

What is the best basketball shot?

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## Table of Contents

Acknowledgements.....	1
Purpose and Hypotheses.....	2
Background Research.....	3
Materials.....	7
Procedure.....	8
Data Graphs.....	9
Results.....	9
Conclusion.....	10
Works Cited.....	11

## Purpose

The purpose of this experiment is to find out what shot would be best for different ages of basketball players. This will help find if you should be shooting from different places at ages.

In 1891, at a training school in Springfield, Massachusetts, after his students couldn't play any outdoor sports in winter, James Naismith, a Canadian teacher, invented a game with 9 men where the object was to put a ball into a peach basket. Little did he know, Naismith had invented basketball and had put his name in the history books. His game spread to many schools in America and became a very popular sport.

By the 1920's, many semi pro leagues in America and many colleges included the sport but those players didn't usually go pro after college. However, in 1949, when the NBA was formed, it changed a lot. The National Basketball Association became the biggest league and had many college players going professional. It has become the biggest basketball league in the world and has had great talent such as Wilt Chamberlain, LeBron James, Magic Johnson, Larry Bird, Tim Duncan, Bill Russell and the goat, Michael Jordan. (Smith, 2020)

(<http://www.thepeoplehistory.com/basketballhistory.html>)

Many of these players had different specialty shots. Michael Jordan, for example, shot over his head. He would put the ball slightly above line of sight to the basket, bend his arms and leap to hit his shot. However, Tim Duncan's shot is different. He holds the ball very high above his body so tall defenders can't block it. This makes sense as he is a big man. Larry Bird was a three point specialist who would bring the ball behind and to the right of his head to generate power and accuracy. But how did these famous players develop their specialized shots?

Everyone is going to have a different shot. Like in these examples, it is usually because

of the skill set of the player. However, what is the best shooting form for a 10 foot shot for 8 year olds and younger, 9 to 11 and 12 and older? The possible shots are at the chest, on the chin, or over the head.

For the 8 year olds, they can be strong but they will need a lot of power to let the shot have a chance to go in. They would have to work on their arm strength to get more power. A good routine for building up strength is 10 bodyweight lunges, 10 push ups, 5 pull ups and repeat all the exercises for 5 rounds. Most young children would probably have to shoot from the chest, while some stronger ones from the chin, to generate the most power.

However the 9 to 11 year olds are a bit trickier. Their strength can vary a lot. Usually 9 and maybe 10 year olds will shoot from the chest or chin. The girls will probably have more power with chest and the boys will do better with chin shooting. The kids should also remember to bend their legs to generate even more power for the shot. The 11 year olds typically use chin shoots and some of the stronger kids will shoot over the head. They have a good amount of strength. Players aged 12 and older are much easier than the last group.

Many older kids will have enough power to shoot whatever way they want. Most have a lot of power to easily shoot any shot. So over or near the head would be best as a shot.

Power is important, but so is accuracy. Accuracy shooting doesn't vary from age to age. Accuracy is one, giving the ball a good chance to go in, and two, getting the ball above the defenders to score. Obviously, the best way to get the defender not to block it is to

get the ball high above the defender. So shooting from the chest is not very good in coverage.

However, for accuracy the best is because of good form, not the height of a player's hands. First, he keeps his eyes on the basket and doesn't follow the flight of the ball. Next, he points his feet straight forward and puts the strong hand foot slightly in front of the other.

Then the ball gets wrapped around the player's waist in the shot pocket and grip to be ready to shoot. Hold the ball with the seams horizontal facing toward the player and grip the ball with the dominant hand on the bottom and the non dominant hand on the left side for righties and the right side for lefties. When a player is ready to shoot, he should have his elbow inward to give more power and accuracy, bend down and jump up to get a lot of power and angle the ball towards the basket. The ball should be pushed forward with the dominant hand and guided with the other hand. When released, stick the hands where they are until the shot hits the rim. It is very important that the player uses some of the tips and tricks to maximize the chance of the shot going in.

For the accuracy of the shot, getting the ball above the head is the best. At chest height, a player cannot control the ball very well because for most the chest shot gives way too much power and will not be accurate. Also at the chin shot, sometimes the ball will be in one's face and does not allow for a good shot. Over the head doesn't shield the eyes from the basketball and the lack of power gives way for more accuracy. Another thing to help is maintaining balance in shooting; be square and don't jump back or go off one foot to shoot. When a ball is shot over the

head it should not be shot from behind the head but slightly above the head.

Eight years olds would do best with the chest shot from 10 feet away. It gives them the best chance to make the shot and give it a chance. For the 9-11 year olds, a chin shot would be the best possible shot. It will have the best power for that age and the player should have the ball on the left or right side of the head, (depending on dominant hand), which will also have very good accuracy.

Some may still want to shoot from the chest, mostly 9 year olds. Finally, the 12 and older kids would have a choice between chin or over the head. Chin has more power but one can always make the shot easily. Over the head has better accuracy but is very hard to make long shots. By keeping the ball closest to the shooting hand, it is the best way to shoot.

Knowing the best shot is good, but if a player has good shooting form, eat healthy and exercise regularly, he can be a great shooter.

## Materials

3.048 metres basketball hoop, 72 cm wide, 0,625 kgs ball, 3.6576 metres line, and three children aged 8, three children aged between 9 and 11, and three children aged 12 years olds.



### Procedure

I will set up a line 12 feet from the basket. Then I will have set the basketball hoop 10 feet up. I will have me and my siblings shoot three shots at each position. Then I will have my friends and my siblings' friends come over and shoot three for each.

## Results

8 year olds:

Brody:  $\frac{1}{3}$  Chest,  $\frac{1}{3}$  Chin 0/3 Over the head

Conor:  $\frac{2}{3}$  Chest  $\frac{2}{3}$  Chin 0/3 Over the head

Dimitra:  $\frac{1}{3}$  Chest 0/3 Chin  $\frac{1}{3}$  Over the head

9-11 year olds:

Avery 0/3 Chest,  $\frac{2}{3}$  Chin, 0/3 Over the head.

Jack  $\frac{2}{3}$  Chest,  $\frac{1}{3}$  Chin  $\frac{1}{3}$  Over the head

Lucy: 0/3 Chest 0/3 Chin 0/3 Over the head Note: Her chest and chin misses were closer than her head misses.

12 and older:

Henry  $\frac{1}{3}$  Chest,  $\frac{2}{3}$  Chin,  $\frac{2}{3}$  Over the head.

Lily  $\frac{2}{3}$  Chest, 3/3 Chin, 3/3 Over the head

Patrick:  $\frac{1}{3}$  Chest  $\frac{1}{3}$  Chin  $\frac{1}{3}$  Over the head

## Conclusion

8 years old: I hypothesised they would be best on chest but they are about the same in chest and chin.

9-11 years: I hypothesised they would be very much the same on chest and chin and I was correct

12-13 years old: I believe they would be best at Over the head and I think they did.

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