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Technical Success Level Analysis Hitting, Scoop Andreserve Hit Sporthockey Outdoor On Eventmen's Asian Games Qualifer 2022

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Abstract

This study aims to determine the success and percentage of hits, scoop and reserve hits in the Hockey Outdoor Men's Asian Games Qualifer 2022 competition. The design of this study is a descriptive quantitative method using video analysis. The research subjects were 9 teams. The instrument used in this study was an analysis sheet by means of a video review. Data collection by non-test method using documentation techniques in the form of video analysis. Furthermore, the data will be sorted and analyzed using data descriptions. Based on the results of the research, hits in all Hockey Outdoor Men's Asian Games Qualifer 2022 matches obtained the highest percentage of 48% by the Sri Lankan national team, this result did not determine the team won the championship. The highest percentage of scoops obtained in the Hockey Outdoor Men's Asian Games Qualifer 2022 was 66% achieved by the Oman national team, with this result Oman was able to win 1st place. by the Singapore national team, these results could not lead the Singapore team to become champions because each team has a different strategy. Of the three techniques, the one with the highest percentage is the reserve hit because the success rate is higher than the failure rate.

Keywords: Hit, scoop and reserve hit

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INTRODUCTION

The success of passing in question is that it is used to carry out a team strategy between players by working together. If a player makes a pass to another teammate then the bait is not on target or on target and is cut off by the opponent then the bait fails (Fatur Muhammad, 2022). Hockey is a sport that uses tools such as sticks to play balls (sticks) and balls. Therefore hockey is included as a sport that dominantly uses manipulative movements, namely motions that act as objects, namely sticks and balls (Budiarto, 2014). The aim of the game of hockey is to get the ball into the opponent's goal as much as possible and prevent the goal from getting the ball into it. It can only be done with the cooperation of each player through the use of basic techniques and game strategies. Apart from the basic technical factors, one of the important factors that players need is to be in excellent physical condition. This is necessary because hockey is a sport with a dynamic system requiring each player to move agilely and explosively with various attacks and defenses (Atradinal & Dharma, 2019).

Outdoor or field hockey is a team sport in which, in one team, there are 10 people and 1 goalkeeper. Hockey is played for 4 quarters, each round lasts 60 minutes, 1 quarter takes 15 minutes (D. Jennings, 2012). In the outdoor number hockey sport, there are several basic techniques that must be mastered, including the following: 1. Push, 2. Stop ball/control ball,

3. Dribble, 4. Tapping, 5. Hit, 6. Flick, 7. Reserve, 8. Scoop, 9. Slap. Meanwhile, indoor number hockey has its own rules which are partly different from outdoor number hockey. Can be seen based on the number of players consisting of 12 players, 6 core players and 6 reserve players. The techniques used are also just a few of the number outdoor hockey techniques including the following: 1. Push, 2. Stop, 3. Dribble, 4. Flick. (Entang Hermanu, 2011) Outdoor hockey or field hockey is a team sport, therefore there is a need for teamwork to achieve victory and success. But besides that, it is also required to have optimal individual skills and master the basic techniques of hockey.

In the game of hockey, the hit technique is to hit the ball hard which aims to produce long-distance passing of the ball, and can make it easier for the ball to travel quickly to the opponent's defense area, useful for luring the opponent to come closer so as to open up space for attack, can move the playing area (Rustandi, 2019).

There are several ways to pass the ball, one of which is if a defender is in a position surrounded by an opponent and it is not possible to penetrate the attacker's block, this technique is one way to pass the ball in position (Valentino & Akbar, 2018). A player deliberately raises the ball over the opponent's head into an empty area 23 of the field which is then greeted by his team mates, this is a scoop technique. Scoop has another use in the field of shooting, to lift the ball high in a relatively short distance. Scoop is an effective skill. The steps for carrying out the scoop technique are: (1) The stick is held in the right hand under the left hand. (2) Lift the entire surface of the ball and position the left shoulder straight towards the intended target.

In hockey, various terms such as backhand flat hit and reserve sweep, commonly called reserve hit, have a role that is almost the same as hit technique. In this movement the ball is hit by the player starting from the left side by using a different grip handle and must use part of the side of the stick (Purnomo, 2019). This technique is effective for shooting and passing.

The experience of researchers in witnessing the Outdoor Men's Asian Games Qualifer Hockey Championship 2022, where when doing long distance passing the dominant use of the push technique. So that at a certain moment the opponent's position is not crowding and it is possible to hit, scoop or reserve hit the athlete cannot finish it and the ball is stopped by the opponent. At certain times some athletes do the scoop technique, but the movement is not perfect so that the passing is not directed. In this study using previous research as a comparison and research benchmarks. The first previous research was a study that discussed

the motion analysis of the hit technique conducted by Saiful Anam, a Surabaya State University student in his final thesis project with the research title "Analysis of Field Goal Success Rates, Penalty Corners and Penalty Strokes in Hockey Sports (Studies on Teams Belgian Men's National Field Hockey at the 2018 World Cup Championships)" this research contains analysis and to determine the success rate of field goals, penalty corners and penalty strokes in hockey (studies on the Belgian men's national field hockey team at the 2018 world cup championship). The second previous research is research that discusses the analysis of passing and shooting in outdoor hockey competitions in the 2022 Asian Games qualifier conducted by Mochamad Fathur Rohman, a student at the University of Surabaya in his final assignment for an e-journal article entitled "Analysis of Passing and Shooting in Sports Competitions Asian Games Qualifier Outdoor Hockey 2022".

So that what distinguishes between previous research and this research is the type of material context and the object and subject of the research. Then, what distinguishes this research from previous research is the formulation of the problem, research methods and research instruments. So that this research will produce reference teaching materials and studies for coaches and athletes to improve the quality, effectiveness and success of hit and scoop techniques.

In the world of sports analysis is an important thing to do, by analyzing you can get a lot of information that athletes and coaches can use as a basis for training programs. (Hidayatullah, 2021). From the explanation above, the researcher proposes research on "Analysis of the Success Rate of Hit, Scoop and Reserve Hit Techniques at the Hockey Outdoor Men's Asian Games Qualifer 2022 Event"

METHOD

The design of this research is a quantitative research with a descriptive model which aims to describe the nature of an individual, frequency or condition with a certain relationship between a symptom and other symptoms (Zellatifanny & Mudjiyanto, 2018). The design used in this study is to describe events during the match which aims to analyze the success rate of hit, scoop and reserve hit techniques at the Hockey Outdoor Men's Asian Games Qualifer 2022. The aim of this research is to determine the percentage success rate of hit, scoop and reserve techniques. reserve hit in the Hockey Outdoor Men's Asian Games Qualifer 2022. The research subjects were all the men's teams competing in the Hockey Outdoor Men's Asian Games Qualifer 2022 with a total of 9 teams including Bangladesh, Hong Kong, Indonesia, Kazakhstan, Oman, Singapore, Sri Lanka, Thailand and Uzbekistan.

With a total of 24 matches. The research instrument is a tool used for data collection, in this case the researcher uses an analysis sheet instrument by means of a video review, namely about the success of the hit, scoop and reserve hit techniques at the Hockey Outdoor Men's Asian Games Qualifer 2022. To obtain data the researcher uses data collection techniques non test steps as follows:

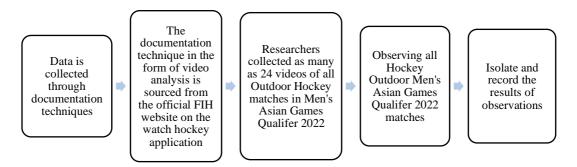


Figure 1. Data Collection

The results of the data obtained will be observed and recorded then analyze the data by conducting data descriptions, data descriptions are used to determine the number of each description obtained. After sorting the data and analyzing it using data descriptions, the researcher began to determine the percentage success rate of hit, scoop and reserve hit techniques at the Hockey Outdoor Men's Asian Games Qualifer 2022, with the following percentage formula:

Percentage

$$P = \frac{n}{N} x 100\%$$

Information:

P = Percentage

n = Frequency or number of results

N = number of samples

Source: (Rustiawan, 2020)

After getting the results from the percentage calculation regarding the success rate of hit, scoop and reserve hit techniques for all teams at the Hockey Outdoor Men's Asian Games Qualifer 2022 event, in the next stage the researcher will draw conclusions on determining the final data followed by evidence that has been obtained during the research so that the answers are appropriate to the problem researched.

RESULTS

A. Data Description Number of Engineering Successes Hit Hockey Outdoor Men's Asian Games Qualifer 2022

Technique hit is said to be successful if the ball reaches the target and is not interrupted by the opponent. The purpose of this analysis is to determine the success rate and percentage of techniques hit on the event Men's Asian Games Qualifer 2022. The following is the result of the video analysis of the success rate of the technique hit on the event Men's Asian Games Qualifer 2022

Table 1. Results of technical analysis hit on match Hockey Outdoor Men's Asian Games Qualifer 2022

Tim	Succeed	Fail	Total
Bangladesh	13	21	34
Hongkong	8	19	27
Indonesia	8	27	35
Kazakhstan	5	27	32
Oman	11	14	25
Singapore	3	17	20
Srilanka	20	22	42
Thailand	13	27	40
Uzbekistan	9	23	32

Table 1 shows the results of the technical acquisition hit in all the men's team matches at the event Hockey Outdoor Men's Asian Games Qualifer 2022 for a total of 24 matches. It is known that the total hits of all that were carried out were 287, and for successful acquisition, namely 90.

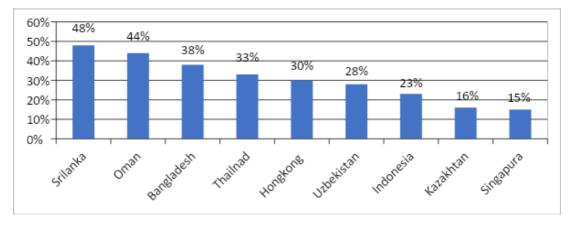


Figure 2. Engineering percentage hit succeed Hockey Outdoor Men's Asian Games Qualifer 2022

In Figure 1. it can be observed that the implementation of the hit technique was successful in the men's team in the match Hockey Outdoor Men's Asian Games Qualifer the highest percentage of successful hits was achieved by the Sri Lankan men's team of 48%.

B. Data Description Number of Engineering Successes Scoop Hockey Outdoor Men's Asian Games Qualifer 2022

Table 2. Results of technical analysis scoop at the Hockey Outdoor Men's Asian Games Qualifer 2022 competition.

Tim	Succeed	Fail	Total
Bangladesh	33	25	58
Hongkong	23	45	68
Indonesia	19	33	52
Kazakhstan	10	32	42
Oman	44	23	67
Singapore	37	29	66
Srilanka	32	19	51
Thailand	16	55	71
Uzbekistan	22	50	72

Based on table 2, the results of the technical acquisition are shown scoop in all the men's team matches at the event Hockey Outdoor Men's Asian Games Qualifer 2022 for a total of 24 matches. Known total scoop of the total that was carried out, namely 547, and for technical acquisitions scoop successful is 236.

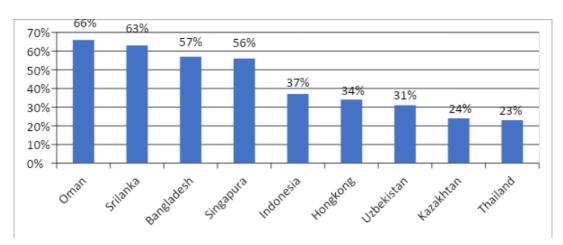


Figure 3. Engineering percentage scoop berhasil Hockey Outdoor Men's Asian Games Qualifer 2022

In Figure 2. it can be observed that the implementation of the technique scoop who did well in the men's team at the games Hockey Outdoor Men's Asian Games Qualifer 2022

countries that obtain technical percentages scoop the highest success in the event Hockey Outdoor Men's Asian Games Qualifer 2022 namely the Omani men's team with a share of 66%.

C. Data Description Number of Engineering Successes Reserve Hit Hockey Outdoor Men's Asian Games Qualifer 2022

Table 3. Results of technical analysis reserve hit on match Hockey Outdoor Men's Asian Games Qualifer 2022

Tim	Succeed	Fail	Total
Bangladesh	32	10	42
Hongkong	23	19	42
Indonesia	26	10	36
Kazakhstan	31	14	45
Oman	29	21	50
Singapore	28	5	33
Srilanka	10	6	16
Thailand	17	22	39
Uzbekistan	38	14	52

Table 3 shows the results of the technical acquisition reserve hit in all the men's team matches at the event Hockey Outdoor Men's Asian Games Qualifer 2022 with a total of 24 games, 355 in total reserve hit obtained and 234 successful.

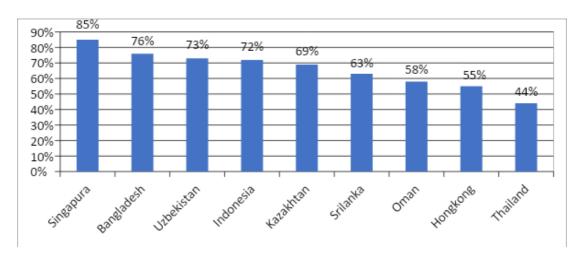


Figure 4. Engineering percentage reserve hit succeed Hockey Outdoor Men's Asian Games Qualifer 2022

In Figure 3. it can be observed that the implementation of the technique reserve hit who did well in the men's team at the games Hockey Outdoor Men's Asian Games Qualifer 2022 countries that obtain technical percentages reserve hit the highest success in the event Hockey

Outdoor Men's Asian Games Qualifer 2022 namely the Singapore men's team with a total of 85%.

D. Match Data Description Hockey Outdoor Men's Asian Games Qualifer 2022

The results of the group A stage of the countries that qualify for the semifinals are Oman as group winners and Thailand as runner up group. Meanwhile, Uzbekistan and Hong Kong are ranked 3rd and 4th in the preliminary round of group A which will later compete for 5th to 8th place.

Table 4. Group stage match results A Hockey Outdoor Men's Asian Games Qualifer 2022

Match	Team	Score	VS	Team	Score
1.	Hongkong	2	vs	Uzbekistan	4
2.	Thailand	3	vs	Kazakhstan	0
3.	Oman	3	vs	Kazakhstan	0
4.	Thailand	1	vs	Uzbekistan	1
5.	Hongkong	1	vs	Oman	5
6.	Uzbekistan	3	vs	Kazakhstan	3
7.	Kazakhstan	0	vs	Hongkong	2
8.	Thailand	0	vs	Oman	1
9.	Oman	6	vs	Uzbekistan	3
10.	Hongkong	1	vs	Thailand	1

Table 5. Group A preliminary round results Hockey Outdoor Men's Asian Games Qualifer 2022

Pos	Team	M	IN	D	L	GF	GA	GD	Pts	Qualification
1	Oman	4	4	0	0	15	4	+11	12	
2	Thailand	4	1	2	1	5	3	+2	5	Semi final
3	Uzbekistan	4	1	2	1	11	12	-1	5	
4	Hongkong	4	1	1	2	6	10	-4	4	
5	Kazakhstan	4	0	1	3	3	11	-8	1	

Information:

M = Match (Number of Matches)

W = Win (Win Amount)

D = Draw (Number of Series)

L = Lose (Loss Amount)

GF = Goal For (Total Goals)

GA= Goal Against (Total Goals Conceded)

GD = Goal Difference (goal difference)

PTS = Points (Total Points)

Meanwhile, group B consists of 4 countries including Bangladesh, Indonesia, Sri Lanka and Singapore. The results of the group B preliminary round won by Bangladesh and Indonesia as the group winners runner up group that will advance to the semifinals, while the 3rd place in group B is occupied by Sri Lanka and Singapore in 4th place which will fight for positions 5 to 8.

Table 6. Group B preliminary results Hockey Outdoor Men's Asian Games Qualifer 2022

Match	Team	Score	VS	Team	Score
1.	Bangladesh	3	VS	Indonesia	1
2.	Srilanka	5	VS	Singapura	2
3.	Indonesia	0	Vs	Singapura	0
4.	Srilanka	1	vs	Bangladesh	3
5.	Indonesia	3	vs	Srilanka	1
6.	Bangladesh	1	vs	Singapura	0

Table 7. Group B preliminary round results Hockey Outdoor Men's Asian Games Qualifer 2022

Pos	Team	M	IN	D	L	GF	GA	GD	Pts	Qualification
1	Bangladesh	3	3	0	0	7	2	+5	9	
2	Indonesia	3	1	1	1	4	4	0	4	Semi final
3	Srilanka	3	1	0	2	7	8	-1	3	
4	Singapore	3	0	1	2	2	6	-4	1	

Information:

M = Match (Number of Matches)

W = Win (Win Amount)

D = Draw (Number of Series)

L = Lose (Loss Amount)

GF = Goal For (Total Goals)

GA= Goal Against (Total Goals Conceded)

GD = Goal Difference (goal difference)

PTS = Points (Total Points)



Figure 5. Classification rating 5 to 6 Hockey Outdoor Men's Asian Games Qualifer 2022

In Figure 4 it is explained that the classification for the 5 to 8 ranking brought together the 3rd place group A (Uzbekistan) against the 4th group B (Singapore) which was won by the Uzbekistan team through penalty shoot out, while the 4th place in group A (Hong Kong) against the 3rd place in group B (Sri Lanka) the advantage was won by the Sri Lankan team. The two teams that won the match will fight for the 5th and 6th positions. From the chart above it is known that the Sri Lankan team won 5th place, and Uzbekistan ranked 6th. Then the team that lost in the battle for rank 5 and 6 will be competed to fight for rank 7 and 8.



Figure 6. Classification rating 7 to 8 Hockey Outdoor Men's Asian Games Qualifer 2022

From the chart above it is known that the Singapore team won 7th place and 8th place was won by the Hong Kong team.

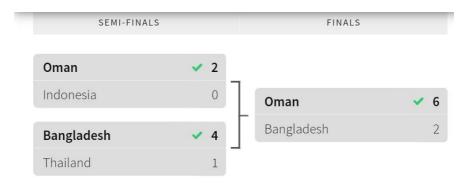


Figure 7. Classification rating 1 to 2 Hockey Outdoor Men's Asian Games Qualifer 2022

The semifinal phase brought together the winner of Group A (Oman), against runner up group B (Indonesia), in this match the victory was won by the Oman national team. While the match The next semifinal will bring together the winners of Group B (Bangladesh) to facerunner up group A (Thailand) and the victory was won by the Bangladesh national team. Teams that fall in the semifinals will be competed for 3rd and 4th place.

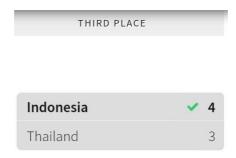


Figure 8. Classification rating 3 to 4 Hockey Outdoor Men's Asian Games Qualifer 2022

From the chart above it is known that in 3rd place Indonesia and Thailand are in 4th place. Final standings Hockey Outdoor Men's Asian Games Qualifer 2022 as follows:

Table 8. Final standings Hockey Outdoor Men's Asian Games Qualifer 2022

Pos	Tim	Qualification
1.	My own	
2.	Bangladesh	
3.	Indonesia	Asian games 2022
4.	Thailand	
5.	Srilanka	
6.	Uzbekistan	
7.	Singapore	
8.	Hongkong	
9.	Kazakhstan	

DISCUSSION

Based on the results of the match video analysis Hockey Outdoor Men's Asian Games Qualifer 2022 will be connected with a description of the data in which it discusses the success of the technique hit, scoop and reserve hit. It is known as a whole through video analysis that is carried out to obtain technical comparisons hit success and failure is 90: 197 with a total acquisition hit of 287. The overall results of the technique scoop men's team at the game Hockey Outdoor Men's Asian Games Qualifer 2022 known technical comparisons

scoop successful and failed, namely 236: 311 with a total acquisition scoop 547. While from the results of the technique reserve hit men's team in all matches Hockey Outdoor Men's Asian Games Qualifer 2022 with total earnings reserve hit as many as 355 with a comparison of techniques reserve hit success and failure is 234: 121.

A. The Success of Outdoor Hockey Hit Technique Men's Asian Games Qualifer 2022

Technique hit is one of several basic sports techniques hockey outdoor. In all matches Hockey Outdoor Men's Asian Games Qualifer 2022 percentage gain hit the highest was achieved by the Sri Lankan national team with a success of 48%, but with this acquisition the Sri Lankan team did not advance to become champions and only ranked fifth, because all the men's teams did not always pass long distances using techniques hit. Based on the research results, the success rate of successful hit techniques is smaller than the failed hit techniques, because on average the team still often uses short passes so that when executing the hit technique the ball is not on target and is cut by the opponent. In hockey, to create a goal, you have to carry out a team strategy, where the achievement of successful hit techniques does not determine whether a team will achieve victory. There are several other factors that affect the failure of the hit technique Hockey Outdoor Men's Asian Games Qualifer 2022 such as, the accuracy of the hit between the ball and the stick so that when executing the hit technique the position of the ball and stick is not right resulting in a violation called danger. Another failure factor is the height of the ball, in outdoor hockey sports regulations the implementation of the hit technique is a maximum ball height as high as the knee, if it exceeds the knee then it is declared a violation high. At the match Hockey Outdoor Men's Asian Games Qualifer 2022 it turns out that the men's team still commits many violations high, which is where the opponent's position is approaching then the player hits but the ball bounces above the knee resulting in a failed pass.

Movement hit urgently require power arm muscles, therefore to generate hit good ones are also needed power good arm muscles (Ramadhan & Sunaryadi, 2019). As explained (Alexander & Willmot, 2012) that technique hit is a movement by swinging two hands to produce the ball at high speed towards the goal or long distance bait. In sports hockey basic techniques must really be mastered, there are two things for a team to be successful, firstly individuals must really master basic techniques well, such as passing the ball, possession of the ball, playing the ball and hockey is a team sport where players are required to be able to work together with their teammates (Entang, 2013).

B. Engineering Success Scoop Hockey Outdoor Men's Asian Games Qualifer 2022

In playing hockey specifically hockey outdoor long-range passing skills are needed because the players must work together in developing strategies and tactics in order to take advantage of attack opportunities so that a goal can be created. Attacks are built through short and long passes and are directed to produce a good attack pattern (Surbakti, 2013). Percentage gain scoop highest in all matches Hockey Outdoor Men's Asian Games Qualifer 2022 achieved by the Oman national team with a success of 66%. This success helped the Oman national team to win the championship and be in first place in the final standings. Based on the results of research success scoop less than failure scoop, because the entire dominant team uses passing remote use push. At the match Hockey Outdoor Men's Asian Games Qualifer 2022 the entire men's team on average uses scoop when the ball is dead and the player is in a free position. There are several factors that cause the technique scoop experienced failures, including the distance between the players who were too close, because in outdoor hockey the distance between players to do the scoop technique was 5yard (5 meters) but in practice the men's team is still often in a position of less than 5yard.

The next factor is the strength of the hand muscles, because scoop requires power and precision components passing to lift the ball so that it reaches the target. Then hitting the ball and stick also determines the success of the scoop technique, which is in the match Hockey Outdoor Men's Asian Games Qualifer 2022 some players are still not precise regarding the accuracy between the ball and the stick, resulting in a failed pass and the ball cannot bounce far right at the intended target. The distance between the feet and the ball is about one stick with the stance position and the body leans to the side and continues by lifting the ball with the continued movement of the hands still swinging forward. According to what happened when the match took place, the players on average did scoop with the distance between the ball and the feet too close to produce passing which failed. Hand strength is also needed in the implementation of the scoop because this technique is a combination of push and flick so that the strength of the hand is very influential for the results scoop the maximum. It says technique scoop successful if the ball is not stopped by the opponent (Valentino & Akbar, 2018).

C. Engineering Success Reserve Hit Hockey Outdoor Men's Asian Games Qualifer 2022

Technique backhand in sports hockey or so-called reserve hit very needed. In all matches Hockey Outdoor Men's Asian Games Qualifer 2022 percentage gain reserve hit the highest was achieved by the Singapore national team with 85% success. These results are quite good

but do not affect the team to win this event, because each team has a different strategy and tactics apart from that, technique reserve hit in hockey used for the position of the player is on the left side or backhand (Nasution, 2017). It is known based on the results of research on the entire men's team when the match took place carrying out techniques reserve hit the average success and minimal failures because the players can control the ball when in a tight space and fast time, especially on the left side and the players when doing this technique the opponent tends not to confine or surround so that the resulting pass is on target. The players had pretty good mastery of technical skills reserve hit This is due to the correct positioning of the stick and ball as well as good passing accuracy so that the ball does not go off in an irregular direction.

CONCLUSION

Based on research results obtained from all match video analysis Hockey Outdoor Men's Asian Games Qualifer 2022 regarding the success rate of the technique hit, scoop and reserve hit can be concluded that:

- Acquisition of engineering success hit men's team in all matches Hockey Outdoor
 Men's Asian Games Qualifer 2022 with the highest percentage achieved by the Sri
 Lankan team, this result did not affect the team to become champions and in the
 match Hockey Outdoor Men's Asian Games Qualifer 2022 the entire men's team is
 still dominant in using technique push.
- 2. Scoop technique in all matches Hockey Outdoor Men's Asian Games Qualifer 2022 obtaining the highest percentage achieved by the Oman team. These results can help the Oman team to win 1st place and all the teams that follow Hockey Outdoor Men's Asian Games Qualifer 2022 managed to do scoop when the ball is dead and in a free position.
- 3. Acquisition of engineering success reserve hit men's team in all matches Hockey Outdoor Men's Asian Games Qualifer 2022 with the highest percentage achieved by the Singapore team. These results do not determine a team to become a champion because each team has different strategies and tactics apart from that, technique reserve hit in hockey used for the position of the player is on the left side or backhand

Related to the discussion and conclusions that have been explained, this can be reviewed again by coaches, athletes and further researchers. one of them is technique hit, scoop and reserves hit which must be done continuously correctly until it produces

passing right and make the right decision. Long distance passing training can be started from a variety of techniques that can be used, namely hit, scoop and reserve hit. Furthermore, do drill passing as closely as possible to the actual match situation such as taking advantage of opportunities to do long distance passing so as not to be cut off by opponents, lats and encouraging athletes to be quick in solving problems because during a match must be accompanied by the speed of thinking in making decisions.

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