurance | 0.507 | 4.259 |
| Pepsi | 0.480 | 4.052 |
| Michelob Ultra | 0.472 | 4.017 |
| Truly Hard Seltzer | 0.474 | 3.943 |

* All scores normalized

Table 4 Selected Low Outdegree and Beta Centrality Scores for Sponsoring Brands

| Sponsoring Brand | Outdegree Value | Beta Centrality Value |
|----------------------------------|------------------------|------------------------------|
| Filson | 0.032 | 0.283 |
| Fremont Brewing Co. | 0.032 | 0.283 |
| HockeyTech | 0.032 | 0.283 |
| Hop Valley Brewing Company | 0.032 | 0.283 |
| Impossible Foods | 0.032 | 0.283 |
| KEXP | 0.032 | 0.283 |
| LiUNA! Local 242 | 0.032 | 0.283 |
| Muckleshoot Casino | 0.032 | 0.283 |
| PitchBook Data | 0.032 | 0.283 |
| Premera Blue Cross | 0.032 | 0.283 |
| Puget Sound Energy | 0.032 | 0.283 |
| Root Sports | 0.032 | 0.283 |
| Silver City Brewing | 0.032 | 0.283 |
| 14 Hands | 0.032 | 0.283 |
| Tegria | 0.032 | 0.283 |
| The Climate Pledge | 0.032 | 0.283 |
| Bavarian Meats | 0.032 | 0.283 |
| VIDO Vodka | 0.032 | 0.283 |
| Virginia Mason Franciscan Health | 0.032 | 0.283 |
| Washington Federal (WaFD) | 0.032 | 0.283 |
| Washington's Lottery | 0.032 | 0.283 |
| Westland Distillery | 0.032 | 0.283 |
| Alaska Airlines | 0.032 | 0.283 |
| Smartsheet | 0.032 | 0.283 |
| Space Needle | 0.032 | 0.283 |

Table 5 “Core” Brands in the Sponsorship Network

| Sponsoring Brand | Value | NCorewithK |
|-----------------------|-------|------------|
| Fanatics | 1.000 | 2 |
| EA Sports | 1.000 | 2 |
| Gatorade | 0.997 | 3 |
| adidas | 0.987 | 4 |
| Enterprise Rent-A-Car | 0.950 | 5 |
| Geico | 0.798 | 6 |
| TicketMaster | 0.790 | 7 |
| Bud Light | 0.625 | 8 |
| New Amsterdam Vodka | 0.609 | 9 |
| Coca-Cola | 0.532 | 10 |
| Budweiser | 0.518 | 11 |
| Lexus | 0.506 | 12 |
| Socios.com | 0.500 | 13 |
| Ford Motor Company | 0.471 | 14 |
| Toyota | 0.460 | 15 |
| Dunkin’ | 0.455 | 16 |
| Bud Light Seltzer | 0.440 | 17 |
| Jack Daniel’s | 0.424 | 18 |
| Coors Light | 0.418 | 19 |
| Coca-Cola Zero Sugar | 0.409 | 20 |
| Pepsi Zero Sugar | 0.384 | 21 |
| Progressive Insurance | 0.373 | 22 |
| Pepsi | 0.354 | 23 |
| Michelob Ultra | 0.351 | 24 |
| Truly Hard Seltzer | 0.345 | 25 |

Through finding brands that are congruent with their organizational values, and are committed to investing in long-term relationships, properties can realize benefits of reduced sponsor turnover, and increased fan identification (Wakefield et al., 2020). Further, brands should seek creative ways to ensure congruence between brand and property, as congruence and endurance allow for a brand to more effectively achieve their marketing objectives of brand image, awareness, and equity. However, as mentioned, there is space for teams to identify new targets, whether that is crafting out additional subcategories or identifying new brands with whom to develop unique partnerships. In actual sport business practice, this may manifest through deeper, long-term planning strategy, moving beyond simply selling existing inventory to a brand in a product category to tailoring a partnership specific and endemic to that brand. In this spirit, brands are much less likely to end the sponsorship, and teams may not necessarily need to increase the amount of brands in their portfolio, instead opting for a small, exclusive group with which to engage.

Theoretical Implications

In addition to these practical implications, this research also contributes to the existing literature within sport management. As sport sponsorship continues to evolve, there is a growing need to take stock and scope out the existing ties within the sport sponsorship space. The findings of this study support literature regarding the presence of category exclusivity, congruence, and endurance in sponsorship relationships, and how these elements correlate to sponsorship success and increased brand recognition (Dees et al., 2019; Cornwell et al., 2005; Jensen & Cornwell, 2017). However, the degree of competition and diversification represented here equally illustrates that

sponsorship in and of itself does not wholly prevent the possibility of competition or clutter (Burton, 2019). The insights this study yields thus offer an important consideration point for scholars to begin to dig further into these modern sport sponsorship details, namely the nature of these ties, big and small, and team perceptions of these ties. In this spirit, the academic value of this work lies in its ability to shine a light on a complex map, enabling future researchers to delve further within.

6. Conclusion

The research, using the NHL as a single-shot case, illuminated over 206,000 sponsorships with 2,073 brands engaged in sponsorship activity during the 2022 calendar year. As sponsorship continues to evolve, diversify, and expand, it is critical to map out the relationships that exist and the types of patterns and trends, innovative or otherwise, that exist (Naraine et al., 2022). To this extent, this study revealed that brands from traditional (e.g., automotive) and non-traditional (e.g., cryptocurrency) categories exist, and there is an increased proliferation of subcategories in order to maximize sponsorship inventory. Diversity of approach was likewise found, as not all teams engage in the same sponsorship behavior; some teams opt for less sponsorships with unique brands, indicative of the innovative strategies being employed by sport properties in the 21st century.

Limitations

Despite these advances, a number of limitations must be acknowledged. First, the choice of sample size for this research serves as a limitation, as only the sponsorship data of the NHL was analyzed. There was a large amount of data produced and analyzed within the NHL, with the league

serving as a valuable guide for future SNA or other professional sport leagues sponsorship portfolios. Despite this, by only analyzing one professional sports league's sponsorship portfolios, the insights that can be provided are limited, as the macro-view of the industry is restricted due to study's focus on purely the NHL. Additionally, our study was delimited by the time period that was chosen for analysis. Only those sponsors for the 2022 NHL calendar year were analyzed, with any past or future sponsors not represented as nodes in the dyad. It is possible that in 2023 (and beyond) the sport sponsorship ecosystem may have changed (again) with new entrants from existing or new product and service categories. Finally, there are certain SNA measures related to the network that could not be drawn within this study. As the data collection resulted in over 206,000 connections within the network, technological difficulties arose as a result of the size of the database. Specifically, several metrics regarding betweenness centrality could not be gathered which may have enhanced the study's findings. These metrics provide valuable insights into who serves as the connective tissue within the sponsorship industry. This would allow for brands and properties to understand who would be most beneficial to connect with, due to their broader industry ties.

Applications for Future Study

Despite these limitations, this study offers a pathway for researchers to build upon with future studies. Natural extensions of this research would be to utilize SNA to examine a greater number of sports leagues such as the NFL, NBA, and MLB to determine whether the trends identified here are consistent on a larger scale. Further, it would also be relevant for a landscape study across men's and

women's professional leagues in multiple jurisdictions (e.g., Europe, Australia) to determine whether these trends are localized to North America or being adopted worldwide. Likewise, it may be valuable to analyze consumer sentiment as it relates to network centrality; specifically, it would be useful to examine how consumers respond to sponsoring brands that are more central to the network as opposed to those who are situated on the network periphery. There is a high potential for growth and expansion in these areas, where SNA can be used as a tool in order to uncover insights regarding sponsorship decision-making and consumer sentiment not found in this study. It would also be worthwhile for researchers to utilize the insights of the present study to unpack perceptions of activity (and their outcomes) via interviews with modern sponsorship professionals on the property and brand side. Finally, although not necessarily discussed, this study focused on the brand-team dyadic relationship as it relates to sponsorship, but marketing agencies are an important stakeholder in this paradigm (Cornwell & Kwon, 2019; O'Reilly et al., 2023, and thus it would behoove researchers to explore triadic relationships vis-à-vis the centralization of agency stakeholders in the power dynamics of a sponsorship network.

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