

## EVALUATING THE TYPES OF SMASH HITS AND THEIR RELATIONSHIP TO THE RESULTS OF THE IRAQI PREMIER LEAGUE VOLLEYBALL MATCHES

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### Abstract

The game of volleyball depends mainly on some technical skills and at the forefront of these skills is the overwhelming beating and all kinds of where you consider the decisive factor in determining the win and get the points that win The team . The successful attack reflects positively on the level of morale of the team and the players and raises their confidence, as it raises the motivation to do more effort and give, where the importance of research is reflected in the study of the reality of the skill of beating overwhelming all Types of Iraqi Premier League players with volleyball to detect the aspect of success and failure and through the experience of the researchers in the field of volleyball and through the follow-up games Iraqi league volleyball, the researchers were found A large gap between the global and local levels in the level of performance of the skill of beating overwhelming and qualitative types . So the researchers wanted to analyze and evaluate the skill of beating overwhelming and know the result of the attack for each type and its relationship with the results of the teams participating in the first gathering of the Iraqi league games for the sports season 2023, 2024. The goal of the research was to identify the relationship of the skill of successful crushing of each type of total sum of the types of crushing multiplication of the teams of the research sample . When the researchers hypothesized that there was a difference in the use of the different types of crushing multiplication that participated in the assembly, as well as a statistical correlation between the successful crushing multiplication rate of each type of crushing multiplication during the assembly. The researcher used the descriptive approach in the survey method, when the researcher identified the research sample, which represented the research community honestly 100% Teams of the first assembly of the first group of the Iraqi Premier League volleyball for the sports season 2023 -2024 and are teams (Peshmerga, Mekdadiya, Nineveh ,Industry) The

researchers used a note form that was intended to record and write down the type and number of beating overwhelming of all kinds for each team where the researchers presented this form to some volleyball specialists from experts And academics for the purpose of verifying the sincerity and objectivity and was conducted reconnaissance experiment to ensure the safety of the camera and imaging procedures and was the reconnaissance experiment between the two teams of South Gas and Peshmerga in the final of the Iraqi Super Cup The researchers then conducted the main experiment on the first group assembly matches in the hall of the Peshmerga Club, where the researchers concluded that there is a difference in the use of the types of crushing beatings used by the teams of the sample search in the pool matches First and in the following order (high crushing beating, back crushing beating ,Beating crushing hook ) and also having a difference in the success rate of the crushing beating of the teams sample research either recommendations of the research was to work on the training of players crushing beating towards the weak areas of the opposing team and work to increase Training on crushing hook striking, which is considered the best and fastest offensive method to obtain a direct point.

**Keyword:** spike,Iraqi League, Volleyball

## **Introduction**

The high level of performance in the game of volleyball globally, in particular, may witness remarkable development in some countries that in the previous period were not developed at this high level and thus achieved great achievements, as the cadre of specialists in the game of volleyball called for a study of the reasons that led to reaching this level and in The forefront is the skill of smashing and all its types, as the smash is considered the deciding factor in the test of victory and taking the points scored by the winning team. It is worth noting that all technical skills in volleyball must end with a smash. That is, all technical skills are the basis for building an offensive formation to obtain the point. A successful attack reflects positively on the morale of the team players and increases their self-confidence, as it raises the incentive to exert more effort and giving. There is no doubt that the result of the match depends on the ability of the players to score points, which depends on the success of the skill of crushing all types, and the importance of research is embodied. In studying the level of the smash hit skill for the practical level in terms of analysis and evaluation of that skill in all its types, to search for success and failure in it, and to identify the most commonly used types of smash hit that have a positive impact on the match. Which can be reflected by the researcher in the form of training information of great importance

for players and coaches, which can be reflected by the researcher in the form of training information of great importance for local players and coaches in order to raise the low level of the game compared to the global level. The skill of smashing is one of the most important offensive skills in volleyball because the main purpose of the skill is to obtain a direct point by landing the ball on the opposing team's court and using any type of known smash, which requires the attacker to master the skill effectively as it determines the outcome of the match and through... The researchers' experience in the field of volleyball is that they are currently volleyball players and teachers. (Shukur et al., 2022) Also, by following many local tournaments and comparing them to the level of performance of international teams, the two researchers found a large gap between the global and local levels in the performance of the various types of smashing skills. Therefore, the researchers decided to analyze and evaluate the skill of smashing, knowing the result of the attack for each type, and the relationship to the results of the teams participating in the first gathering of the Iraqi Premier League in volleyball for the sports season 2023-2024. (Tawfeeq, A., & Jalal, 2019) (Mohammed, D., & Jalal, 2020) Some similar studies have dealt with some research variables, such as the study of (Hussein Subhan Ali, 2000) (Al-Ali, 2000) The title of the thesis (The freestyle player and his level of defensive achievement in the game of volleyball) and the study of (Tariq Ali Yousif, 2015) (Yousif, 2015) The title of the study (Study A comparison using an analytical program for the percentage of effectiveness of the skill performance of the national team between three consecutive championships) and a study (Yousif, KHADIM ALMOGMI) Title of the study (analysis-of-the-effectiveness-of-offensive-skill-performance-according-to-a-computer- (based-analytical-program-for-profes.pdf (Yousif et al., 2023a)

### **Method and tools**

The researchers used the descriptive method in the survey style, which aims to collect data as it is the most appropriate method in achieving the research objectives and the most appropriate to the nature of the problem, which in turn imposes on the researcher to use the research method. The research sample must faithfully represent the research community, so the researchers chose a sample of the Iraqi Premier League teams (first assembly) for the 2023-2024 sports season, namely (Peshmerga - Nineveh - Al-Muqdadiya - Al-Sinaa), as they represent one of the groups of Premier League teams, where 6 were observed and analyzed. Matches for teams competing together. (Khudhair, 2022) The sample represented 100% of the original population. The researchers used a group of Arab and foreign sources and references, an observation form to

record and determine the type and number of smash attacks for each team, and also a Korean-made Hp computer to record, display, and analyze the matches. The researcher designed an observation form and then presented it to some specialists and coaches in the game of volleyball. Some of its contents have been modified according to the opinions of specialists, as all types of crushing hits used were noted and each type was evaluated separately. The researchers conducted an exploratory experiment and used an observation form to ensure its validity and the objective of observing a match between the Peshmerga Club and the South Gas Club in the Iraqi Super Cup on Monday, 11/6/2023, at four in the afternoon, in the closed Al-Shaab Sports Hall. (Mohammed, Y., & Sabeeh, 2022) As for the main experiment, the researchers conducted it in the city of Sulaymaniyah, the Peshmerga Club Hall, in the first group matches of the first group during the period 14-16/11/2023 days (Wednesday, Thursday, and Friday). The researchers filmed 6 matches from the matches. This group analyzed the types of crushing hits for the four participating teams, and the researchers used the statistical package (Spss) to extract the following laws (percentage, arithmetic mean, (Mohsen, M., & Sabieh, 2021), standard deviation, analysis of variance law, least significant difference (L.S.D.) , simple Pearson correlation)

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## Results

Presentation and discussion of percentages for types of crushing multiplication

Table (1)

Back smash attack			Attack from the crushing hook			High smash attack			The difference
percentage	The successful	total	percentage	The successful	total	percentage	The successful	total	

	one	numbe		one	numbe		one	numbe	
53	30	57	48,27	13	28	52,94	53	101	Peshmerga
51	14	28	40	9	24	54,31	51	93	Nineveh
58	14	22	57,14	12	21	58,44	44	76	Al Muqdadiyah
50	10	20	50	11	20	52,31	39	75	Industry
53,4	28	127	48,3	45	93	54,2	187	345	the total

Presentation and results of variance analysis for types of successful multiplication

Table (2)

Indication	mistake percentage	F value		A	s	statistical parameters of successful attack for multiplication types
		Tabulation	The calculated one			
moral	0,04	3,20	33,97	5,90	46,40	Hit high
				2,90	11,45	Hitting the hook
				8,14	16,70	Backhand

At a degree of freedom (9.2) and an error rate of (0.05) Displaying the difference of the arithmetic means for the types of successful multiplication within the teams of the research sample and the value of the least significant difference at the significance level (0.05)

Table (3) Between the difference of the arithmetic means for the types of successful multiplication within the teams of the research sample and the value of the least significant difference at the significance level (0.05)

Backhand	Hitting the hook	Hit high	Types of multiplication	
16,65	11,40	47,70	(LSD (10,47) tabular value )	
*30	*36,25		47,70	Hit high

6,20			11,40	Hitting the hook
			16,65	Backhand

At the significance level (0.05) Displaying the results of the correlation between the types of successful smashes and the total number of smashes.

Table (4) It shows the correlation coefficients between the types of successful smashes and the total number of

Backhand	Hitting the hook	Hit high	types of successful hitting
0,510	**0.911	**0.910	Total multiplication

### Discussion of the results

The results presented in Table (1) for finding the successful percentage of the types of crushing strikes for the teams of the research sample showed that the total percentages of attacks from the backhand strike are the highest percentage compared to the attack from the high kick, which came second, and the attack from the snatch, which came third. (JawadKadhim, M., &Mahmood, 2023a) This explains the local teams' reliance on attacking from the backhand in difficult game conditions. (Easa et al., 2022) (Mousa, A. M., &Kadhim, 2023) And when the team has lost a number of consecutive points in the half. He resorts to this type of hitting to break the score, despite the fact that this type is rarely used during matches. The percentage of its use during the gathering was (57) attacks of this type, compared to (101) (JawadKadhim, 2016) high-kick attacks for the Peshmerga team that won first place, while the high-kick attack came in second place in terms of success, but The total total is the highest, which the researchers attribute to the main reliance in attacking on this type, due to the ease of its performance by all players (Kadhim, 2012) and (Mousa, A.M., &Kadhim, 2023), and it does not require hitters with specialization to a high degree, as in hitting. The hook or hit from the back area, which in turn requires a high degree of skill and precise specialization in order to execute it with a good performance that guarantees obtaining points. (Moayed, A., Moayed, G., &Jawad, 2019) and (Fadel&Kadem, 2021)

As for the table of the percentage of successful attacks from high crushing strikes, it came in a percentage of (52.94), (Saadi, A., &Nazar, 2020), which is the second percentage in terms of

success for types of striking. The percentages of the teams in the research sample varied, as the Al-Muqdadiya team obtained by (58.44) while the Peshmerga team came in at the lowest rate (52.94) (Nazar, T., & Aladdin, 2018). This is in contrast to the results obtained by the teams and the team standings for the tournament. The researchers attribute the reason for the Peshmerga team's reliance on the large number of types of attack and reliance on Points were scored from the attack, while the teams' results were based on the same skills, such as blocking and serving, etc., in obtaining points. (JawadKadhim, M., &Mahmood, 2023b) As for the hook attack, it had a success rate of (48.3), which is the lowest percentage in the tournament. The teams' success rate also varied with the positions the teams obtained, as Al-Muqdadiya came with the highest percentage (57). (14) (Ali, Y., Abdulhussein, A., &Jassim, 2023) of the successful attack of this type, while the rapid strike occurred in terms of number and success compared to the rest of the types of attack for international teams. The researchers attribute the reason for this to the overwhelming striking power of the sample teams. Research, which makes it difficult for defense players to deliver correct balls to the preparing player, who in turn prepares them for fast-hitting players (hooks) of all types. (Sabhan, H., &Thamer, 2018) (Kzar&Kadhim, 2020) As well as the fear of using this. This type is due to the accuracy and sensitivity of the stage reached by these teams in the assembly, which does not allow any point to be lost in the matches. And the tendency towards honest play by the prepared player (i.e. hitting high and back), as well as the height of the blocking wall players of the participating teams, which exceeded (2 m) (Mohameed, O., &Mohameed, 2017) (Sami, F., &Mohameed, 2016) in Most of the time, which is considered an important obstacle against carrying out this type of overwhelming attack. (Mohameed, L., &Mohameed, 2011) (Ali, H., &Qasim, 2023) While the results showed that the Al-Muqdadiya team obtained a percentage of (68) for the attack. Successful players from the back area, which is the highest percentage among all participating teams. (Abdul Kareem, M., &Qasim, 2023) It is clear from Table (3) that the value of the least significant difference, the level of significance (0.05), is (10.47), and since the difference between the arithmetic mean for the success of the high crushing hit and the hook crushing hit is greater than the calculated (L.S.D) value, this means that the difference is significant. Between these two types and in favor of the high crushing hit (Alfadly&Thamer, 2023). The researchers attribute the reason for this to the frequent use of the high hit at the expense of the hook hit, due to the ease and intuitiveness of the first type in the game, with the need for precise specialization accompanied by high advantages in the physical and

skill level of the last type. (Jamal, A., & Muayed, 2023) It also turns out that the difference between the arithmetic mean for the success of a smash hit and a smash hit from the backcourt is greater than the calculated (L.S.D) value and this confirms that the significant difference is in favor of a high smash hit. (Essam, F. , & Shaboot, 2023) The researchers attribute the reason for this to the widespread use of this type at the expense of the backhand strike, despite the success in obtaining points from the overwhelming backhand strike, which appeared for some tournament teams such as the Al-Muqdadiya team. It turns out that the value of the least significant difference at the level of significance (0.05) is (10, 47) (Ibrahim, A. M., Aswad, K., & Ahmed, 2023) (Hussein, 2019) (Saad M., 2022) Since the difference between the arithmetic mean of a successful smash from the back area and all its types and a successful hook smash is smaller in The calculated value of (L.S.D) (Saeed, W., Abdulaa, A., & Sakran, 2023), this means that the difference between the two types is a non-significant difference, and the researchers attribute the reason for this to the lack of clear significant differences in the number of uses of these two types of attacks for all teams. Which showed lower results compared to the high crushing hit, and this indicates a decrease in the level of use of these two types of hitting. (nbraz, younis, & Lazim, 2023) (Ali, A., & Rabih, 2023) This explains the arrival of the Al-Muqdadiya team to this advanced position in the group, as the high level requires the presence of distinguished strikers in the back line, and from Table (1) (Rashed, Mohamed, & Ghazi, 2023) it is clear that the highest number of attacks for the types of hitting in question came with ( 101) A high attack attack by the Peshmerga team The lowest number of attacks for all types of hitting was (20) by the American team for all types of hooks and backhands. (Mondher et al., 2023) Finally, it is clear from the table that the highest success rates in the types of hitting came to the Al-Muqdadiya team, but at the expense of the overall score. (Rija, 2023) (Abid, H., & Ali, 2020)

As for discussing Table No. (2), the researchers intended to use the law of analysis of variance (T-ratio) to identify the significance of the differences or not between the three overwhelming multiplication groups under study. It was confirmed through the results shown in Table (2) that there are significant differences between the types. The three for overwhelming multiplication, (Jaafer et al., 2023) (Hussein, Yasir, & Abdulazeen, 2022), where the calculated (F) value (33.97) and the tabulated (F) value (3.20) appeared below the significance level (0, 05) Since the calculated value is greater than the tabulated value, the difference is moral and statistically significant. (Jawad & Athaab, 2021) The researchers resorted to using the law of “least significant



difference" (L.S.D.) to ensure that these significant differences are in favor of any of the three types with different arithmetic means, as shown in Table (3). The data in Table (4) indicate that the variable (successful high crushing multiplication) achieved a high correlation coefficient with the total number of high overwhelming multiplications, as the correlation value (-0.91) appeared below the significance level (0.05) and greater than the value of (t). This tabulation indicates that there is an inverse significant correlation between the successful high smash hit and the total smash hit score. (Zaidam, M., & Hamid, 2019) The researchers attribute the reason for this to the frequent use of this type during the match by all players, on the front and back lines. That is, the players of the back line can attack from the front line, and it is also possible to use 4 or 5 players for this type of hitting in the match, and it is also possible to smash the ball along the length of the net or from outside the field, and this is what was indicated by (SaadHammad Al-Jumaili 2001) from the teams with High level: You use this type of strike by entering the attacker from outside the field, whether he is in position (2) or position (4). (Yousif et al., 2023b)(Awwad, K., & Saleh, 2023) It is clear from the same table that the calculated (R) value was higher than the tabulated (R) value between the successful and total hook smash, and this confirms the significant correlation between the two variables, since this type of attack is a difficult type. (Hamza et al., 2020) It requires the implementation of high skill, great experience, great courage, and precision of movement. It is used in advanced teams and national teams, but with a total total that is less than the rest of the types due to its reliance on the specialized player who possesses the qualities mentioned above, while the results showed the value of (Hamza et al., 2020). The calculated value is less than the tabular (t) value between the successful attack from the back line and the total score for this type. This confirms the absence of a moral connection between the two variables. By referring to the results, we find that the value of the attack from the back line came with a high success rate and developed over the previous two types, as the teams relied on In this type (Ahmed Amer Abdul Hussein, 2020), where the back line players are prepared to perform the attack, whether from position (1), or from (6), or from (5), as this is considered the best and most modern method, especially at the higher levels. (Abdulhassan et al., 2020)

### **Based on the results, the researchers concluded**

There is a difference in the use of the types of crushing strikes used by the research sample teams in the assembly, according to the following order

- 1- High crushing hit.

2- Back smash.

3- Crushing hook.

- There is a difference in the overwhelming success of the teams in the research sample, according to the above ranking.
- There are significant differences between the types of successful hitting, in favor of the high crushing hit, among the teams in the research sample.
- There are significant differences between the types of successful strikes and the total number of attacks for each type of attack through the results obtained by the teams.
- The recommendations were:
  - Working on training players to attack along the net and in all positions, and emphasizing attacking towards the weak areas on the opposite court.
  - Work on increasing training on the hook attack, which is considered the best and fastest attacking method to obtain the point.
  - It is necessary for coaches to emphasize training on attacking in conditions similar to international playing conditions, which require high self-confidence and the players' abilities to attack, and to avoid hesitation about any type of attack.
  - Emphasis on attacking from the back line due to the effectiveness of this type in obtaining points in the tournament, and frequent use of this type to force the opposing team to focus on it, which facilitates the task of the front attackers in a successful attack.
  - Conducting studies and research on other factors other than attack to benefit from them in revealing the strengths and weaknesses of attack types in order to develop the level of the game in the country.

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