COMPARATIVE EVALUATION OF THE TWO HAND UNDERHAND FREE THROW TO THE ONE HAND PUSH FREE THROW

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Charles Stanley Albeck

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COMPARATIVE EVALUATION OF THE TWO HAND UNDERHAND FREE THROW TO THE ONE HAND PUSH FREE THROW

by

Charles Stanley Albeck

AN ABSTRACT OF A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
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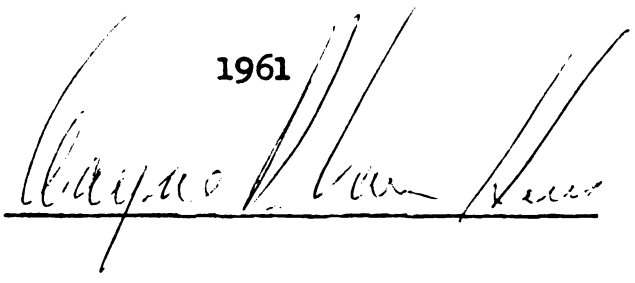
Approved 

ABSTRACT

COMPARATIVE EVAULATION OF THE TWO HAND UNDERHAND FREE THROW TO THE ONE HAND PUSH FREE THROW

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Statement of Problem

To analyze and compare the two methods of free throwing through survey results and cinematographic analysis.

Methodology

A statistical analysis was computed on the over-all survey results. A regional comparison was also completed between the two hand underhand method and the one hand push free throw.

A Bell and Howell 16mm. camera was used to photograph ten subjects, consisting of six freshmen basketball members; two Michigan State varsity players; and two former college basketball players. The pictures were taken from the side for all ten subjects. Each man attempted three free throws in the style they preferred. The pictures were analyzed frame by frame with a Bell and Howell Time and Motion Analyzer projector.

A third source was personal interviewing. This was done at national meetings, basketball clinics, and Big Ten basketball games.

Conclusions

1. The survey results indicated the one hand free throw was the most popular method of free throwing today.

2. Of the two methods, the one hand push free throw was the more accurate in both the over-all survey results and in the regional comparisons.

3. The cinematographic analysis revealed the one hand throw had a slower release velocity. It also had a better angle of approach to the basket on its flight. Both of these are leading prerequisities and instrumental in excellent free throwing.

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Acknowledgment is hereby made to my wife and family who inspired this work by their love and loyality.

C. S. A.

CHAPTER I

INTRODUCTION TO THE PROBLEM

For many years a difference of opinion has existed regarding the relative effectiveness of the two hand underhand free throw as compared with the one hand push free throw. The majority of claims made by each side are based on limited observation or the result of experience. There has not been any experimental evidence presented to support the contentions of either side. The Research Quarterly contains eleven articles on basketball between the years 1940 and 1949. However, not one of these articles referred to free throw shooting.

I. THE PROBLEM

Statement of the problem. The purpose of this study is to determine which of the two free throw methods, the two hand underhand or the one hand push, results in the greater accuracy; which method is the most common both regionally and nationally; and to determine why such differences exist.

Need for the study. Free throwing has always been an important part of basketball. Very frequently games are won

or lost at the free throw line. Rule changes in basketball, providing for a bonus shot, have increased the importance of the free throw. Also, more and more fouls are being called by officials. It is not uncommon for a team to shoot thirty or forty free throws in a single game in this new era of basketball.

Inconsistency in shooting free throws either by individual players, or an entire team, is of maximum concern. This does not seem logical. The free throw is a shot that is taken from the same distance, to a basket of the same size and height. It would seem that a player would be able to perfect this phase of the game. It is one of the very few situations in any athletic contest where a player knows he is unmolested and unguarded, and this situation will exist everytime he shoots a free throw.

Limitations of the study. A final statistics sheet with the total number of free throws attempted and free throws made were received from universities and colleges. Some approximations were necessary in the cinematographic analysis in plotting due to blurring at the point of ball release.

CHAPTER II

REVIEW OF LITERATURE

The literature written on basketball is abundant. Almost every outstanding college and many high school coaches have published books or written articles explaining their style of basketball. In all of these books free throwing is discussed. However, it is interesting to note that this information is not of a scientific nature, but merely an opinion or the result of experience. As a consequence, there is great diversity concerning the subject of free throw shooting. On one point there is universal agreement. Foul shooting is important to success in basketball and great emphasis should be placed on perfecting the art of free throwing. "Good free throwing discourages fouling," according to Dean.[1]

The following material on the underhand free throw and the one hand free throw is either an opinion or the result of experience. There has been no data furnished which would validate these remarks.

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[1]Everett S. Dean, Progressive Basketball (New York: Prentice-Hall, Inc., 1946), p. 113.

Two hand underhand method. Angell,[2] in 1921, recommended three different styles of shooting free throws: (1) two hand underhand, (2) one hand push shot, (3) overhead loop shot. He preferred the underhand style by claiming it was easily mastered. It coincided with the most popular shot of this time and resulted in better accuracy.

From the writings of Bliss,[3] in 1929, came the claim that the one hand push shot was used less merely because few players used it successfully.

Going back to one of the country's most successful coaches, J. Craig Ruby,[4] who in 1931 prescribed the underhand method merely because of the customs passed down which has made it a heritage.

Allen[5] claims that the one hand push shot causes the shooter to lean too far forward and upsets the shooter's balance. He advocates the underhand free throw because it

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[2]E. D. Angell, Basketball for Coach, Player, and Spectator (New York: T. E. Wilson, 1921), p. 60.

[3]James G. Bliss, Basketball (Philadelphia: Lee and Febiger, 1929), p. 79.

[4]J. Craig Ruby, Coaching Basketball (Champaign, Illinois: J. Craig Ruby, 1931), p. 95.

[5]Forrest C. Allen, Basketball (New York: McGraw-Hill Book Company, 1937), p.157.

gives the shooter a more delicate coordination. This is accomplished by developing and using the finer accessory groups of finger, forearm, and wrist muscles, instead of the heavier axial groups.

Before the early 1940's, the two hand underhand method was considered to be the only correct way to shoot free throws according to Murphy.[6] The use of the large flexor muscles along with a lower center of gravity and nearer the base of operations, the feet, brought about more accurate throws.

Eight of the ten University of Kentucky players of the 1948 NCAA champions used the underhand style. Adolph Rupp,[7] coach of the champions, believes the body bends more natural in this stance. It allows the player to be on his toes, his knees bent, his hips down, his back straight, and his head up. He insists it is the most natural way and the easiest manner to shoot free throws.

The opinion of Masin[8] is that excessive wrist action required in the one hand push shot makes it difficult for

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[6]Charles C. Murphy, Basketball (New York: A. S. Barnes Company, 1939), p. 18.

[7]Adolph Rupp, Championship Basketball (New York: Prentice-Hall, Inc., 1948), p. 41.

[8]H. L. Masin, "Foul Shooting," Scholastic, December, 1938, p. 28.

the young player, therefore, the underhand style is recommended for youngsters and they select their own style as they grow stronger with age. In watching beginning youngsters play the game they always shoot with the underhand style first instead of one hand.

Newsom[9] writes that the free throw is different than any other shot in basketball as it is strictly unopposed and, therefore, a completely different shot than is used during the regulation game conditions should be perfected. The underhand shot is therefore the answer to this requirement.

The effects of fatigue would greatly influence the selection of the style of shooting by the individual states Masin[10] in his book.

Forddy Anderson,[11] coach of Michigan State University, maintains the two hand underhand free throw is the better method. His belief stems from the fact that it will be more accurate in the closing minutes of the game. Since fatigue sets in late in the game, the fatigues player should use the type of free throw which takes the least out of him in his effort and this is the underhand throw.

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[9]Heber L. Newsom, Basketball for the High School Coach and Physical Education Teacher (Dubuque, Iowa: W. C. Brown Company, 1952).

[10]Masin, op. cit., p. 30.

[11]In conference.

Jack Gardiner,[12] of Utah favors the two hand underhand free throw. He justifies it by saying it is the most dependable because a relaxed person will keep his arms and elbows in the same flexed position as used in the underhand throw.

The coach of the NCAA and NIT tournament winners in 1950, Nat Holman[13] of CCNY, says the underhand method is the most effective of all methods. You are able to gauge the distance accurately and also develop better "feel" for the amount of pressure needed to make the shot with two hands on the ball.

In a study of games played in New York City during the 1944-1945 season conducted by Howard Hobson,[14] he found the underhand method the most exacting. In fifty-two games the underhand free throw percentage was .565 as compared to .504 for the one hand push free throw.

One hand push method. Barry,[15] was one of the coaches favoring the one hand push shot as he believe it had the greatest scoring power.

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[12]Jack A. Gardiner, "First Annual Spartan Basketball Clinic," Michigan State College Report, December,1952, p.11.

[13]Nat Holman, Holman on Basketball (New York: Crown Publishers, 1942), p. 69.

[14]Howard Hobson, Scientific Basketball (New York: Prentice-Hall, Inc., 1949), p. 67.

[15]J. M. Barry, Basketball-Individual and Team Play (Iowa City: The Clio Press, 1926), p. 26.

Do not let the players crouch while shooting free throws because it means that there is too much coordination to be depended upon, therefore, foul shooting style is an individual matter.[16]

The belief of Jack Nagle,[17] Marquette University coach, is that the one hand push is the most accurate. His reasoning is that many players shoot that style from early in high school and express more confidence in this manner.

The argument in favor of the one hand push shot is not based on scientific fact, but upon logic. Since the majority of players use the one hand push shot from the floor it would also seem logical to use the same shot at the free throw line, according to Loeffler.[18]

The basketball coach at Memphis State University, Bob Vanatta,[19] asserts the one hand push is the superior free throw. He defends this statement by saying there is less muscle action in the one hand shot, whereas, the two hand underhand throw has more muscles involved and the margin of error is greater in this method.

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[16] Ibid., p. 27.

[17] In conference.

[18] Kenneth Loeffler, Basketball (New York: Prentice-Hall, Inc., 1955), p. 50.

[19] In conference.

John Benington,[20] of St. Louis University, does not have an underhand free thrower on his squad. His conviction being the underhand free throw is outdated. It is not being instructed on the lower levels, consequently, we have fewer players employing this style.

North Carolina's Frank McGuire,[21] taught the underhand method in high school. In college, he allows the players their choice of styles believing it is too late to change.

Successful Ben Carnevale,[22] of Navy, lets the player employ the style he likes best. He insists it is entirely mechanical from that point on. He never changes the player's style unless accuracy falls but rather attempts to restore confidence.

Another advocate of the underhand method in high school is John Wooden,[23] noted coach of UCLA, although in college he will let the boy use what style he likes best. He will then analyze and try to improve his style.

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[20] In conference.

[21] Frank McGuire, Offensive Basketball (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1958), p. 128.

[22] Ben Carnevale, "Symposium on Coaching of Foul Shooting," Scholastic Coach, December, 1956, p. 4.

[23] John Wooden, "Symposium on Coaching of Foul Shooting," Scholastic Coach, December, 1956, p. 4.

Bill Rohr,[24] Northwestern University coach, suggests an interesting observation. He noted that out of the five best free throwers in professional basketball four employ the one hand push.

The most contrasting of ideas by Meanwell,[25] was from the theory that the underhand shot should be taught while the boy is young and developing flexor muscles. After the boy is stronger and more developed and has acquired new coordination in the extensor muscles, the one hand push should be used as the free throw.

Branch McCracken,[26] coach of the Indiana Hoosiers, feels that it is not the method, but the amount of time spent perfecting the method.

"Players should use the method that they have the most confidence in." This is Arnold "Red" Auerbach's,[27] coach of the world champion Boston Celtics, statement concerning the best method of free throwing.

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[24]Bill Rohr, in conference.

[25]Walter E. Meanwell, Science of Basketball for Men (Madison, Wisconsin: Democrat Printing, 1924), p. 116.

[26]Branch McCracken, Indiana Basketball (New York: Prentice-Hall, Inc., 1955), p. 85.

[27]Arnold "Red" Auerbach, Basketball (New York: Pocket Books, Inc., Copyright 1952).

First of all, the coach should experiment in order to learn which method of free throwing is best for a particular boy, declares Saltis.[28]

In an article by Morland,[29] he had this to say about free throwing. "Proficiency in free throwing will not be reached until the player has attained so much confidence in his shot and in himself that he knows he is going to make his free throw regardless of all external forces."

The inability of the player to concentrate is a primary cause of failure according to Pfitsch.[30]

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[28]L. R. Saltis, "Teaching Free Throw Shooting," American Association of Health, Physical Education, and Recreation, November, 1954, pp. 15-16.

[29]Richard Morland, "Basketball Enigma--The Free Throw," Athletic Journal, January, 1951, p. 5.

[30]J. A. Pfitsch, "Concentration in Shooting," The Athletic Journal, December, 1953, p. 22.

CHAPTER III

METHODOLOGY OF RESEARCH

Survey Data

The survey data compiled in this study were collected by sending a letter to a sample of sixty colleges and universities throughout the nation. The schools were selected from the official list of colleges and universities.

After a waiting period of eight weeks the letters were checked off the complete list of schools. Follow-up letters (see Appendix) were then sent to the athletic publicity directors requesting the school to reply to the original letter. The final returns included forty-seven out of the total sixty colleges and universities. A chi-square analysis was computed on these returns for the two types of free throw styles.

The second step used was a cinematographic analysis of the two methods of free throwing. Six university freshmen basketball players, plus two members of the Michigan State University varsity, and two ex-college players were included in this group and acted as subjects. Five of the freshmen players were one hand shooters in high school. They shot in this manner during their entire playing careers.

Motion pictures of the two styles were taken with a Bell and Howell 16mm. camera. The pictures were taken from a vertical angle for each subject. The distance from camera to each man was fifteen feet.

To plot the patterns, the pictures were analyzed, frame by frame, with a Bell and Howell Time and Motion Analyzer projector, using the techniques described by Cureton.[31]

Analysis of the Movie Projector Methods

The players were awarded three free throw attempts in the style they preferred. The action was taken at sixty-four frames per second, and the subject was fifteen feet away from the camera in as close to a vertical position as possible. The camera was set on a tripod to avoid the possibility of any camera movement.

To ascertain the time element, two balls were used. By photographing a dropping ball from a known height, and by counting the frames of film used to photograph the drop, the time represented in each frame was determined. This time element was used in obtaining the velocity of the throw and phases of the throw.

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[31]T. K. Cureton, "Elementary Principles and Techniques of Cinematographic Analysis as Aids in Athletic Research," Research Quarterly, 10:3-24, May, 1939.

All free throws were plotted by projecting pictures on a sheet of white paper sixty inches from the Bell and Howell Time and Motion Analyzer porjector. The film was cranked through the projector frame by frame. A reference point in the field of the porjected image was noted in each plotting.

The projected image point was adjusted to the marked point before each frame was plotted. In this manner, it corrected for any movement of the camera during the taking of the pictures. The same procedure was followed every other frame in outlining the pattern formed by the free throws. The ball was plotted from the players starting position until the ball reached or entered the basket.

The distance the ball traveled from starting position until it entered or hit the rim of the basket was measured with a caliper. In this manner we were able to obtain the estimated velocity of the ball. The measurement was obtained by measuring with a verner the distance the ball traveled frame by frame on the pattern.

CHAPTER IV

ANALYSIS AND PRESENTATION OF DATA

Introduction

Data was gathered from leading authorities concerned with the problem. The method used took the form of gathering written material on the subject, personal interviews, and a questionnaire sent to a representative number of colleges and universities throughout the nation.

Motion pictures were taken of six university freshmen basketball players, plus two members of the Michigan State University varsity, and two former college basketball players. We were able to compare the pattern and trends between the one hand free throw and the two hand underhand free throw. This was done by a frame by frame analysis.

The analyzes presented in this chapter are divided into the analysis of survey results and cinemotographic data.

Survey Results

An over-all comparison between the one hand and the underhand free throw was established to distinguish the difference between the two methods of free throwing. It was the author's feeling there was a distinct difference.

Using a chi-square analysis, it was found there was a significant difference between the types of free throws used. Table I shows this relationship in favor of the one hand free throw; 68.9 per cent of the one hand attempts were successful as compared with 65.5 per cent for the two hand style.

TABLE I

FREE THROW ACCURACY RESULTS: SEASON RECORDS OF 47 MAJOR UNIVERSITIES

Type of Shot Used	Free Throws Missed	Free Throws Made	Totals
Two hand underhand	3,758	7,037	10,795
One hand throw	7,529	15,942	23,471
Totals	11,287	22,979	34,266
		$X^2 = 24.99$	$P = .01$

Regional Comparisons

The data were also compiled by regions to determine if different regions of the country advocate and/or show more success in either of the styles.

In the Midwest as well as the East and Southeast there was no significant differences between the types of free throws. However, in the Far West, South, and Southwest areas significant differences were found in favor of the one hand free throw. Table II notes this margin. This

TABLE II

FREE THROW ACCURACY BY REGIONS

Type of Shot Used	Free Throws Missed	Free Throws Made	Totals
East and Southeast Region			
Two hand underhand	460	995	1,455
One hand throw	1,408	3,076	4,484
Total	1,868	4,071	5,939
	X^2 = .0168	P = greater than .05	
Far West Region			
Two hand underhand	868	1,516	2,384
One hand throw	1,597	3,375	4,972
Total	2,465	4,891	7,356
		X^2 = 13.26	P = .01
Midwest Region			
Two hand underhand	1,878	3,480	5,358
One hand throw	2,429	4,838	7,267
Total	4,307	8,318	12,625
	X^2 = 3.66	P = greater than .05	
South and Southwest Region			
Two hand underhand	558	1,043	1,601
One hand throw	2,095	4,653	6,748
Total	2,653	5,696	8,349
		X^2 = 8.56	P = .01

was also apparent in the percentages of these respective regions as the one hand push free throw was the more accurate by 68.9 per cent as compared to 65.1 per cent for the underhand method in the South and Southwest.

In the Far West, the one hand free throw lead with a 67.8 per cent as compared to a 63.5 per cent for the underhand throw.

According to statistics published by the National Collegiate Athletic Association in 1955, six out of the eleven best free throwing teams in the country came from these same two areas (South and Southwest).

The figures indicate in the Midwest area and the East and Southeast region the one hand free throw and the two hand throw are almost equal in benefit to the shooter. One major difference here lies in the fact that there was more schools grouped in the Midwest than in any other group which might account for the closeness here.

Percentage-wise the accuracy of one hand free throw is superior in all areas. In the Midwest, it led over the two hand throw by the margin of 66.5 per cent as compared to 64.9 per cent.

The closest comparison took place in the East and Southeast where the one hand free throw won honors, 68.5 per cent as compared to 68.3 per cent. The table shows the validity of the two methods and as a result of these figures it is clear the one hand free throw is the more accurate.

Cinematographic Data

The analysis of these data is subdivided into two phases. First of all, the different angles at which the ball is released by the subjects, and the angles which the ball approaches the basket. Secondly, to determine the velocity with which the ball leaves the hand of the free throw shooter, plus, the velocity of the ball as it approaches the basket.

Angles. Two types of angles were obtained, namely, the angle of release and the angle as the ball approached the goal.

The ball was plotted frame by frame in flight to the basket. A best fit angle was then figured on the last three to six plottings. Angle measurements were then taken with a protractor in order to give the exact angle for each subject. This was done on all three attempts by the subjects and an average angle determined.

It was found that the underhand free throwers had a more satisfactory angle of trajectory than the one hand shooters at the point of release as shown in Table III. However, the one hand shooters have a better angle at the basket than do the underhand group. This simply means that their chances of making the throw are enhanced by this better angle. This is surprising since it was thought the underhand throw would result in the higher arc. This is shown in Table III. From the table you can see that all

TABLE III

CINEMATOGRAPHIC ANALYSIS: AVERAGE ANGLES OF THE BALL PATH FROM THE HORIZONTAL

Name	Style	At Release	At Basket
Schaulat	One hand	23.3	50.0
Rand	One hand	40.7	54.6
Anderegg	One hand	20.3	49.6
Marazita	One hand	13.7	57.3
Markovich	One hand	26.0	52.0
		M = 24.8	M = 52.7
Stouffer	Underhand	35.7	51.0
Rhodes	Underhand	40.7	49.0
Albeck	Underhand	39.3	51.0
Bencie	Underhand	33.0	45.0
Quiggle	Underhand	30.3	47.6
		M = 35.8	M = 48.7

the one hand shooters, with the exception of one, are above the 50^{o} angle. In the underhand group, there are but two above this same angle.

Velocity. The speed at which the ball approached the rim is very important as well as the release velocity which the individual uses. It was the author's desire to resolve which method was the better in each of these categories.

The velocity was recorded for each subject at the point of release. This was completed for three attempts through plottings and an average velocity obtained for each individual. These appear in Table IV.

The results indicate that the underhand free throwers release the ball faster than the one hand shooters. This is a combination of bringing the ball below the waist, in the starting position, and releasing it by a faster snap and a breaking of the wrists. This would indicate it would be difficult to master and there is great margin for error in this method.

On the other hand, the one hand push throw was delivered slower and the tendency was to have greater accuracy. This is due to their holding the ball chest high in the starting position. This has eliminated the extra momentum generated by the underhand free throwers and has cut down extra muscle coordination, thus insuring a sounder shot.

TABLE IV

CINEMATOGRAPHIC ANALYSIS: COMPARATIVE VELOCITIES

Name	Style	Velocity At Release ft/sec	Velocity At Basket ft/sec
Schault	One hand	29.5	23.8
Rand	One hand	31.7	27.1
Anderegg	One hand	29.1	21.6
Marazita	One hand	32.5	20.7
Markovich	One hand	30.2	24.0
		M = 30.6	M = 23.4
Stouffer	Underhand	34.2	18.9
Rhodes	Underhand	35.2	20.8
Albeck	Underhand	33.6	18.7
Bencie	Underhand	32.9	17.0
Quiggle	Underhand	35.6	16.9
		M = 34.3	M = 18.5

Basket velocity was obtained in the same manner as release velocity with the frame by frame analysis. Here again, the final three to six plottings indicated the greatest intensity and our findings were computed from these.

Our findings indicate the underhand method had less velocity at the basket than did the one hand push throw (Table IV). Because of the higher arc of the ball in the one hand throw, it can be predicted that it will have a greater velocity. Even though the one hand free throw has a greater velocity, the chance for it being successful is greater than the underhand throw because of this increased angle.

General Discussion

Through the survey results, regional comparisons, and the cinematographic data, it can be concluded that the one hand free throw is the most accurate and successful in free throwing today.

The over-all survey results disclosed a determining factor in favor of the one hand free throw in two ways. First of all, by a chi-square analysis, and secondly, a better percentage supporting the one hand shot.

The Far West division and the South and Southwest districts clearly demonstrated supremacy for the one hand free throw from both a chi-square analysis and a percentage base.

The Midwest area and the East and Southeast portion showed no significant distinction by way of statistical comparisons, although there was a variant percentage in favor of the one hand free shot.

The most productive free throwing area was the South and Southwest with the one hand throw being utilized. This entire sampling averaged 68.9 per cent which is excellent for such a group. The above is figured on percentage.

Underhand shooters in the Far West made the poorest showing with a 63.5 per cent of the entire study. Following right along with this is the fact that the largest chi-square difference between the two methods occurred in the same district.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The problem of free throw shooting style and shooting accuracy have plagued both player and coach since the game was originated.

It was found that coaches have formed certain theories relative to the best method of free throwing. These theories have been assumed and have been merely opinions rather than being based on scientific fact. The author found no evidence of comparative research through cinematographic techniques on either the one hand free throw or the two hand underhand throw.

With the aid of the Bell and Howell Time and Motion Analyzer projector, the subjects, shooting in their preferred style were analysed. Release and basket velocities were obtained in order to discover certain trends of each style. Angle velocities were attained at the point of release for each attempt as well as the basket velocity. This material was of prime importance on deciding which was the better method of free throwing.

Ten subjects were photographed with a Bell and Howell 16mm. camera. They were given three free throw attempts which were later plotted frame by frame.

The subjects consisted of six university freshmen members, two Michigan State University varsity players, and two former college players. Five of the freshmen used the one hand push style throughout their elementary and high school playing days. The other subjects were underhand shooters and trained in this method since high school. The pictures were taken from the side for all subjects.

Findings and Conclusions

The following observations were made in comparing the two styles.

1. The survey results indicate the one hand free throw is the favorite method of players today.
2. The statistics point out the one hand free throw is the more accurate of the two methods.
3. Regional comparisons of the two methods express a decided advantage for the one hand free throw according to percentage.
4. Release velocity for the one hand free throw shooter is slower, insuring less margin of error in the technique.
5. A better angle at the basket is obtainable through use of the one hand free throw.

Recommendations

The writer would like to offer the following recommentations concerning future free throw analysis:

1. The same number of free throws be obtained for absolute statistical analysis.
2. Have free throw statistics for the final five minutes to decide which method is better in the late stages of a game.
3. Conduct a study of body parts, including the muscles involved to find out exactly the muscle structure of the one hand free throw.
4. Determine the importance of mental attitude toward free throw shooting.
5. Have a cinematographic analysis taken from the side and front views as well as an overhead shot to find out the mechanics involved in the one hand free throw.

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APPENDIX

January 23, 1956

Mr. Otis Dypwick
Athletic Publicity Director
University of Minnesota
Minneapolis, Minnesota

Dear Mr. Dypwick:

My name is Stan Albeck and as an introduction to you, I am a graduate student presently working on my Master's Degree. At the same time, I am acting as assistant freshman basketball coach at Michigan State University.

I am conducting a comparative evaluation of the two hand underhand free throw in contrast to the one hand push free throw. This is with the hope of ascertaining which is the better method.

The purpose of this letter is to acquaint you with the study and to secure a final statistics sheet including free throws attempted and made for the 1954-55 season. If you could distinguish as to whether the individual shot was with the one hand or two hand method it would be very much appreciated. The first ten tem members will be sufficient.

Upon your request, I shall be happy to forward you a summary of the findings covering this subject. Enclosed is a self-addressed envelope for their statistic sheet.

Thanking you in advance for your help in this matter, I remain

Sincerely,

Stan Albeck
Assistant Coach

March 1, 1956

Mr. James Dynan
Athletic Publicity Director
University of Tulsa
Tulsa, Oklahoma

Dear Jim:

Recently you received a letter requesting a copy of your final basketball statistics for the season 1954-55. This was to help us complete a study of free throwing.

I have been unable to find your copy and would like very much to have your fine school in this study.

I trust you will be able to find a final copy of the basketball statistics for this year. Please include only the top ten members with their preferred style. This was either the underhand style or the one hand push method.

Thanks again for your interest in this study.

Sincerely,

Stan Albeck
Assistant Coach

SA:sa