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Comparison Ranking Stands Of Top 3 Vs. Bottom 3 Football Team In English Premier League 2020/21 On Team Play Statistics

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Abstract: Scoring is not the sole indicator to measure the success of football team. To our knowledge the study of comparison between two different teams based on the ranking table is scarce, thus giving difficulty to coaches, management team and players themselves to gain understanding of external sources of their performance. The purpose of this study is to identify indicators in the team play statistics between the top and bottom three (3) in English Premier League (EPL) which postulated to have influence on EPL's ranking table. Purposive sampling is being applied because the subjects possess certain performance indicators that need to be studied such as, total passes, passes per match, % pass accuracy, total crosses, and % crosses accuracy in Team Play Statistic. Top 3 football clubs Manchester City, Manchester United, Liverpool. Meanwhile, the lower 3 were Fulham, West Bromwich Albion, and Sheffield United. Overall, the present result from this study explained that those teams in the top 3 nor bottom 3 had the significant and insignificant result of performance indicators. Overall, a significant result where the top 3 football teams had a better result on total passes, passes per match, and passes accuracy percentage compared to the bottom 3 Further research needs to find out the effectiveness of cross accuracy to be part of the key element in Team Play Statistics

Keywords: Performance Analysis, English Premier League, Ranking Stands, Football, Team Play Statistics.

I. INTRODUCTION

The scene behind the success of the football team not only comes from the struggles of football players in the team, but also, coaches, fans, and the media provide their way to give output for the successful football teams. A previous study analysed on attacking and defensive positions which believed that these indicators would make differences for teams' ranking stands at the top or bottom. Study shows that the top ten teams had a greater amount of ball possession with shorter passes (11). The indicators also counted as a reflection of the athletes' shortcomings in sports. Besides that, the previous study focused on winning factors such as goals scored, the region of the pitch where how the created goal was scored, time scored, and the position of the player who scored the goal (14).

Each team will be ranked according to their total number of goals differences and points. In simple words, top teams will have higher points compared to bottom teams. If two teams have the same number of points, they will be ranked based on goal differences (GD). Usually, higher GD represent higher position the team will stand in the ranking. However, if two teams had the same number of points (PTS) and GD, head-to-head performance comparison will act as determinant in which one team will get a higher ranking if they have more goal scored (GS) when the two teams met on home and away sides. Most leagues relegate the last three teams to a lower league division, where they are replaced by the top three teams from the lower division (10).

According to (11), mainly Performance Analysts' researchers had their interest focuses analysing on how the goal scored. The tendency of studying goal patterns is higher when they put it as the ultimate determinantal of winning team and losing team. Consequently, research analysis from other perspectives such as defensive playing styles, tactical, technical abilities, and team play abilities information are limited to be attained. Scoring is not the only indicator to measure the success of a football team. Even though one of the most essential aspects of football match analysis is the discovery of goal-scoring patterns and successful offensive plans, coaches and management teams might evaluate the total team performance ineffective due to unconcern of team play statistics. It is because these indicators are not created by the whole team player itself,

where it was created by subgroups of different positions. This can be supported by (17), where there is still lacking reviews and studies regarding league-ranking effects towards abilities to score goals.

Concerning researchers' performance analysis in English Premier League (EPL), to our knowledge the study of comparison between two different teams based on the ranking table is scarce, thus giving difficulty to coaches, management team and players themselves to gain understanding of external sources of their performance. According to (11) there has only been one research that has scrutinized the potential and essential key performance indicators that contribute to success collected data from games between the top and bottom three teams in the 2001/02 EPL season. With their study included, only two studies have been made of comparison between two or more football teams related to the ranking table in EPL.

Furthermore, team ranking has received less attention in the quantitative literature and more to be assumed as predictive to win-loss records in major sports (4). Therefore, this research aims to identify indicators in the team play statistics between the top and bottom three (3) in the EPL which postulated to influence the ranking table in EPL.

II. METHODOLOGY

The team play in football performance analysis has many indicators. This study will analysed it based on team play statistics of all matches in EPL season 2020/2021. Each team played total of 38 games throughout the season. Each result will have appeared on the table fixture after the match ended. Every teams will played twice, once at their home stadium and once at the opponent's home field. The top three in the 2020/2021 season were Manchester City FC, Manchester United FC, and Chelsea FC. Meanwhile, the lower 3 were Fulham FC, West Brom FC, and Sheffield United FC. The team has been confirmed via the EPL website. This current study adapted causal-comparative mode or known as ex post facto where it is to investigate cause-and-effect linkages that explain existing variations in groups or individuals. It is unethical if the data is being manipulated intentionally.

Purposive sampling was applied in this study because the subjects possess certain performance indicators that need to be studied. In reference to the EPL's official website the Top 3 football clubs are Manchester City, Manchester United, Liverpool. Meanwhile, the lower 3 were Fulham, West Bromwich Albion, and Sheffield United.

The current study had utilised the official website of EPL as means of data gathering needed in team play statistics. Generally, performance indicators in team play statistics will be reported in percentage and numbers. The indicators consist of total passes, passes per match, percentage (%) pass accuracy, total crosses, and % crosses accuracy. All databases on the website are collected and analysed by a team called OPTA. Secondly, a software of Social Package for Social Science (SPSS) version 26 will be used to analyse data collected.

The data was collected from an official website of EPL followed by interpretation of team play statistics executed by using SPSS version 26 using Mann-Whitney U Test.

III. RESULTS AND DISCUSSION

Analysis revealed that some performance indicator in team play statistics which is total passes (p=0.05; Figure 1), passes per match (p=0.05; Figure 2), pass accuracy (p=0.05; Figure 3) is significantly better performance in top three teams. compared to bottom three teams. As for total crosses, the analysis showed that the total crosses (p=0.83; Figure 4) and cross accuracy percentage (p=0.66; Figure 5) were not significant as the bottom three teams perform better.



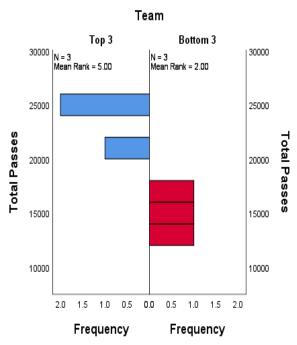


Figure 1 frequencies of total passes per season between top 3 and bottom 3

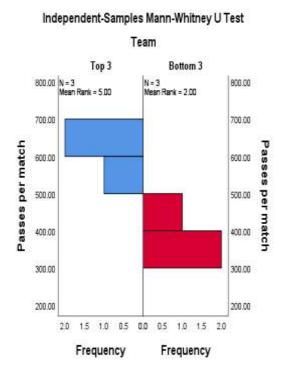


Figure 2 frequencies of passes per match in a season between top 3 and bottom 3.

Independent-Samples Mann-Whitney U Test

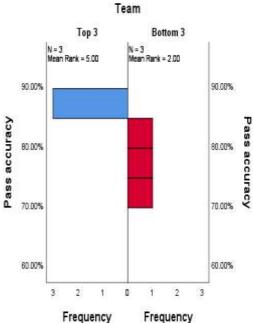


Figure 3 frequencies of pass accuracy percentage between top 3 and bottom 3.

Independent-Samples Mann-Whitney U Test

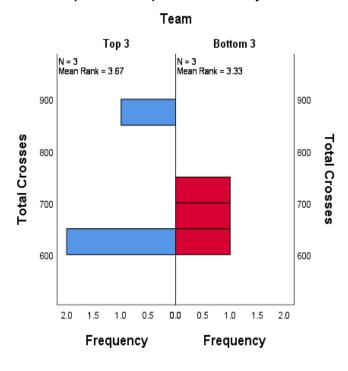


Figure 4 frequencies of total crosses in a season between top 3 and bottom 3.

Independent-Samples Mann-Whitney U Test

Team Top 3 Bottom 3 26.00% N = 3 Mean Rank = 3.17 Mean Rank = 3.83 24.00% 22.00% 22.00% 22.00% 20.00% 20.00% 20.00% 20.00%

18.00%

16.00%

18.00%

16.00%

Figure 5 frequencies of percentage cross accuracy per match in a season between top 3 and bottom 3.

1.0 0.8 0.6 0.4 0.2 0.0 0.2 0.4 0.6 0.8 1.0

Frequency

Frequency

Figure 1 showed teams in the top 3 is significantly have a better number for total passes compared to the bottom 3. The findings revealed that roughly top 3 teams managed to perform at least more than 20000 passes per season while bottom 3 only achieved below than 20000 passes per season. In reference to Figure 2. The current study revealed the top 3 teams have 500 - 700 passes per match compared to the bottom 3 teams which have 300 - 500 passes per match which correlates with pass accuracy between the top and bottom teams as portrays in Figure 3 stated that the pass accuracy showed a significant result where the top 3 teams achieved 90% pass accuracy which is higher than the bottom 3 teams with a minimum of 70% pass accuracy. Onto total crosses findings revealed there were no significant between the top 3 and bottom 3 teams. Figure 4 showed that some football team in the top 3 had the same amount (600 total crosses) as the bottom 3, which mean some of the bottom 3 teams managed to achieve better (750 total crosses) than the top 3 teams. Lastly the performance indicator on cross accuracy showed insignificant result in comparison between the top 3 and bottom 3 football teams. Figure 5 showed that 2 over 3 football teams in the bottom 3 achieved better cross accuracy up to 24% compared to the top 3 football teams with the lowest accuracy of 19%.

IV. CONCLUSION

According to a systematic review done by (12) in the study on *How to be Successful in Football*. One of the significant results in many studies that, they analysed, there was a strong relationship between group-task and performance to be a winning team. When there is a high positive feeling of togetherness in completing the task in football, the higher likelihood of winning. Furthermore (12) also reveal a few studies of secondary predictive analyses regarding wins and losses in the latest outcome 2016 comprehend that a greater number of total shots, crosses along with its accuracy have effects on winning.

Findings from this study are postulated to provide the factors on how the football team managed to achieve in the top 3 in the ranking league. It shows that the top three performed higher passes per match, total passes in one season and passes accuracy percentage compared to the bottom three. Overall, both group is possible to have the same performance and numbers of crosses and accuracy because it is difficult to deliver the ball very well in the danger zone of the opponent's area. Either passes or crosses must come together with the finest accuracy to secure chances of winning.

It is hopeful that findings of the current study beneficial in giving significant knowledge to improve better performance in football performance analysis. Any knowledge in performance analysis in football, according to (13) many studies reviewed their findings as basic research when they found the new knowledge and information regarding performance. However, the findings still lack to be applied by the coaches and

management team to make decisions based on empirical studies. Further research needs to find out the effectiveness of cross accuracy to be part of the key element in team play statistics and to establish a strategic plan on how to translate the scientific information into the field.

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