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Promotions and Themes:

An Empirical Analysis of Attendance Factors in the National Women's Soccer League

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Abstract

The National Women's Soccer League (NWSL) has experienced significant growth, making it crucial to understand attendance drivers at matches. This study evaluated the impact of themed events and promotions on attendance during the 2023 NWSL season. Using data from all regular-season home matches (N = 167), an OLS regression analyzed how various factors influenced attendance measured as a percentage of stadium capacity. Results revealed that themed events significantly increased attendance, while traditional promotions showed a positive but non-significant effect. External factors including post-World Cup timing, visiting team marquee players, and market demographics also significantly influenced attendance. These findings provide actionable insights for NWSL teams seeking to optimize marketing strategies and enhance match attendance.

Keywords: Attendance, Consumer Behavior, Marketing, Soccer, Thematic Analysis

The National Women's Soccer League (NWSL) has experienced significant growth since its inception in 2013, establishing itself as a leader in women's professional sports in the United States. Since its founding, the NWSL has expanded from its original eight teams to 14 in 2024, with plans for further expansion in 2026. Attendance has surged, drawing more than 1.2 million fans to matches in 2023, a 26% increase from the previous season (Adgate, 2023). In 2024, the league again set an attendance record with an average of 11,250 fans per game, a 6% increase from the previous year (Silverman, 2024). Additionally, the NWSL's popularity on social media has skyrocketed, with millions of followers across various platforms, reflecting its growing influence and fan base.

As the league continues to grow, understanding the dynamics that drive fan attendance becomes increasingly crucial for sustaining this growth and enhancing the overall game-day experience. The NWSL's unique position offers a compelling case study for examining the impact of marketing strategies on attendance. Unlike established men's leagues, the NWSL faces distinct challenges, including limited media coverage, smaller budgets, and competition from European leagues for talent (Wetzel, 2025).

The NWSL's success is not just measured by the quality of play on the field, but also by the league's ability to attract and engage a diverse fan base. Studying the factors influencing attendance in the NWSL is essential for several reasons. High attendance figures are indicative of the league's popularity and financial health, directly impacting revenue through ticket sales, concessions, and merchandise. Moreover, robust attendance creates a vibrant and energetic atmosphere, which can positively affect player performance and fan satisfaction. As the league continues to expand, identifying effective strategies to maintain and increase attendance will be pivotal.

This study primarily sought to explore the impact of promotions and themed events on attendance during the 2023 season. For the purposes of this study, promotions included tangible incentives such as discounted tickets (Orlando Pride's \$5.04 Star Wars Night tickets), giveaway items (Chicago Red Stars' lanyards, San Diego Wave's bucket hats), food and beverage deals (Washington Spirit's \$2 beers), or special pricing packages (Gotham FC's \$22 supporter section experience). Themed events, in contrast, create experiential atmospheres around specific concepts such as Pride celebrations and community festivals (Angel City FC's Pride Fan Fest), cultural heritage nights (Hispanic Heritage celebrations), or cause-awareness events (Orlando Pride's Breast Cancer Awareness Night) that enhance the overall game experience beyond the core soccer match. The insights gained will provide practical recommendations for marketers and team management. Furthermore, by understanding the nuances of fan engagement in women's professional soccer, the NWSL can continue to build on its success and ensure continued growth.

Literature Review

Understanding the factors that drive attendance at sporting events has been a central focus of sport management research. Despite extensive research across various sports and leagues, a significant gap remains in our understanding of attendance drivers in women's professional soccer, particularly in the NWSL. To address this research gap, this study proposes a framework that categorizes attendance factors into three distinct categories: internal factors (controllable elements such as promotions and themed events), external factors (uncontrollable elements including timing, competition, and star players), and team performance factors. This categorization builds upon the established internal/external factor framework utilized in sport attendance literature (e.g., Howell et al., 2015), while incorporating team performance as a distinct category based on recent findings in soccer research (Stephenson, 2024). This framework is particularly relevant for the NWSL context, where teams must balance marketing expendi-

tures while competing for entertainment dollars in diverse markets with varying levels of soccer culture.

Internal Factors

Internal factors represent controllable elements that teams manipulate to influence attendance through marketing strategies and fan experience enhancements. Promotions and themed events were selected due to their proven effectiveness across sports contexts and relevance for building fan loyalty and attracting new audiences. Studies across multiple leagues demonstrate positive promotional impacts on attendance. Research on baseball in both Minor League (Cebula et al., 2009; Howell et al., 2015) and Major League contexts (McDonald & Rascher, 2000) has found significant attendance increases, with similar effects observed in hockey (Paul et al., 2013).

External Factors

External factors encompass elements beyond team control that significantly influence attendance patterns, including temporal factors, competitive dynamics, and international competition schedules. Understanding these factors helps explain attendance variation not attributed to team-controlled efforts. Research indicates that the timing of women's soccer matches relative to international competitions influences attendance, with post-World Cup matches experiencing notable increases (LeFeuvre et al., 2013; Stephenson, 2024). Star players boost attendance, although their impact varies depending on whether the match is played at home or away (Jewell, 2017), while weekend matches consistently outperform week-day games (LeFeuvre et al., 2013; Stephenson, 2024).

Team Performance Factors

Team performance represents a distinct attendance driver reflecting the on-field product quality. Although promotions and external factors may attract fans to individual matches, performance influences longer term patterns and fan loyalty (Schreyer & Ansari, 2022; Watanabe & Soebbing, 2017). In women's soccer, the quality of the visiting team significantly impacts attendance, while the home team's performance yields mixed results (LeFeuvre et al., 2013; Stephenson, 2024), suggesting that fans are attracted to high-quality matchups regardless of their allegiance.

Theoretical Foundation

This framework further aligns with Funk and James's (2001) Psychological Continuum Model (PCM), which describes how consumers progress through stages of awareness, attraction, attachment, and allegiance toward sport entities. Internal factors such as promotions can move fans from initial awareness to attraction, whereas sustained team performance and positive external experiences may facilitate progression toward attachment and long-term allegiance. Understanding how different attendance factors contribute to this fan development process is particularly important for the NWSL as it seeks to convert casual observers into committed supporters.

Exploratory Analysis

This study analyzed match-level data from all regular-season home matches played during the 2023 NWSL season (N = 167). To provide initial context on the potential impact of promotions and themes on attendance, the average attendance across the sample of matches with promotions was 10,104. Matches with themes had slightly higher average attendance, at 10,393, compared to both promotions and themes, at 10,211. Matches with neither a promotion nor a theme had the lowest average attendance at 9,256. These figures offer insights into the relative effectiveness of these marketing strategies in at-

tracting fans to NWSL matches.

Methodology

Although collecting data from multiple seasons would have been preferable to create a longitudinal dataset, the league and its teams do not consistently publish information regarding promotions and themes on their respective websites. An Ordinary Least Squares (OLS) regression model was utilized to examine the relationship between attendance and various predictor variables. OLS was selected over fixed or random effects models because: (a) the research goal was to understand broad population-level relationships rather than within-group variations, (b) the dataset lacked the panel structure needed for those alternatives, and (c) OLS offers more straightforward interpretation of coefficients, aligning with the applied nature of this research.

The dependent variable was individual game home attendance, measured as a percentage of stadium capacity, which allowed for a more direct interpretation of coefficients and comparisons across varying stadium sizes (Cebula et al., 2009). With only 4% of matches ($n = 7$) exceeding 100% capacity, a standard OLS rather than a Tobit regression was appropriate (Watanabe, 2012).

The study considered 14 independent variables selected based on previous research and divided into three categories: internal, external, and team performance factors. Internal factors refer to those controlled by the franchise, including promotions and themes. Each team's schedule was first reviewed on their respective websites to determine which matches featured a promotion or theme. Although some provided sufficient details, others offered little to no information. The researchers then used the official Instagram pages of the teams to triangulate which matches featured either a theme or promotion. There were also instances where matches featured both a theme and promotion. To account for this, an interaction term was created to consider the potential impact of both incentives on attendance.

The next set of factors included eight external variables, taking into account the broader socio-economic and competitive landscape influences of the various markets. The during World Cup and after World Cup variables designated matches as those that occurred during (July 20–August 6) or after (August 7–October 15) the 2023 Women's World Cup. For reference, the USWNT lost to Sweden on August 6, which marked the end of their World Cup participation. The next variable, weekend, considered whether a game was played Monday through Thursday (weekday) or Friday through Sunday (weekend). The next set of external variables, marquee players home and away, accounted for the impact that widely recognized players have on attendance. Marquee players were designated as those who played for their respective women's national teams during the 2023 season, as those players would, theoretically, also be among the best on their respective NWSL rosters. To ensure accuracy and account for player absences during the World Cup, the researchers tallied the number of marquee players on a game-by-game basis. The last set of external variables considered were MSA income and population to account for the relative economic ability and size of the market in which each team operates.

The final set of factors considered the performance of each team throughout the season. Goal differential was used to measure the difference between the number of goals a team had scored and the number of goals it conceded. The next set of variables, expected goals (xG) and expected goals against (xGA), are used in soccer to quantify the quality of scoring chances created and conceded by a team. xG provides a numerical value representing the probability of a shot being scored, whereas xGA measures the quality of chances conceded by a team, indicating how likely a shot against them is to result in a

goal. These values were obtained from each team's schedule page on Soccer (FB) Reference. Last, points earned refer to the number of points a team accumulated during the regular season based on match results (3 points for a win, 1 point for a draw, and 0 points for a loss). A complete list of variables, summary statistics, and their scale can be found in Table 1.

Table 1

Summary Statistics

Variable	Mean	SD	Scale
Percent Capacity	49.67%	25.84%	Continuous
<i>Internal Factors</i>			
Promotion	.25	.432	Indicator
Theme	.46	.500	Indicator
Promotion * Theme	.16	.364	Indicator
<i>External Factors</i>			
Before World Cup	.63	.483	Indicator
During World Cup	.10	.303	Indicator
After World Cup	.26	.442	Indicator
Marquee Players–Away	1.25	1.337	Discrete
Marquee Players–Home	1.16	1.289	Discrete
Weekend	.86	.346	Indicator
MSA Population	6,062,603	5,339,981	Continuous
MSA Income	\$88,340	\$14,009	Continuous
<i>Team Performance Factors</i>			
Goal Differential	.04	5.862	Continuous
Expected Goals	1.474	.739	Continuous
Expected Goals Against	1.168	.598	Continuous
Points Earned	14.76	9.132	Continuous

N = 167.

Before performing the OLS regression analysis, multicollinearity was assessed for the independent variables using the variance inflation factor (VIF). VIF values greater than 10 are considered to be problematic, with researchers also using a more stringent threshold of 5. In this model, no VIF value exceeded 3.5, indicating that multicollinearity was not a significant concern. After estimating the OLS model, heteroskedasticity was tested using the Breusch-Pagan test. The test yielded a *p*-value of 0.3773 (BP = 15.012), suggesting that there was no evidence of heteroskedasticity, leading to the failure to reject the null hypothesis of homoscedasticity and the conclusion that the residuals are homoscedastic. Complete results from the OLS regression model are provided in Table 2.

Table 2
NWSL Attendance OLS Regression Results

Variable	β	SE	<i>p</i> -value
Intercept	-4.336	17.683	.81
<i>Internal Factors</i>			
Promotion	2.895	6.817	.67
Theme	8.980	4.466	.04**
Promotion * Theme	-6.324	8.645	.47
<i>External Factors</i>			
During World Cup [#]	.529	7.507	.94
After World Cup [#]	13.232	6.811	.05**
Marquee Players–Away	2.408	1.472	.09*
Marquee Players–Home	.235	2.288	.91
Weekend	9.239	5.491	.09*
MSA Population ⁺	-1.048	.355	.01**
MSA Income [^]	.538	.208	.01**
<i>Team Performance Factors</i>			
Goal Differential	.879	.361	.01**
Expected Goals	2.588	2.552	.31
Expected Goals Against	-3.919	3.378	.25
Points Earned	-.345	.379	.36

Note. Dependent variable is measured as a percentage of stadium capacity. [#]Before World Cup variable was designated as the control group. ⁺Variable scaled by 1,000,000. [^]Variable scaled by 1,000.

$N = 167$; $R^2 = .307$; * $p < .1$, ** $p < .05$.

Results and Discussion

Internal Factors

An analysis of internal factors influencing NWSL match attendance revealed varied degrees of impact. The promotion coefficient of 2.895 ($p = .67$) indicated a positive yet statistically insignificant effect on attendance. Although promotions like scarves and other tangible giveaways have successfully attracted fans in other sports, their impact is limited in the context of NWSL matches. It is possible that fans attending NWSL matches are more motivated by different factors and may not be as responsive to traditional promotional strategies.

The theme variable showed a coefficient of 8.980 ($p = .04$), indicating a statistically significant and positive relationship with attendance. The significance of the theme variable suggests that events, such as Pride Night or Fan Appreciation Night, increase match attendance by approximately nine percentage points compared to matches without a theme. The interaction term between promotions and themes showed a negative coefficient of -6.324 ($p = .47$), suggesting combined efforts did not enhance attendance beyond individual effects, possibly due to fans responding differently to either promotions or themes alone.

External Factors

External factors also yielded mixed results, which align with those of LeFeuvre et al. (2013) and

Stephenson (2024). Compared to matches played before the World Cup, matches played during the World Cup did not have a significant impact on attendance ($\beta = .529$; $p = .94$). This result could be driven by the fact that because the World Cup is a major international event, fans may be more focused on watching World Cup matches rather than attending domestic league matches. In contrast, matches played after the World Cup experienced a statistically significant increase in attendance ($\beta = 13.232$; $p = .05$), suggesting that, on average, matches played after the World Cup had an attendance increase of approximately 13 percentage points compared to those played before the World Cup. This suggests a potential positive residual effect of the World Cup on domestic league match attendance, driven by heightened interest in soccer resulting from extensive media coverage and increased public engagement with the sport.

The variable for marquee players playing for the away team showed a marginally significant and positive relationship with attendance ($\beta = 2.408$; $p = .09$). This suggests that the presence of high-profile players on the visiting team attracts more fans to the stadium, likely due to the excitement of seeing the top talent in the sport. Conversely, the variable for marquee players on the home team had a coefficient of 0.235 ($p = .91$), indicating no significant impact on attendance.

The last set of external variables yielded varied results. Weekend games had a marginally significant impact on attendance ($\beta = 9.239$; $p = .09$). This result suggests that attendance was significantly higher during weekend matches, which aligns with previous studies across the demand literature. The results also showed that the MSA population had a significant negative impact on attendance ($\beta = -1.048$; $p = .01$), indicating that for each additional million residents in a team's metropolitan area, there was an associated 1.05 percentage point decrease in stadium capacity attendance. One potential explanation is that larger metropolitan areas offer more entertainment options and sporting events, resulting in greater competition for fans' time and attention. In contrast, the MSA income had a significant positive impact on attendance ($\beta = .538$; $p = .01$). This finding indicates that higher average income levels within the MSA are associated with increased attendance at NWSL matches.

Team Performance Factors

Team performance variables are not universally considered in the demand literature; however, soccer-specific studies generally consider such factors. Goal differential had a significant and positive impact on attendance ($\beta = 0.879$; $p = .01$). This finding suggests that teams with a higher goal differential, reflecting better overall performance and a stronger ability to outscore opponents, tend to attract more fans. Conversely, the results for expected goals ($\beta = 2.588$; $p = .31$) and expected goals against ($\beta = -3.919$; $p = .25$) showed no significant impact on attendance. Last, the variable for points earned had a coefficient of $-.345$ ($p = .36$), indicating no significant effect on attendance. The result implies that the accumulation of points, despite being a critical determinant of a team's standing in the league, does not directly equate to higher attendance.

Implications

From a theoretical perspective, different attendance factors may serve distinct roles in fan development along the PCM continuum. Themed events are effective at moving fans from awareness to attraction through memorable experiences, while post-World Cup matches can capitalize on elevated awareness to foster attachment and allegiance. This has significant implications for NWSL teams seeking to establish long-term fan bases, rather than focusing solely on maximizing attendance at individual games.

This research also provides actionable insights for NWSL team executives and marketers seeking

to boost attendance. The significant impact of themed events on attendance suggests teams should prioritize these engagements throughout the season. Themed events that celebrate community values or show appreciation for fans create unique experiences that foster a sense of belonging among attendees, potentially increasing loyalty and repeat attendance. However, teams should implement a strategic approach to themed events, avoiding oversaturation that could diminish their novelty and impact.

Conversely, the limited effect of traditional promotions indicates a need to reassess tangible giveaway strategies. Although promotional items may seem attractive, their minimal impact on attendance suggests that NWSL fans are motivated by factors different from those of other sports. Teams might benefit from redirecting resources from conventional promotions toward developing more compelling, themed experiences that resonate with their specific fan base.

The strong positive effect of matches played after the World Cup presents a clear opportunity for strategic marketing. Teams should develop targeted campaigns that capitalize on the heightened interest in women's soccer following international tournaments, converting casual World Cup viewers into regular NWSL attendees. This might include highlighting returning national team players and leveraging the momentum from international competitions.

Additionally, teams should consider strategically marketing marquee players from visiting teams to complement their product offering. Although directly promoting opposing players may seem counterintuitive, acknowledging high-profile players from visiting teams within marketing materials could enhance matchup appeal and broaden game attractiveness to a wider audience.

Market demographics also merit attention, with higher income markets showing stronger attendance. Teams in larger metropolitan areas face unique challenges, including increased entertainment competition, which suggests a need for differentiated marketing strategies that emphasize the distinctive value proposition of NWSL matches. By considering all these factors, teams can develop a comprehensive approach to promoting matches and sustaining high levels of fan engagement, which is crucial for the league's continued growth trajectory.

Last, although this study focused on the NWSL, our findings offer valuable insights for women's professional sports leagues worldwide. The success of themed events over traditional promotions suggests that women's sports organizations globally should prioritize experiential and values-based marketing strategies that create authentic community connections. Culturally relevant themed events appear to resonate more strongly with women's sports audiences than conventional promotional approaches, provided that specific themes align with local cultural contexts.

Our findings regarding external factors—particularly the positive impact of marquee players and the complex relationship with market size—highlight universal challenges for women's sports in competing for entertainment attention while building star recognition. These patterns suggest that women's sports leagues may benefit from collaborative approaches to player promotion and strategic scheduling around major sporting events. These results provide a foundation for understanding how marketing strategies can be adapted across different countries and sports contexts, ultimately contributing to the development of a larger audience for women's sports globally.

Conclusion

This study investigated the impact of promotions and themed events on attendance during the

2023 NWSL season, revealing a complex interplay of factors that influence fan decisions to attend matches. The findings demonstrate that themed events have a significantly positive impact on attendance, highlighting the importance of creating unique and memorable experiences that resonate with the NWSL's fan base. By fostering a sense of community and belonging, themed events serve as powerful tools for enhancing fan engagement and driving attendance.

The study also identified several external factors that have a significant influence on attendance, including post-World Cup timing, weekend scheduling, and market demographics. Team performance metrics, particularly goal differential, proved influential in attendance decisions, suggesting fans are attracted to teams demonstrating offensive strength. These results collectively provide valuable insights for NWSL teams seeking to maximize attendance and enhance the fan experience.

As the NWSL continues to grow, understanding these attendance dynamics becomes increasingly critical for sustained success. The league's unique position in the sports landscape requires tailored marketing approaches that align with fan preferences and values. By implementing strategic themed events, capitalizing on international tournament momentum, and highlighting exciting matchups, NWSL teams can create compelling game-day experiences that attract and retain fans. Further research incorporating multiple seasons and additional variables would strengthen our understanding of attendance patterns in women's professional soccer. However, this study provides an essential foundation for evidence-based marketing decisions in the evolving landscape of women's professional sports.

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