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The role of technical effectiveness in determining the final result in basketball- A study of the title round of the Algerian Men's Championship 2024 Seniors-

دورالفعالية التقنية في تحديد النتيجة النهائية في كرة السلة - دراسة لدورة اللقب بطولة الجزائر رجال2024 أكابر-

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Abstract:

This study aimed to explore how the effectiveness of certain technical elements (field goals, assists, rebounds) influences the final outcomes of matches in the National Basketball Championship for Seniorsin Algeria, where we assumed that the offensive technical elements represented by the assists, field points, as well as the defensive technical elements represented by the rebound have a direct effect in determining the outcome of the match.We relied on analyzing the score sheets for all six teams participating in the tournament, and the totals of technical elements and their percentages for all matches, by comparing the averages for each technical element alone for all teams. There were no statistically significant differences between the competing teams in the technical variables, as confirmed by the results,and the results proved that these variables were highly convergent, which reflects the convergence of the teams' level in the tournament. We also concluded that there were other variables that might have an impact on the outcome of the matches, perhaps the most important of which is the physical and physiological factor.

Keywords: Match Analysis;match statistics; technical outcomes; playing position; match results

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01.Introduction:

Basketball is a sport that encompasses a wide range of technical, tactical, and psychological aspects. As the sport has advanced and new tools, both technological and philosophical, have been developed, it has become crucial for countries participating in high-level international competitions to keep up with these advancements. They must stay informed about the latest developments in the sport and continually strive for its growth. Additionally, basketball training, similar to many other sports, is witnessing significant growth and development. This is largely due to the high skill levels and tactical performances of players in both local and international competitions, as well as improvements in their technical output during games. Coaches design training programs that incorporate physical, skill, and tactical elements suitable for the competition level.Weineck has affirmed that achieving the highest levels of physical, skill, tactical, and psychological abilities is essential for winning and success. Consequently, training programs based on scientific principles of modern sports training must be organized and systematic.(Weineck, 1983, p. 309)

Continental and international championships are invaluable opportunities to precisely gauge the level of various teams. By analyzing these teams, we can assess their physical, skill, technical, and psychological attributes. The data and results from these analyses provide essential indicators that help establish benchmarks and objective insights, guiding our future efforts. This applies to all team members, from juniors to senior national team members, enabling us to develop plans to enhance every aspect of practice in preparation for such performances.

The statistical analysis of basketball games can uncover many significant performance indicators, though not all can be evaluated in real-time. Therefore, focusing on close matches enables the identification of a smaller set of crucial performance indicators. (Csataljay, O'Donoghue, Hughes , & Dancs, 2009)

Analyzing matches and approving score sheets that provide raw data and outputs for each team's technical elements is essential. This process helps identify the key indicators that contribute to team victories and losses. Numerous studies have highlighted the importance of score sheets in objectively analyzing game results and determining the factors that lead to one team's victory and another's defeat. For instance, the study "Dynamic Modeling of Performance in Basketball" by Jorge Malarranha, Bruno Figueira, Nuno Leite, and Jaime Sampaio identified four indicators—field goals, offensive rebounds, defensive rebounds, and turnovers—that directly impact match outcomes. By analyzing 74 basketball matches from the 2010 World Championship in Turkey, they concluded that these variables significantly influenced the results in different proportions. These findings provide coaches with more precise information for preparing their teams for competition.(Malarranha, Figueira, Leite, & Sampaio, 2013)

In a study titled "Statistical Analysis of Basketball Team Performance: Understanding Teams' Wins and Losses According to a Different Index of Ball Possessions," researchers examined over 400 matches from the 97-98 and 98-99 seasons of the Portuguese Professional Basketball League. The study aimed to understand the factors influencing winning and losing

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for sports teams, considering variables such as the type of match (regular season or playoff), match outcome (win or loss), and match location (home or away). Matches were categorized into three sections—close games, balanced games, and unbalanced games—based on the points difference. The study concluded that low technical performance throughout the competition was the primary reason for losses in unbalanced and balanced games. In close games, the critical factors differed; successful free throws were crucial during the regular season, while offensive rebounds were significant in playoffs and away matches. In return matches, the visiting team's errors played a significant role in determining the outcome.(Sampaio & Janeira, 2003). Conversely, the study by Shaoliang Zhang et al., titled "Performance Profiles and Opposition Interaction During Game-Play in Elite Basketball: Evidence from the National Basketball Association," highlighted additional variables that influence match outcomes. This study confirmed the significance of match location (home or away) and found that defensive rebounds, blocked shots, and assists were crucial for stronger teams in determining wins and losses. For weaker teams, defensive rebounds and turnovers were identified as key performance indicators.(Zhang, et al., 2019)

Analyzing score sheets from a technical perspective can benefit coaches, fitness trainers, and psychological trainers. It helps them understand the psychology of their team's play as well as the playing style of competing teams, enabling them to better prepare the players and avoid past mistakes.

Many studies have shown that competing teams, whether in continental or international tournaments, exhibit similar tactical and technical levels. These studies have concluded that the differences in match outcomes and the crowning of teams with cups and championships are primarily due to the influence of minor technical factors. These factors include the two-point or three-point shooting percentage, the average number of assists, and the rate of defensive and offensive rebounds, which often significantly determine the final match outcome. Based on this premise, we posed the following question: What is the role of efficiency in certain technical characteristics (shooting, rebounds, and assists) on the final outcomes of matches in the Algerian Senior Men's Basketball Championship?

1.1Hypotheses

We assumed thatthere is an effect of the effectiveness of some technical characteristics of shooting, rebounding and assists on the final result of the matches of the Algerian Senior Men's Basketball Championship.

1.1.1Partial hypotheses

- 1.1.1.1There is an effect of the effectiveness of shooting by 2 points and 3 points on the final result of the matches of the Algerian Senior Men's Basketball Championship.
- 1.1.1.2.There is an effect of the effectiveness of the assist on the final result of the matches of the Algerian Senior Men's Basketball Championship.
- 1.1.1.3There is an effect of the effectiveness of defensive and offensive rebound on the final result of the Algerian men's basketball championship matches.

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2. METHODS

2.1 - Research sample: The term community refers to the sum of units that a researcher can deal with in order to collect scientific material. It is therefore a term that is not limited to a specific size, mass, or number.(Ben_Fadhel & Zerari, 2023), The sample represents a portion of the population from which the data was collected. (djrad, Arioua, & Baait, 2023), our study sample was intentional and included 6 teams participating in the Algerian Basketball Championship for Senior Men, namely (Widad Olympique Boufarik "**WOB** ", Nadi basket staoueli"**NBS**", Tradji Riad Amel Draria"**TRAD**", Mouloudia Club D'alger"**MCA**", Union Sportive Medina D'alger"**USMA**", Nasr Athletic Houssein Dey"**NAHD**")

2.2 - Study methodology: The study method is defined as those sequential and interconnected steps that dominate the course of the mind in order to reach a relatively fixed truth. Since in our study we will rely on a process of analyzing the technical aspect of all the championship matches, represented by analyzing the score sheets and its various components, so the basis of the study here is presentation, analysis and discussion, and therefore we will rely on the descriptive analytical approach.

2.3 -Data collection tools: In our study to collect information, we relied on match sheets, which give raw statistics at the end of each match, starting from the final result to all the technical data. What concerns us most in the score sheets are certain key elements:

- The final result of the match:which indicates the winning and losing teams, as well as the total points scored by each team at the end of the match.
- The field goals **(2pts, 3pts):** are baskets scored on any shot or tap other than a free throw, worth two or three points depending on the location of the attempt.
- The offensive rebounds **"OR"** : in which the ball is recovered by the offensive side and does not change possession.
- Defensive rebounds **"DR":** in which the defending team gains possession.
- Assists **"AS"** : assist is attributed to a player who passes the ball to a teammate in a way that leads directly to a score by field goal

Score sheets can be considered tools with great honesty and objectivity, because they provide exclusive raw data and express to a large extent what exists on the ground without bias. Therefore, these results (match sheets results) can be accepted as reliable data collection tools, and we can perform statistical operations on them confidently

2.4 - Statistical Tools: The researchers used statistical methods like the SPSS Program to calculate: Normality of data distribution using Shapiro-wilk test, The Kruskal–Wallis test by ranks to compare the means of more than two independent samples.

2.5 test of normality:

table01: Shapiro-Wilk Normality Test Results

variable	Test stat	p-value	variable	Test stat	p-value	variable	Test stat	p-value
pts2_wob	,178	,147	**pts2_trad**	,274	,016	**pts2_usma**	,186	,112
pts3_wob	,268	,000	**pts3_trad**	,265	,003	**pts3_usma**	,161	,154

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as_wob	,180	,091	**as_trad**	,223	,008	**as_usma**	,165	,041
or_wob	,244	,005	**or_trad**	,143	,112	**or_usma**	,207	,188
dr_wob	,201	,160	**dr_trad**	,314	,002	**dr_usma**	,202	,068
pts2_nbs	,228	,009	**pts2_mca**	,220	,024	**pts2_nahd**	,195	,106
pts3_nbs	,291	,002	**pts3_mca**	,244	,004	**pts3_nahd**	,207	,010
as_nbs	,240	,011	**as_mca**	,238	,043	**as_nahd**	,182	,050
or_nbs	,227	,025	**or_mca**	,293	,081	**or_nahd**	,195	,178
dr_nbs	,197	,069	**dr_mca**	,179	,080	**dr_nahd**	,224	,031

Notes:df: 13 / sig level: 0.05 / N: 13

We notice from the table that the distribution of data was varied between those that were normal distributed and those that were not, as the normal distributed variables amounted to 16 variables, while the variables that were not normally distributed amounted to 14, which leads us to adopt non-parametric tests.

3. Presentation and Analysis of Results:

1st hypothesis:There is an effect of the effectiveness of shooting by 2 points and 3 points on the final result of the matches of the Algerian Senior Men's Basketball Championship.

Table02:shows the results of the Kruskal–Wallis test of the 1st hypothesis (2pts variable)

Teams (groups)	Mean ranks	Chi- square	p-value
pts2_wob	39,92	0,39	0,995
pts2_nbs	39,04		
pts2_usma	37,00		
pts2_trad	40,58		
pts2_nahd	38,42		
pts2_mca	42,04		

Notes:df: 05 / sig level: 0.05 / N: 13

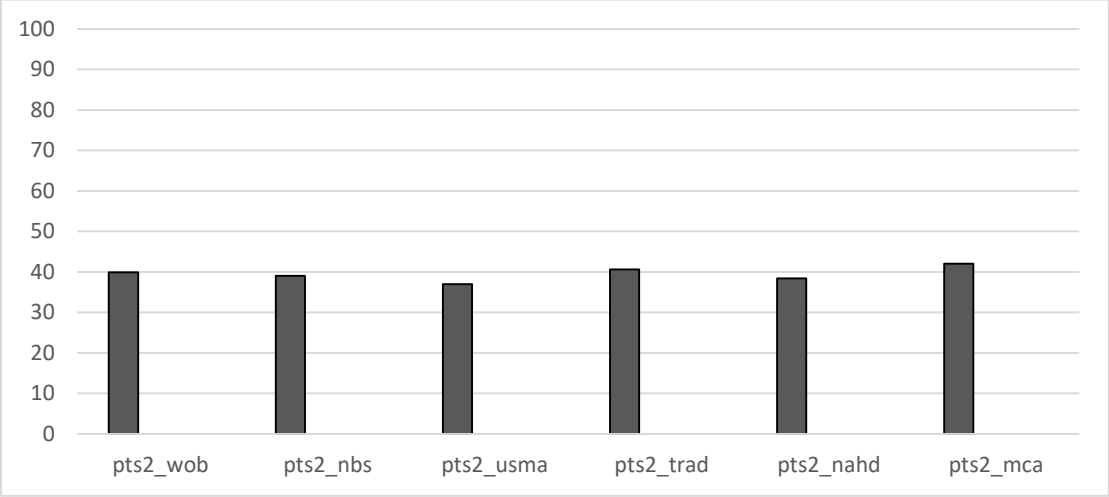


figure 01: mean ranks of each team (2 pts)

From Table No. 02, We observe that there are no statistically significant differences in the average differences for the two-point variable. (p-value 0.995). We also note from the graphic representation the similarity in mean ranks suggests a convergence between the differences in the two-point variable.

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Table03:shows the results of the Kruskal–Wallis test of the 1st hypothesis (3pts variable)

Teams (groups)	Mean ranks	Chi- square	p-value
pts3_wob	36,31	0,975	0,964
pts3_trad	37,85		
pts3_usma	42,46		
pts3_nbs	38,42		
pts3_mca	43,12		
pts3_nahd	38,85		

Notes:df: 05 / sig level: 0.05 / N: 13

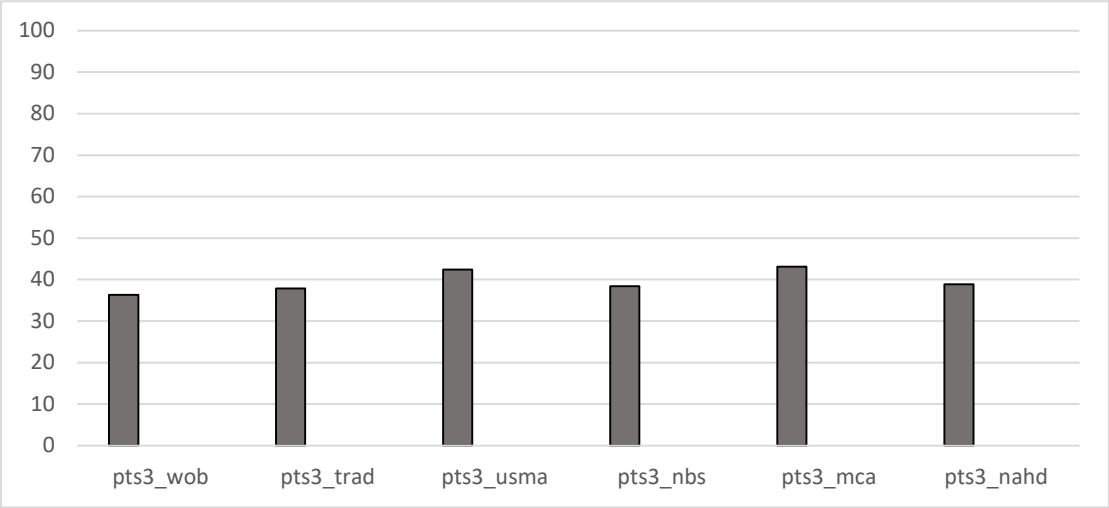


figure 02: mean ranks of each team (3 pts)

From Table No. 03, We observe no statistically significant differences in the mean differences for the three-point variable. (p-value 0.964). We also note from the graphic representation the convergence in mean ranks, whichindicates the convergence between the differences in the three-point variable.

2ndhypothesis:There is an effect of the effectiveness of the assist on the final result of the matches of the Algerian Senior Men's Basketball Championship

Table04:shows the results of the Kruskal–Wallis test of the 2nd hypothesis (assist variable)

Teams (groups)	Mean ranks	Chi- square	p-value
as_wob	42,00	0,968	0,965
as_trad	36,19		
as_usma	37,88		
as_nbs	39,15		
as_mca	43,54		
as_nahd	38,23		

Notes:df: 05 / sig level: 0.05 / N: 13

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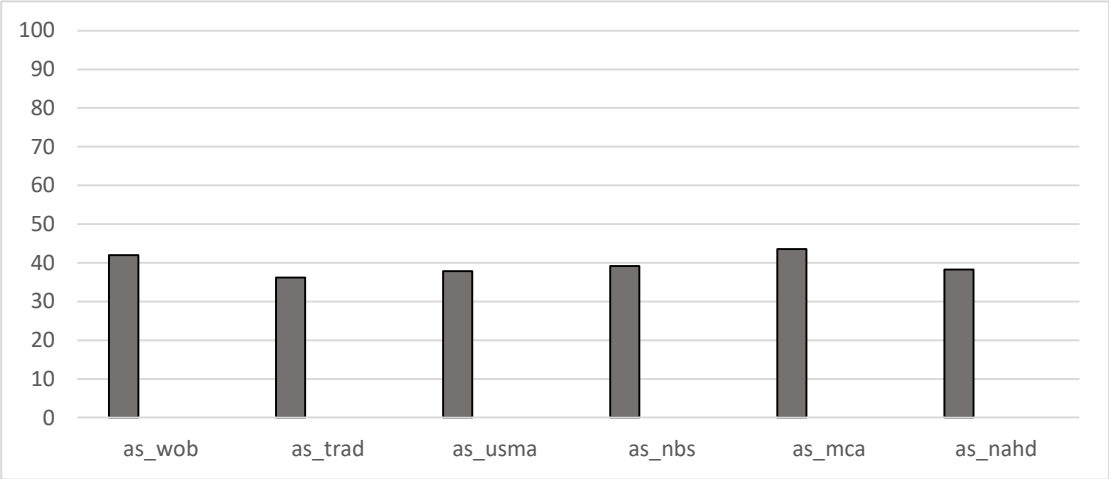


figure 03: mean ranks of each team (assist)

From Table No. 04, we note the absence of statisticallysignificant differences in the means of the differences in the assists variable (p-value 0.956). We also note from the graphic representation the convergence in mean ranks, which indicates the convergence between the differences in the assists variable.

3rdhypothesis:There is an effect of the effectiveness of defensive and offensive rebound on the final result of the Algerian men's basketball championship matches.

Table05 shows the results of the Kruskal–Wallis test of the 3rd hypothesis (offensive rebounds variable)

Teams (groups)	Mean ranks	Chi- square	p-value
or_wob	36,12	0,743	0,980
or_trad	37,69		
or_usma	41,81		
or_nbs	41,23		
or_mca	41,69		
or_nahd	38,46		

Notes:df: 05 / sig level: 0.05 / N: 13

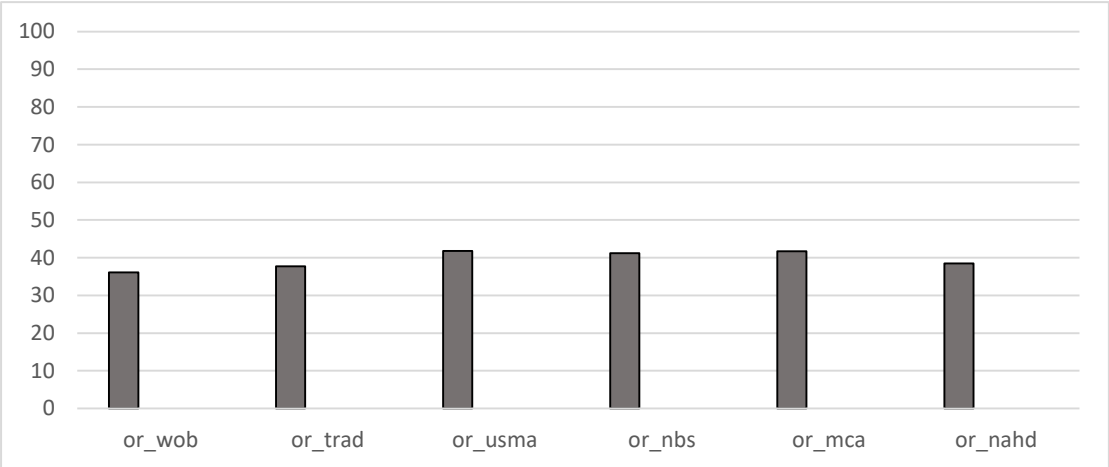


figure 04: mean ranks of each team (offensive rebounds)

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From Table No. 05, we note the absence of statistically significant differences in the means of the differences in the offensive rebounds variable (p-value 0.980). We also note from the graphic representation the convergence in mean ranks, which indicates the convergence between the differences in the offensive rebounds variable.

Table06:shows the results of the Kruskal–Wallis test of the 3rd hypothesis (Defensive rebounds variable)

Teams (groups)	Mean ranks	Chi- square	p-value
dr_wob	43,08	0,761	0,979
dr_trad	39,65		
dr_usma	37,35		
dr_nbs	39,92		
dr_mca	40,77		
dr_nahd	36,23		

Notes:df: 05 / sig level: 0.05 / N: 13

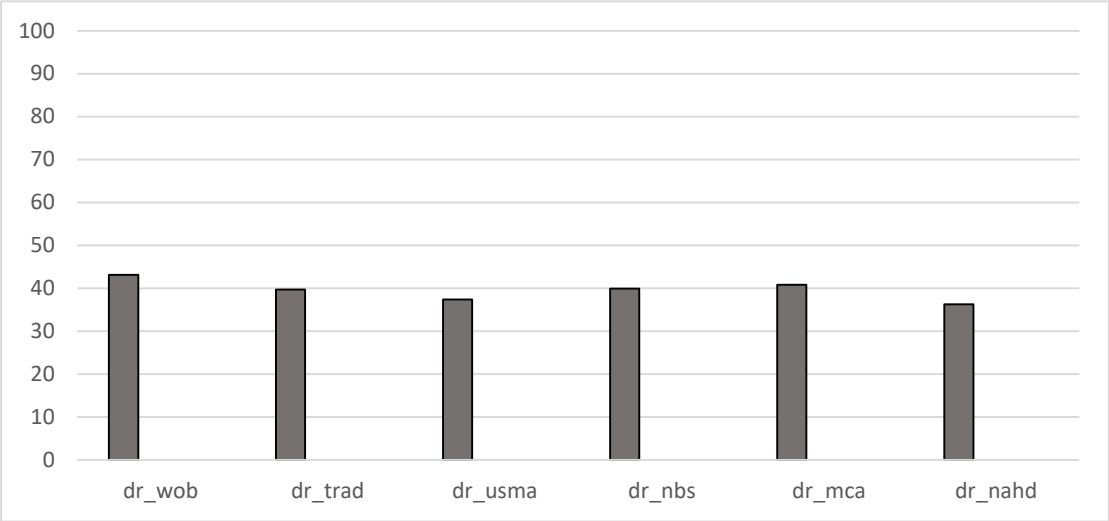


figure 05: mean ranks of each team (Defensive rebounds)

From Table No. 06, we note the absence of statistically significant differences in the means of the differences in the defensive rebounds variable (p-value 0.979). We also note from the graphic representation the convergence in mean ranks, which indicates the convergence between the differences in the defensive rebounds variable.

04. Discussion:

Through the results of the tables and graphs related to comparing the averages in technical outputs between the teams participating in the National Basketball Championship for Senior Men, which proved that there were no statistically significant differences between them, it can be concluded that the effectiveness in certain technical aspects such as shooting, rebounding, and assisting did not directly affect the final outcome of the matches. This observation is also supported by the percentages for each team in each technical variable.

Regarding the two-point and three-point variables, we note that the percentages of shots that ended with two points ranged between 42.56% and 48.03%, and 19.87% and 31.97% for the three-point variable, which are very close percentages, reflecting the similarity in the level of performance between the teams in this variable. This similarity can also be explained by the absence of statistically significant differences between the teams, and its lack of impact on the

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final result in the match, because the similarity in the percentage of correct shots naturally leads to the similarity in the final result, as we see that the total points obtained in the tournament as a whole were limited to between 402 points and 342 points, with an average difference of 10 points, including free throws, which is a small difference that can be attributed to several variables.

As for the variable of assists, we notice a difference between the teams, which was limited to a total of 84 and 121 assist, but the difference was not statistically significant because the average difference in passes in each match did not exceed the limit of six.

As for the variable of offensive and defensive rebounds, they also did not have a direct impact on the final result of the matches, as their total for the teams was also very close, as the total of offensive rebounds in the tournament as a whole was limited to between 60 and 69 offensive rebounds, while the defensive rebounds were limited to between 155 and 181 defensive rebounds. That is, with an average difference of less than one offensive rebound per match, and 4 defensive rebounds per match, which reflects the close level of defensive and offensive performance, as well as the percentages of possession, which naturally leads to creating a state of defensive and offensive balance in the match, and this is what limits the direct effects of this variable on the final result.

The similarity in technical performance levels, which resulted in no direct impact on the match outcome, can be attributed to several factors, with kinematic variables being among the most significant.and their impact on skill performance, as Sayeh Meddour’s study proved that high skill performance, which may have an impact on the outcome of matches, may be affected by kinematic variables such as the correct technical performance of the arm throwing the ball and its path, the angle of the throw and the height of the ball during its path. (Sayeh , 2017), the effectiveness of skill performance can also be influenced by additional variables. As demonstrated by Majdi Rabeh and others, there is a statistically significant relationship between skill performance effectiveness in basketball and certain physical and functional measurements, which could impact the final result of the match.(Majadi, Saidan, & Saoudi, 2014). On the other hand, Talha and Salami's study proved that some physical and functional variables such as explosive power of the lower and upper limbs, transitional speed, as well as the player's physiological abilities, affect technical effectiveness, and their differences between players in different teams may make a difference in the outcome of the match. (Talha & Sallami , 2023). In Gheribi Hichem's study, he highlighted the significance of explosive power in enhancing game performance and its direct correlation with better shooting quality. (GHERIBI, 2018),On this basis, even if some technical elements do not have a direct impact on the final outcome of the match, some other physical, physiological and kinematic variables may have an impact on technical effectiveness, as their proportions increase among teams in competitions, and they will inevitably have a direct impact on the final outcome of matches,This is what was confirmed by the study of both Gheribiand Kridechewhich suggested a training program to improve vertical jumping ability, highlighting it as one of the most crucial attributes for a professional basketball player.)Gheribi و Krideche (2016 ،

However, However, Sarah and Marcos' study, through analyzing 20 matches, confirmed that among the most important elements and determinants that were considered to have a direct impact on the outcome of the matches were defensive rebounds and assists (Canuto & de

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Almeida , 2022), while Anthony, Miguel and Carl's study on the existence of a relationship between the outcome of the final match and the characteristics of the team's performance index, as the results proved that high rates of field point effectiveness and defensive rebounds gave the greatest probability of winning. (Leicht, Gómez, & Woods, 2017)

The findings of this study, combined with those of previous research, highlight the broad range of factors that can influence match outcomes. The variables that were studied, whether in the current study or in previous studies, may be useful to coaches to determine the most important elements that should be focused on during training, and the ability to predict match outcomes, based on these variables and their proportions in previous matches.

05. Conclusions and suggestions:

- Taking into account the set of variables that have a direct impact on the outcome of the match.

- Programming training sessions based on variables that have been proven to have a direct impact on the outcome of matches.

- Technical outputs (field points, assists, rebounds) are usually factors that influence the course of matches. Must work on developing their effectiveness.

- Among the factors that affect the course of matches are physical, physiological and kinematic factors, which must be taken into consideration when planning training sessions.

- The need to conduct an analytical study of the impact of other technical elements on the final outcome of matches.

- Working on conducting predictive studies based on the effects of performance aspects and technical outputs in determining the final outcome of matches in the Algerian environment.

06. **References**

Ben_Fadhel, F., & Zerari, H. (2023). A comparative study of passing skills between the Algerian and Senegalese national teams participating in the African Cup of Nations Egypt 2019. *El tahadi Journal, 15*(2), 188 - 204. Récupéré sur https://www.asjp.cerist.dz/en/article/229574

Canuto , S. C., & de Almeida , M. B. (2022). Determinants of Basketball Match Outcome Based on Game - related Statistics. *European Journal of Human Movement*(48), 4-20. Récupéré sur https://dialnet.unirioja.es/servlet/articulo?codigo=8506296

Csataljay, G., O'Donoghue, P., Hughes , M., & Dancs, H. (2009). Performance indicators that distinguish winning and losing teams in basketball. *International Journal of Performance Analysis in Sport, 9*(1), 60 - 66. doi:https://doi.org/10.1080/24748668.2009.11868464

djrad, K., Arioua, s., & Baait, R. B. (2023). The role of recreational sports activities in achieving psychological security among the hearing impaired. *El Tahadi Journal, 15*(02), 158 - 170. Récupéré sur https://www.asjp.cerist.dz/en/article/229572

Gheribi , H., & Krideche , M. (2016). Effects of a Plyometrics Program on the Evolution of Vertical jump Performance and Morphological Parameters (case of three basketball

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-Publication rights are reserved for Oum-El Bouaghi University -website: https://www.asjp.cerist.dz/en/PresentationRevue/71

teams under 19 years old). *el-tahadi journal, 8*(2), 49-56. Récupéré sur https://www.asjp.cerist.dz/en/article/43744

Gheribi, H. (2018). Impact of interval training on the development of explosive force and jump shot quality in senior Algerian basketball players. *el-tahadi journal, 10*(1), 31-46. Récupéré sur https://www.asjp.cerist.dz/en/article/54120

Leicht, A., Gómez, M., & Woods, C. (2017). Explaining Match Outcome During The Men's Basketball Tournament at The Olympic Games. *Journal of Sports Sciences and Medicine, 16*(4), 468–473.

Majadi, R., Saidan, S., & Saoudi, A.-D. (2014). Some anthropometric measurements and functional indicators and their relationship to the effectiveness of skill performance among basketball players. *Sports Creativity journal, 5*(2), 57-76. Récupéré sur https://www.asjp.cerist.dz/en/article/13951

Malarranha, J., Figueira, B., Leite, N., & Sampaio, J. (2013). Dynamic Modeling of Performance in Basketball. *International Journal of Performance Analysis in Sport, 13*(2), 377-387. doi:https://doi.org/10.1080/24748668.2013.11868655

Sampaio, J., & Janeira, M. (2003). Statistical analyses of basketball team performance: understanding teams' wins and losses according to a different index of ball possessions. *International Journal of Performance Analysis in Sport, 3*(1), 40-49. doi:https://doi.org/10.1080/24748668.2003.11868273

Sayeh , A.-A. M. (2017). The effect of some kinematic variables on the effectiveness of skill performance in free throw and three-point shooting in basketball. *El Mouhtarif Journal, 4*(3), 345-356. Récupéré sur https://www.asjp.cerist.dz/en/article/131367

Talha , H., & Sallami , A. (2023). The effect of some functional and physical characteristics on the effectiveness of performing some basic skills among basketball back players of some Skikda State teams under 17 years old. *Algerian Journal of Research and Studies, 20*(1), 200-217. Récupéré sur https://www.asjp.cerist.dz/en/article/221550

Weineck, J. (1983). *Manuel d'Entraînement.* Paris: Edition Vigot.

Zhang, S., Lorenzo, A., Zhou, C., Cui, Y., Gonçalves, B., & Gómez, M. A. (2019). Performance profiles and opposition interaction during game-play in elite basketball: evidences from National Basketball Association. *International Journal of Performance Analysis in Sport, 9*(1), 28-48. doi:https://doi.org/10.1080/24748668.2018.1555738

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