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ABSTRACT

A Comparative Analysis of Offensive Strategies: Top 3 and Bottom 3 Teams in the SUKMA 2024 Futsal Games

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I. INTRODUCTION

Futsal is a fast-paced, skill-oriented indoor sport with 5 players per team, known for its emphasis on quick decision-making and offensive play [1]. This study compares offensive strategies in the SUKMA 2024 futsal games, focusing on the top three and bottom three teams. It analyses key performance indicators, including successful passes, shots on target, and set pieces [2]. These elements have been proven to be essential indicators of offensive effectiveness [3]. By examining these factors, we aim to uncover the tactical differences between top-performing and lower-ranked teams, offering insights into strategies that influence success in futsal.

II. METHODS

Data on passes, shots on target, and set pieces were collected from post-match video footage available on platforms like YouTube, TVS Entertainment, and Astro Arena. Manual notational analysis was performed with intrarater reliability procedures to ensure data accuracy [4]. The data were compiled in Microsoft Excel and analysed in Jamovi. Descriptive statistics and independent t-tests were used to compare the top three and bottom three teams based on variables such as passes, shots on target, and set pieces [5].

III. RESULTS AND DISCUSSION

A. Analysis of Passes Between the Top Three and Bottom Three Teams

The top three teams had a higher average number of successful passes per match compared to the bottom three teams (e.g., Team 1 had 221.33 successful passes). However, the difference was not statistically significant ($p = 0.503$), indicating that successful passing frequency was similar between both groups [6]. This reflects that in futsal, the emphasis is on quick transitions and opportunistic goal creation rather than prolonged passing sequences.

B. Investigation of Shots on Target

The top three teams had a higher average number of shots on target (11.94 ± 2.78) compared to the bottom three teams (10.85 ± 2.67). However, like the passes, the difference in shots on target was not statistically significant, with a p -value of 0.279 (greater than 0.05) [7]. This suggests that the number of shots on target did not differ significantly between the two groups. It implies that effectiveness is shaped more by

situational context rather than sheer volume of attempt, consistent with the idea that shot context and precision override quantity [8].

C. Analysis Total of Set Pieces

There was no significant difference in the frequency of total set pieces (corners and free kicks) between the top three and bottom three teams [9]. The average number of total set pieces for Team 1 (from the top three) was slightly higher (10.78 ± 2.16) compared to Team 2 (10.15 ± 3.56), but the p -value for this comparison was 0.548, indicating no significant difference in the total set pieces between the two groups. This supports the idea that set-piece frequency (volume) did not significantly differ between winning and losing teams, and that fast counterattacks are dominantly impactful in scoring [10].

D. Success of Set Pieces

The top three teams had a higher success rate for set pieces (0.61 successful set pieces per match) compared to the bottom three teams (0.39 successful set pieces). However, this difference was not statistically significant ($p = 0.428$), indicating that success in set pieces did not notably differ between the top and bottom groups [10].

TABLE I
COMPARISON OF SUCCESSFUL PASSES, SHOT ON TARGET, TOTAL SET PIECES, AND SUCCESSFUL SET PIECES BETWEEN GROUPS

Group	N	Mean (SD)	t	df	p value
Successful passes	30	6.487 (9.68)	0.678	29	0.503
Shots on Target	30	1.398 (0.995)	1.104	29	0.279
Total Set Pieces	30	0.624 (1.027)	0.608	29	0.548
Successful Set Pieces	30	0.226 (0.282)	0.804	29	0.428

IV. CONCLUSIONS

Although differences in passes, shots on target, and set pieces were observed between the top and bottom teams, none of these differences were statistically significant. This suggests that, at least for these metrics, offensive strategies may not be the key factor distinguishing top and bottom teams

in the SUKMA 2024 futsal games [10]. Future studies could expand on these findings by including a larger sample size across more teams and tournaments to improve generalizability. Additionally, incorporating qualitative tactical assessments, player positioning data, and defensive metrics could offer a more holistic understanding of match performance. Researchers may also benefit from integrating positional tracking systems and advanced analytics to capture dynamic aspects of team movement, space occupation, and decision-making that go beyond basic offensive statistics.

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