



Phase-of-Play Performance Profiles in Elite Women's Futsal: Evidence from the FIFA Women's Futsal World Cup 2025

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ABSTRACT

The purpose of the study. The purpose of this study was to analyze performance characteristics associated with in-possession, out-of-possession, and transition phases during the FIFA Women's Futsal World Cup 2025. As the inaugural edition of this global tournament, the study aimed to establish baseline phase-of-play performance profiles at the highest level of women's futsal competition.

Materials and methods. A descriptive quantitative research design using a notational performance analysis approach was employed. The sample consisted of 64 team performances derived from all 32 matches of the FIFA Women's Futsal World Cup 2025. Performance data were obtained from official match summary reports released by the tournament organizers. Performance indicators were categorized according to phases of play, including in-possession, out-of-possession, and transition actions. Descriptive statistics, including total counts, mean values with standard deviations, and relative frequencies, were calculated using SPSS statistical software.

Results. Out-of-possession actions accounted for the largest proportion of total team actions (50.8%), followed by in-possession actions (41.0%), while transition actions represented a smaller share (8.2%). In-possession performance was dominated by set plays, which accounted for 55.3% of actions within the phase, indicating a strong reliance on structured offensive situations. Out-of-possession behaviors were primarily characterized by mid-block and low-block defensive organization, reflecting an emphasis on compact defensive structures. Transition phases were mainly composed of recovery and defensive transition actions, highlighting the importance of reorganization following possession changes.

Conclusions. Performance at the FIFA Women's Futsal World Cup 2025 was characterized by a high volume of out-of-possession activity, structured in-possession behaviors dominated by set plays, and transition phases focused primarily on recovery and defensive reorganization. These findings provide the first phase-of-play performance benchmarks at the world championship level in women's futsal and offer valuable reference values for coaches, performance analysts, and researchers preparing for future international competitions.

Keywords: women's futsal; performance analysis; FIFA Women's Futsal World Cup.

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INTRODUCTION

Futsal is a high-intensity team sport characterized by limited playing space, rapid ball circulation, and continuous alternation between offensive and defensive situations (Santos et al., 2024; Taufik et al., 2021). This unique format demands exceptional physical conditioning, technical proficiency, and tactical acumen from players, as the reduced pitch dimensions (typically 40m x 20m) and five-a-side gameplay amplify the frequency of physical contacts, ball recoveries, and directional changes. Team performance in futsal emerges from the dynamic interaction between actions executed during ball possession, collective organization when out of possession, and the ability to manage transitions between these states (Rico-González et al., 2020). These phases of play—in-possession (offensive organization), out-of-possession (defensive organization), and transitions (possession gains/losses)—form the foundational structure of match dynamics, where success hinges on seamless shifts and adaptive responses to opponent actions. Such interactions require constant adaptation in positioning, decision-making, and interpersonal coordination within an evolving match environment, often under high cognitive load due to the sport's intermittent nature and short recovery times between high-intensity efforts. At the elite level, performance characteristics are shaped by tactical systems (e.g., formation choices like 1-2-1 or 2-2), physical

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demands (e.g., repeated sprints covering up to 10-12% of total distance at high speed), opponent behavior (e.g., pressing intensity), and competition context (e.g., match status or venue) (Fernando et al., 2024).

In women's futsal, the rapid global development of the sport—fueled by increased investment, professional leagues, and FIFA's promotion—has heightened interest in understanding performance demands at the highest level of competition. Participation has surged, with confederations like UEFA and CONMEBOL hosting regular international events, yet empirical data on elite women's play lags behind men's due to historical disparities in research focus (Santos et al., 2024). The FIFA Women's Futsal World Cup 2025 represents the first global benchmark competition for women's futsal, offering a unique opportunity to examine how teams organize their behaviors across phases of play under standardized world-class conditions (Balyan & Vural, 2018). This inaugural tournament, featuring 16 nations in a compact format, provides ecologically valid data from high-stakes matches, enabling the identification of tactical patterns, action frequencies, and phase distributions that reflect optimal elite performance. By analyzing these elements, researchers can delineate how women's teams balance offensive creativity with defensive solidity, adapt to transitional volatility, and exploit structured opportunities, thereby contributing to a nascent body of knowledge tailored to the physiological and tactical nuances of female athletes in this domain.

Performance analysis research in futsal and football has primarily focused on technical-tactical behaviors during in-possession and out-of-possession phases, providing foundational insights into match dynamics (Armatas et al., 2025; Plakias et al., 2024; Welch et al., 2021). Studies on offensive performance emphasize the importance of attacking actions, counterattacks, and set plays, highlighting spatial exploitation, numerical superiority, and coordinated movement as key contributors to attacking success (Armatas et al., 2025; Plakias et al., 2024; Welch et al., 2021). For instance, analyses of elite futsal leagues have revealed that teams employing positional attacks alongside counterattacks exhibit balanced offensive profiles, with successful outcomes linked to quick transitions and efficient set-piece execution (Domínguez et al., 2019). Similarly, research in professional leagues underscores how numerical advantages during fast breaks enhance goal-scoring probabilities, often through rapid ball circulation in constrained spaces characteristic of futsal (Alves et al., 2021).

Conversely, research on defensive performance has explored pressing intensity, defensive block height, and spatial compactness as determinants of ball recovery and opponent disruption (Forcher et al., 2023). Recent tracking data studies demonstrate that high-pressing strategies in elite soccer—adaptable to futsal—rely on coordinated pressure timing and spatial coverage to regain possession swiftly, with compact formations minimizing exploitable gaps (Forcher et al., 2022; Pizarro et al., 2020). In futsal contexts, mid- and low-block defenses have been identified as prevalent for maintaining structure against rapid attacks, though high-press variants correlate with higher interception rates in transitional moments (Rico-González et al., 2020). These findings highlight the tactical trade-offs between aggressive disruption and organized retreat, influencing overall match control.

More recently, scholars have emphasized the value of phase-of-play frameworks, which categorize performance indicators into in-possession, out-of-possession, and transition phases to provide a more holistic understanding of match dynamics (Deb et al., 2024; Rico-González et al., 2020). Such approaches enable the dissection of game sequences, revealing patterns like team shape expansion during attacks and contraction in defense (Eusebio et al., 2024). For example, augmented possession models integrate notational data to evaluate tactical efficacy across phases, showing transitions as pivotal for exploiting imbalances (Deb et al., 2024). Although this body of literature has advanced knowledge of futsal performance, most studies have been conducted in domestic leagues, youth competitions, or established continental tournaments (Sanmiguel-Rodríguez et al., 2021; Santos et al., 2019). Systematic reviews confirm a predominance of technical-tactical analyses in male elite settings, with limited exploration of physiological or contextual moderators (Alves et al., 2021).

A notable limitation pertains to women's futsal, where empirical data remains scarce despite the sport's growth (Barreira et al., 2024; Santos et al., 2024). Scoping reviews indicate fragmented research, often relying on cross-sectional designs from non-elite matches, neglecting leadership roles and high-stakes international play (Barreira et al., 2024, 2025). Consequently, the ecological validity of these findings for newly established world-level women's competitions, such as the inaugural FIFA Women's Futsal World Cup, remains uncertain, as tactical demands under global pressure may diverge from domestic benchmarks (Sanmiguel-Rodríguez et al., 2021).

Despite growing scholarly attention to women's futsal, empirical evidence at the world championship level is extremely limited. In particular, there is a lack of descriptive benchmarks describing how elite women's teams distribute actions across in-possession, out-of-possession, and transition phases during global competition. Furthermore, previous research has often examined offensive and defensive behaviors in isolation, providing limited insight into the relative balance between phases of play within matches (Deb et al., 2024; Tani et al., 2014). The absence of phase-specific performance profiles for women's futsal at the world championship level constitutes a clear gap in the literature.

As the inaugural edition of a women's futsal world championship, the FIFA Women's Futsal World Cup 2025 introduces a new competitive environment with distinct tactical and organizational demands. Establishing baseline phase-of-play performance profiles is essential for building foundational knowledge of elite women's futsal. Such benchmarks can inform coaching practice, guide training design, support match preparation, and serve as reference values for future research and tournament comparisons. A comprehensive descriptive analysis of in-possession, out-of-possession, and transition behaviors is therefore warranted.

The purpose of this study was to analyze performance characteristics associated with in-possession, out-of-possession, and transition phases during the FIFA Women's Futsal World Cup 2025. Specifically, the study aimed to establish baseline descriptive profiles of phase-of-play behaviors at the highest level of women's futsal competition.



MATERIALS AND METHODS

Study participants

The sample consisted of 64 team performances derived from all 32 matches played during the FIFA Women's Futsal World Cup 2025. Each match contributed two observational units, one for each competing team. All data were obtained from official match statistics released by the tournament organizers. As the study exclusively analyzed publicly available secondary data and involved no direct interaction with athletes, ethical approval was not required in accordance with institutional research guidelines.

Study Design

This study employed a descriptive quantitative research design using a notational performance analysis approach. The design aimed to examine performance characteristics associated with in-possession and out-of-possession phases of play at the elite international level. Performance indicators were systematically categorized according to phases of play to enable a structured and comprehensive analysis of team behaviors across all matches of the tournament. This approach ensured ecological validity, as all observations were derived from real competitive settings.

Data Collection and Performance Variable

Performance data were collected from official match summary reports released by the tournament organizers for all matches of the FIFA Women's Futsal World Cup 2025. The data source consisted of standardized *Actions in Phase of Play* reports, which provide objective frequency-based records of team behaviors during competitive matches. Each report included detailed information on offensive, defensive, and transitional actions performed by each team throughout the match. Data were extracted for all 32 matches, resulting in 64 team performances. The use of official competition data ensured high reliability, consistency of notational definitions, and strong ecological validity, as all observations were obtained under real match conditions at the elite international level. Performance variables were categorized according to phases of play to reflect the structural dynamics of futsal competition. In-possession variables included attacking actions, individual attacks, counterattacks, and set plays, representing offensive behaviors executed while the team maintained ball possession. Out-of-possession variables comprised high block, high press, mid-block, mid-press, low block, and low press actions, reflecting defensive organization and pressing strategies employed when the team did not have possession of the ball. Transition variables included counterpress, defensive transition, and recovery actions, capturing team responses during moments of possession change. In addition, goals scored were recorded as an outcome variable to provide contextual information on match performance. All variables were measured as frequency counts per team per match using standardized operational definitions provided in the official FIFA match documentation.

Table 1. Classification of performance indicators according to phases of play

Phase of Play	Performance Indicators
In-Possession	Attacking actions, Individual attack, Counterattack, Set play
Out-of-Possession	High block, High press, Mid-block, Mid-press, Low block, Low press
Transitions	Counter press, Defensive transition, Recovery

Methods of Analysis

Descriptive statistics were calculated for all performance indicators and are presented as total counts, mean values with standard deviations, and minimum–maximum ranges. Additional analyses focused on examining the distribution and relative frequency of in-possession, out-of-possession, and transitional actions across team performances to characterize phase-of-play performance patterns during the tournament. Statistical analyses were performed using SPSS statistical software (IBM SPSS Statistics, Version 25).

Ethical considerations

This study analyzed publicly available secondary data obtained from official match summary reports released by the organizers of the FIFA Women's Futsal World Cup 2025. The data contained no personal or identifiable information related to individual athletes, coaches, or officials. No direct interaction with human participants occurred, and no experimental intervention was implemented. In accordance with institutional research policies and national ethical guidelines for human research, formal ethical approval was not required for studies based exclusively on anonymized, publicly accessible data sources. Nevertheless, the study was conducted in full compliance with the principles of the Declaration of Helsinki and established standards for research integrity.

RESULTS

The Results section presents the descriptive and comparative analyses of goal productivity and phase-of-play performance indicators derived from team performances at the FIFA Women's Futsal World Cup 2025. Descriptive statistics are first reported to provide an overall profile of offensive, defensive, and transitional behaviors observed across the tournament, followed by analyses examining differences and relationships between in-possession and out-of-possession phases.

Table 2. Descriptive statistics of goal productivity and phase-of-play performance indicators at the FIFA Women's Futsal World Cup 2025

Phase	Variable	Total	Mean \pm SD	Min	Max
Goal Scoring In Position	Goals	210	3.28 \pm 3.26	0	17
	Attacking actions	723	11.30 \pm 8.59	0	40
	Individual attack	189	2.95 \pm 2.83	0	18
	Counterattack	813	12.70 \pm 6.65	1	32
Out of Position	Set play	2135	33.36 \pm 13.39	6	67



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Transition	High block	318	4.97 ± 5.42	0	22
	High press	298	4.66 ± 6.17	0	29
	Mid-block	1987	31.05 ± 13.28	2	64
	Mid-press	301	4.70 ± 5.39	0	27
	Low block	1830	28.59 ± 18.75	1	89
	Low press	49	0.77 ± 1.33	0	7
	Counter press	197	3.08 ± 2.99	0	12
	Defensive transition	206	3.22 ± 2.39	0	8
	Recovery	370	5.78 ± 4.08	0	19

Table 2 summarizes the descriptive statistics of goal productivity and phase-of-play performance indicators across all team performances at the FIFA Women's Futsal World Cup 2025. A total of 210 goals were recorded, with a mean of 3.28 ± 3.26 goals per team performance, indicating substantial variability in scoring output across matches. In-possession performance indicators showed that teams frequently executed attacking actions (11.30 ± 8.59) and counterattacks (12.70 ± 6.65). Individual attacking actions occurred less frequently (2.95 ± 2.83), suggesting that offensive play was predominantly characterized by collective actions rather than isolated individual efforts. Out-of-possession indicators were dominated by mid-block (31.05 ± 13.28) and low-block actions (28.59 ± 18.75), reflecting a consistent use of compact defensive structures when teams were not in possession of the ball. High block (4.97 ± 5.42) and high press actions (4.66 ± 6.17) were observed less frequently, indicating selective application of aggressive defensive pressure. Transition-related indicators showed comparatively lower frequencies than in-possession and out-of-possession actions. Low press actions were rarely observed (0.77 ± 1.33), while counter pressing (3.08 ± 2.99), defensive transition (3.22 ± 2.39), and recovery actions (5.78 ± 4.08) occurred more consistently across team performances.

Table 3. Relative distribution of phase-of-play actions at the FIFA Women's Futsal World Cup 2025

Phase of Play	Total Actions	Percentage (%)
In-Possession	3860	41.0%
Out-of-Possession	4783	50.8%
Transition	773	8.2%
Total	9416	100%

Out-of-possession actions represented the largest proportion of match actions (50.8%), followed by in-possession actions (41.0%). Transition-related actions accounted for a smaller share of total activity (8.2%). The higher proportion of out-of-possession actions indicates that teams spent a substantial amount of match time engaged in defensive organization and positioning when not in control of the ball. In-possession actions also occurred frequently, reflecting sustained involvement in offensive build-up and attacking sequences. Transition actions were observed less frequently but appeared consistently across team performances, highlighting their role as brief phases connecting offensive and defensive play. The distribution of actions across phases of play indicates a clear emphasis on defensive organization and structured offensive activity, with transition phases occurring at a comparatively lower frequency during matches.



Figure 1. Percentage distribution of phase-of-play actions at the FIFA Women's Futsal World Cup 2025.

Highlighting the proportion of in-possession, out-of-possession, and transition phases across team performances. To further detail these phase-specific patterns, Table 4 presents a breakdown of individual performance indicators within each phase of play, expressed as proportions relative to the total number of team actions recorded during the tournament.

Table 4. Proportion of in-possession, out-of-possession, and transition actions within total team actions.

Phase of Play	Performance Indicator	Total	Percentage (%)
In-Possession	Attacking actions	723	77%
	Individual attack	189	2.0%
	Counterattack	813	8.6%
	Set play	2135	22.7%



Out-of-Possession	High block	318	3.4%
	High press	298	3.2%
	Mid-block	1987	21.1%
	Mid-press	301	3.2%
	Low block	1.830	19.4%
	Low press	49	0.5%
	Counter press	197	2.1%
	Defensive transition	206	2.2%
	Recovery	370	3.9%
	Total	9416	100%

Within the in-possession phase, set plays represented the largest proportion of actions (22.7%), followed by counterattacks (8.6%) and attacking actions (7.7%), while individual attacking actions accounted for a smaller proportion (2.0%). This distribution indicates that offensive activity during ball possession was largely characterized by structured and collective actions rather than individual initiatives. Out-of-possession actions were predominantly associated with mid-block (21.1%) and low-block (19.4%) defensive organization. High block (3.4%), high press (3.2%), and mid-press actions (3.2%) occurred at lower proportions, while low press actions accounted for a minimal share of total actions (0.5%). These values show that defensive performance was mainly concentrated in compact block structures, with pressing behaviors appearing less frequently. Transition-related actions constituted a smaller proportion of total team actions. Recovery actions accounted for 3.9% of total actions, followed by defensive transition (2.2%) and counter pressing actions (2.1%). This pattern indicates that transition phases were primarily characterized by recovery and reorganization behaviors rather than sustained pressing immediately following possession changes. The phase-specific proportions presented in Table 5 provide a detailed descriptive profile of how team actions were distributed within in-possession, out-of-possession, and transition phases during the FIFA Women's Futsal World Cup 2025.

Table 5. Relative distribution of performance indicators within each phase of play at the FIFA Women's Futsal World Cup 2025

In-Possession	Percentage (%)	Out-of-Possession	Percentage (%)	Transition	Percentage (%)
Attacking actions	18.7%	High block	6.6%	Counter press	25.5%
Individual attack	4.9%	High press	6.2%	Defensive transition	26.6%
Counterattack	21.1%	Mid-block	41.5%	Recovery	47.9%
Set play	55.3%	Mid-press	6.3%		
		Low block	38.3%		
		Low press	1%		
Total	100%	Total	100%	Total	100%

Within the in-possession phase, set plays accounted for the largest share of actions (55.3%), followed by counterattacks (21.1%) and attacking actions (18.7%). Individual attacking actions represented a comparatively small proportion of in-possession activity (4.9%), indicating that offensive play during possession was primarily structured and collective in nature. Out-of-possession actions were dominated by mid-block (41.5%) and low-block (38.3%) defensive organization. High block (6.6%), high press (6.2%), and mid-press actions (6.3%) occurred less frequently, while low press actions accounted for a minimal proportion of out-of-possession behaviors (1.0%). This distribution indicates that teams predominantly relied on compact defensive structures rather than sustained high-pressure strategies when not in possession. Within the transition phase, recovery actions constituted the largest proportion of transition-related behaviors (47.9%), followed by defensive transition (26.6%) and counter pressing actions (25.5%). These values indicate that transition phases were mainly characterized by recovery and reorganization actions, with counter pressing occurring at a similar but slightly lower frequency. The distributions presented in Table 5 describe the internal composition of each phase of play, highlighting how specific performance indicators contributed to in-possession, out-of-possession, and transition behaviors during the FIFA Women's Futsal World Cup 2025.

DISCUSSION

The present study provides a comprehensive descriptive profile of in-possession, out-of-possession, and transition behaviors during the FIFA Women's Futsal World Cup 2025, representing the first phase-of-play performance benchmarks for a women's futsal world championship (Oliva-Lozano et al., 2024). The findings demonstrate that out-of-possession actions constituted the largest proportion of total team activity, followed by in-possession actions, while transition phases accounted for a comparatively smaller share. This distribution indicates that match performance at the elite international level is largely shaped by defensive organization and spatial control, emphasizing the importance of collective positioning and coordinated movement when teams are not in possession of the ball (Forcher et al., 2023; Silva et al., 2014).

Within the in-possession phase, set plays emerged as the dominant performance indicator, accounting for more than half of all actions in this phase. This highlights a strong reliance on structured and rehearsed attacking patterns rather than spontaneous or individually driven offensive initiatives. Counterattacks and general attacking actions also contributed meaningfully to offensive behavior, whereas individual attacking actions occurred relatively infrequently (González-Ródenas et al., 2020; He et al., 2023). Collectively, these patterns suggest that offensive effectiveness at this level is primarily grounded in coordinated team play and tactical



organization.

Out-of-possession behaviors were predominantly characterized by mid-block and low-block defensive structures, indicating a preference for compact and stable defensive organization (Fernandes et al., 2021; Sgrò et al., 2016). High block and high press actions were observed less frequently, suggesting that teams selectively applied aggressive pressing rather than sustaining high-intensity pressure throughout matches (Low et al., 2018). In the transition phase, recovery actions represented the largest proportion, followed by defensive transition and counterpressing. This pattern indicates that teams prioritized regaining defensive structure after possession loss rather than immediately attempting to regain possession through intense pressing (Casal et al., 2016).

The prominence of out-of-possession actions observed in this study aligns with previous research in futsal and football showing that elite teams spend substantial periods organizing defensively and controlling space when not in possession. Prior investigations have emphasized that compact defensive blocks and coordinated positioning are central to limiting opponent progression and reducing scoring opportunities (Fernandes et al., 2021; Soujanya et al., 2025). The dominance of mid-block and low-block structures in the present findings is consistent with studies reporting that medium-to-low defensive lines are commonly adopted in high-level competition to maintain defensive balance and manage risk (Fernandes et al., 2021; Forcher et al., 2023; Prieto-González et al., 2025).

The high prevalence of set plays within in-possession phases supports earlier futsal research indicating that rehearsed attacking routines are particularly valuable in small-sided, high-density environments. Limited space and rapid defensive pressure reduce the feasibility of extended open-play sequences, increasing the importance of structured attacking solutions (Ilham et al., 2025). The relatively low frequency of individual attacking actions mirrors findings suggesting that collective patterns and coordinated movements are more influential than isolated individual efforts in elite futsal contexts (Travassos et al., 2016).

Regarding transition behaviors, the emphasis on recovery and defensive reorganization corresponds with previous evidence highlighting the critical role of rapid structural restoration following possession changes. Although some studies have reported the effectiveness of counterpressing in certain contexts, the present results suggest that, at this inaugural world championship, teams more often favored conservative transition strategies aimed at restoring defensive shape (Casal et al., 2020; Maneiro et al., 2019).

These findings have important practical implications for coaches, performance analysts, and practitioners working in women's futsal. The dominance of out-of-possession actions and compact defensive structures underscores the need to prioritize defensive organization, spatial awareness, and collective positioning in training design (Gibson et al., 2021; Marques et al., 2023). Coaches should emphasize coordinated block defending, shifting as a unit, and maintaining compactness under pressure.

The prominence of set plays within in-possession phases suggests that structured attacking routines represent a key performance component at the world-class level. Consequently, systematic rehearsal of set plays, including restarts, corner routines, and organized build-up patterns, may yield substantial performance benefits. Additionally, the collective nature of attacking behavior highlights the importance of synchronization, off-ball movement, and decision-making within team-based offensive frameworks (Duarte et al., 2012; Welch et al., 2021).

From a transition perspective, the emphasis on recovery and defensive transition indicates that training programs should incorporate scenarios focusing on rapid reorganization after possession loss, defensive balance, and communication (Borthik et al., 2023; Shalom et al., 2025). Together, these applied implications support a holistic approach to performance preparation that integrates offensive structure, defensive solidity, and efficient transition management (Bakhtiar et al., 2023; He et al., 2023). Several limitations should be acknowledged when interpreting the findings of this study. First, the analysis relied exclusively on official match summary data, which provide frequency-based information but do not capture spatial, temporal, or sequential characteristics of performance (Manzi et al., 2023). As a result, the study cannot determine where actions occurred on the court, how they unfolded over time, or how they were influenced by specific tactical contexts. Second, contextual variables such as match status, opponent quality, competition stage, and team ranking were not incorporated into the analysis (Hileno et al., 2020). These factors may influence phase-of-play behaviors and should be considered in future research. Third, the descriptive design of the study limits causal inference, and the findings should be interpreted as performance profiles rather than indicators of effectiveness (Teng et al., 2024). Future investigations should integrate video-based notational analysis, include contextual and situational variables, and examine multiple editions of the tournament to explore longitudinal trends. Such approaches would deepen understanding of phase-of-play dynamics and contribute to the continued development of evidence-based practice in women's futsal.

CONCLUSION

This study provides the first systematic performance analysis of in-possession, out-of-possession, and transition phases at the FIFA Women's Futsal World Cup 2025. By examining official match data from all matches of the inaugural world championship, the study establishes baseline performance profiles that characterize elite women's futsal at the highest international level. The findings demonstrate that match performance during the tournament was primarily characterized by a high volume of out-of-possession actions, reflecting the importance of defensive organization and spatial control in elite competition. In-possession behaviors also accounted for a substantial proportion of match actions, with structured offensive situations, particularly set plays, emerging as the most prominent feature of attacking performance. Transition phases occurred less frequently than in-possession and out-of-possession phases and were mainly characterized by recovery and defensive reorganization actions rather than sustained counter pressing. The phase-specific distributions observed in this study highlight the interconnected nature of offensive, defensive, and transitional behaviors in women's elite futsal. The predominance of collective and structured actions across all phases indicates a tactical emphasis on organization, coordination, and positional discipline at the world championship level. As the first edition of the FIFA Women's Futsal World Cup, the performance profiles reported here provide valuable reference values for coaches, performance analysts, and



researchers seeking to benchmark team behaviors and prepare for future international competitions.

Future research should build upon these findings by incorporating video-based notational analysis, contextual variables such as match status and opponent quality, and longitudinal data across subsequent editions of the tournament. Such approaches would enable deeper examination of performance dynamics and contribute to the continued development of evidence-based practice in women's futsal.

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CONFLICT OF INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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