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## A Survey Study of the Amount and Techniques of Scouting used in Preparation for Dual Meet and, or Tournament Competition in High School Wrestling

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A SURVEY STUDY OF THE AMOUNT AND TECHNIQUES OF SCOUTING USED  
IN PREPARATION FOR DUAL MEET AND, OR TOURNAMENT  
COMPETITION IN HIGH SCHOOL WRESTLING

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A Thesis  
Presented to  
the Graduate Faculty  
Central Washington State College

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Education

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by  
Larry G. Brown  
July, 1972

APPROVED FOR THE GRADUATE FACULTY

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A SURVEY STUDY OF THE AMOUNT AND TECHNIQUES OF SCOUTING USED  
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This paper presents a survey study of the present status of scouting in Washington, Class AA, high school wrestling. The study through the use of a questionnaire and personal interview, was designed to reveal the experience level of coaches, the use of scouting, and the method of scouting in Washington State. Complex chi square was used to evaluate the relationship between coaching experience and the use of scouting. The relationship did not prove significant at the five percent level.



## CHAPTER I

### INTRODUCTION

#### I. THE PROBLEM

The popularity of the sport of wrestling, on the participation level, has increased significantly in the past few years, both nationally and in the State of Washington. With this increase in the number of participants the competitiveness of the sport has likewise increased. This in turn demands quality coaching in order to remain competitive. Investigation of the sports area has revealed a vast accumulation of theories and data are available concerning sports play, rules, strategy, philosophy, history, and social attitudes in wrestling. Virtually nothing was mentioned about the employment of various scouting techniques as an aid to coaching success.

The extremely limited amount of information available concerning scouting reports for high school wrestling was probably because wrestling reports are only made available to the specific group for which the report was designed. Through a review of related literature and with the use of a questionnaire, followed by interviews, a criterion for scouting high school wrestling was developed.

#### II. PURPOSE OF THE STUDY

The purpose of this study is to determine the numerical amount of Washington State, Class AA, high school wrestling coaches that use

scouting, discover the variety of methods used, determine the most widely used system, and relate the differences between various coaching experience levels and the use of scouting. This study is not designed to standardize a method or technique for scouting high school wrestling.

Varying coaching strategies and methods of instruction may lead to several different approaches and emphasis in scouting reports. Some scouting reports may be systematic, others unstructured; some formal and written, others casual observation, relying on memory; some will be general, others specific; each will be dependent upon the coaches philosophy or purpose for scouting. The reporting of what is included in Washington State, Class AA, wrestling scouting reports will be an attempt to clarify the studies definition of scouting, to determine the amount of scouting and to reveal the variety of techniques.

### III. STATEMENT OF THE PROBLEM

The use of scouting is widespread among the major sports field of the United States including football, basketball, and baseball. The former, football, has gained the most recognition above the other sports areas for its use of scouting.

A question of concern in this study is whether wrestling merits the application of scouting. It is probable that some form of scouting is used by many high school coaches in the State of Washington; but the concern of this study is, what techniques are employed, what data is recorded, and to discover the relationship between coaching experience and the use of scouting.

It is the investigators contention that the amount of scouting will not vary in relationship with the amount of coaching experience.

The premise that there will be no relationship is founded on the idea that the use of scouting will be more dependent on coaching philosophy than coaching experience.

#### IV. BASIC ASSUMPTIONS

It is assumed that scouting is valuable in the coaching of wrestling and that this study may better reveal its usefulness.

Evidence implies wrestling scouting and coaching methods vary in relation to the data sought, the techniques employed, and the procedure used to obtain and apply this information.

It is assumed that the questions answered by the coaches on the questionnaire and in the interviews were answered sincerely and honestly.

#### V. LIMITATIONS OF THIS STUDY

The following are recognized as limitations of this study:

1. This study is limited to the questions answered by means of a questionnaire sent to and received from forty-five of the fifty-two Washington State, Class AA, head interscholastic wrestling coaches.

2. This study is limited to the questions answered by means of interviews with a random selection of twenty-two, Washington State, Class AA, head interscholastic wrestling coaches that participated in the 1972 Class AA State Wrestling Tournament.

3. This study is limited to information from publications related to wrestling and sports scouting.

scout periodically for important dual matches, or exclusively for tournaments; and (3) extensive scouting, coaches that scout frequently for dual matches, or both dual matches and tournaments.

Coaching Experience. Coaching experience is defined as the number of years a coach has been a coach. This study will refer to three coaching experience levels: (A) novice, coaches initiating or completing their first year of head wrestling coaching experience; (B) apprentice, coaches completing their second or third year of head wrestling coaching experience; and (C) journeyman, coaches with four or more years of head wrestling coaching experience. Coaching experience (B) and (C) have been differentiated in that (B), the apprentice is in the process of establishing his own techniques while possibly trying to override a previous coaches mannerisms; while (C) the journeyman, most likely has already established his own program and coaching techniques.

Investigator. The investigator is the author of this master's thesis study.

mm. The letters mm will be defined as an abbreviation referring to the word millimeter or speed of a film.

## CHAPTER II

### REVIEW OF THE LITERATURE

A close review of wrestling literature indicates that very little has been written in the English language dealing specifically with wrestling scouting. However, several published and unpublished accounts have given reference to the historical development of wrestling and the application of scouting to other sports fields.

### A BRIEF HISTORY OF THE DISCOVERY AND DEVELOPMENT OF GLOBAL WRESTLING

Graeme Kent, in A Pictorial History of Wrestling, gives an excellent account of the historical development of global wrestling. According to Kent, wrestling is one of the oldest and most primitive activities known to man (91:9).

After a time the men of prehistory probably realized that in order to prepare themselves for foes and wild animals it was of great value to wrestle with neighbors in order to practice holds and throws. Eventually, the men of early times probably began to enjoy testing their strength and skill against each other, and from a necessity of survival wrestling became a sport.

Accounts of wrestling have been discovered in the first great empires that developed around the Nile and the Eurphates, and in India and China. The oldest of these first great empires developed along the Nile River in Egypt. Wrestling was popular among the Egyptians as can be noted from their art.

A wall-painting found at Beni-Hasan, a village of Middle Egypt, shows that wrestling was a popular sport, and that the Egyptians knew virtually every hold practiced today (91:10).

Records of wrestling matches date back to over 2000 years before the birth of Christ. Wrestling was highly regarded in the great Mediterranean civilization of Crete. A vase discovered near Hagia Triada, dating back to 1600 B.C., shows athletes boxing and wrestling.

Wrestling was popular among the Jews and evidence of the sport dates back to the Summerian period. The sport lost its appeal around the Christian era, when Herod tried to mimic the Romans and organize his own athletic tournaments with gladiatorial displays and exhibitians of wild beasts, as well as running and wrestling. The subjects of Herod did not favor this emulation of their conquerors and the tournaments were discontinued. As a result wrestling and other sports suffered and never recovered their significance.

The Chinese were devoted to sports at least a thousand years before the birth of Christ and had their own form of wrestling. Their style included a mixture of boxing, wrestling, kicking, and the use of a weapon similar to the spear. The ancient Chinese regarded fighting as a business rather than a sport, providing a useful military training.

Wrestling must have flourished in other ancient civilizations of the world but few records have been handed down. India and Persia, for example, are presumed to have a history of wrestling, as well as other areas of the East, but the origins are shrouded in the mist of prehistory.

Around the 6th century B.C., Greece emerged as the most important nation in the early world. Greek culture and tradition became an

exemplification to other nations to follow, and therefore the tradition of athletics, including wrestling, became of global significance. Within a period of a few hundred years Greece made wrestling one of the major sports practiced by athletes of the civilized world.

Wrestling was first introduced into the Olympic games in 704 B.C., in the 18th Olympiad. By this time wrestling was a well established sport in the Greek world. The inclusion of wrestling in the Olympics gave added impetus to the sport, and before long every city had its own palaestra, or wrestling school (91:18).

The Greeks regarded wrestling as an art and a science in which the method of winning was almost as important as the winning itself. Brute force and ignorance had little place in Greek wrestling (91:23).

In 648 B.C. a new form of wrestling was introduced into the Olympics. This was the pankration, and 'all in' no-holds-barred type of rough-and-tumble contest in which wrestlers fought on the ground. The sole object was to force an opponent into defeat.

Professionalism entered into the Olympic games around the 7th century, particularly in the case of wrestling and boxing competition. During this time the prizes in the local tournaments were so valuable that many athletes devoted their lives to touring the festivals. Wrestling began to change radically into exhibitions of strength and professionalism. Another change for the worse came with the acceptance of bribes which altered the match results.

Alexander the Great, around 300 B.C., conquered Greece, and altered the Greek sports cult, especially wrestling, in two ways. Alexander had little enthusiasm for athletics, therefore upper class support of sports dwindled. On the contrary Alexander helped rejuvenate

the sport of wrestling by introducing athletes from the East into the event. Wrestlers from the East began to dominate the event, thus wrestling lost its appeal to the local athletes and spectators.

In 146 B.C., Greece lost its independence to Rome. The Romans inherited much of the Greek culture including wrestling. This intermixture of Greek and Roman culture led to a new style of wrestling known as the Greco-Roman style. Greco-Roman wrestling consisted to a large extent of ground wrestling with limited amount of the Greek upright style. The new style emphasized strength and tripping was forbidden. The Greco-Roman style has continued to be practiced with modifications to this day, especially on the European continent (91:32).

The evils of professionalism that had beset the end of the Greek era were also rife in the Roman age. Wrestlers sold themselves, agreeing to lose if the price was right.

During the third century, athletics as a whole began to decline. With a dispute over professionalism, a bellicose disruption led to the termination of the ancient Olympic Games by Emperor Theodosius.

Thus the Games ended in 392 A.D. with them ended the heyday of athletics in the ancient world. Sport, wrestling included, was not to die, it was too well established for that, but the Romans no longer took much interest in it (91:43).

Wrestling has continued around the world in various forms. In Asia, wrestling has been a popular sport for at least five thousand years. Mongolia, China, Japan, India, and Turkey claim a vast heritage of wrestling enthusiasts.

Although styles differ from nation to nation, the predominant form has always been some variation of catch-as-catch-can (91:45). In these bouts the loser is the first man to touch the ground with any part of his body except his feet.



It was not only in the countries of the East that wrestling caught on as a popular sport. Almost every nation in Europe practiced some form of the art. A few hundred years after the beginning of the Christian era wrestling was again firmly established in Europe. During the Middle Ages international wrestling tournaments were held frequently, and encouraged throughout the Holy Roman Empire (91:75).

Records of various forms of wrestling have been found in Russia, Finland, Switzerland, and the Balkans. The three European nations which have strongly influenced the development of international wrestling are England, France, and Germany.

It is only in the last years that wrestling has flourished in such countries as South Africa, Canada, Australia, and the United States. Social-economic reasons have hindered the development of sport and leisure of nineteenth century European settlements.

Wrestlings claim to a Golden Age occurred between 1900 and 1914. This was the era in which professional wrestling became the major sport with the greatest audience pull in the English speaking world. The characters that gave birth to the wrestling boom were of international origin; including wrestlers from the United States, Russia, England, Turkey, Japan, and Bulgaria. The most renown of these wrestlers included: Britain's Tom Cannon; Russia's George Hackenschmidt; and the United States' Frank Gotch. The beginning of World War I brought Golden Age of wrestling to an abrupt halt.

While subsequent schools of wrestling have favored professional wrestling over its amateur predecessor; amateur wrestling has steadily increased in popularity since the revival of Olympic Games in 1896. By the 1908 Olympiad the catch-as-catch-can form of wrestling was officially

recognized as an international sport (91:87). Some of the outstanding nations that have received the highest awards in the Olympics and International tournaments include Russia, Sweden, Finland, Turkey, Japan, and the United States.

In conclusion to this synopsis of the global history of wrestling; attention should be called to the fact that today, wrestling is an international sport. All countries wrestle under the same rules in the Olympic Games, but aside from adherence to the style and rules of the Olympics, almost every country has its own native style (89:5).

It is also significant to note that the peak of civilization and the highest degree of national virility is and has been reached in every country at a time which corresponds to the greatest development of wrestling in those countries (89:6).

#### SCOUTING AS AN AID TO COACHING

The investigator was unable to discover any history disclosing the use of wrestling scouting to its present status. It is supposed that scouting was done indiscreetly at first. As the sport grew in popularity, and as competition increased, the pressure and will to win mounted. Some coaches undoubtedly resorted to what might be called spying and other related means to obtain the pertinent information they needed to prepare their teams to meet a specific opponent.

A survey of related literature revealed an early account of "Scouting Football" by Herbert Reed published in Harper's Weekly on December 5, 1914. This article announced the controversy as to the ethics of introducing scouting to football. The following excerpt from Herbert Reed's article will unveil the nature of thought on the subject of scouting football.

One of the most interesting ethical questions which the football season has brought up has been the degree to which scouting is permissible. As the brain side of the game has come in for greater extensive development, the value of detailed reports on what the end-of-the-season enemy is doing have become increasingly valuable. In consequence football coaches all over the country have been paying greater attention to moves made by rivals (62:546).

Reed's article continues expounding upon the old days of football in which football was not so civilized and scouts were chastised as spies in the enemies camp. Despite early attempts to limit scouting, continued persistence of seeking information about upcoming opponents continued. To limit underhanded scouting methods and to suppress bitterness between rivals, scouting was brought into the open (106:13).

David Coryell's unpublished Masters Thesis, A Survey of Football Scouting Techniques . . . states the status of sports scouting in the twentieth century United States. Coryell reports that scouting has progressed to the level of a profession conducted on a highly ethical plane (106:13).

Scouting has become an accepted necessity. Provisions in the athletic budgets of most college and high schools provide finances for the scouting purposes. Usually, every courtesy is extended to the visiting scout. Scouting passes, reserved seats, and statistical information are often obliged to the visiting scout.

Several publications have devoted articles to the subject of scouting in the major sports fields such as football, basketball, and baseball. General reference periodical publication, such as, Sports Illustrated, are directed at new recruits or season predictions. A prime example of the prediction type of scouting report can be found in the article "Scouting Reports: Assessment of all Twenty-Four Big League

Teams; symposium", from Sports Illustrated in the April 14, 1969 issue (65:86).

More specific information on the definition of scouting, procedure of scouting, and the content of a scouting report can be found in such publications as Athletic Journal and Scholastic Coach. A. J. Breyfogie's article "Basketball Scouting Views" in the October, 1967 issue of Athletic Journal defines scouting as follows:

The primary purpose of a scouting report is to determine the various individual and team strengths and weaknesses of opponents and how they may be exploited (10:68).

Breyfogie then comments on the procedure and content of a scouting report. He contends that the methods and techniques of scouting vary as much as the information desired to be recorded. He also states that the information that usually appears on most scouting reports include win-loss records, movement patterns, athletes size and shape, conditioning, and the individual and team strong and weak points (10:68).

Two questions that authors of articles on the subject of scouting most often consider most pertinent are: what are the qualifications of a scout; and what are the procedures of collecting scouting data. The consensus of opinion on the qualifications of a scout from H. Furman, J. Blount, F. Handler, R. Johnson, and G. Pinholster is: a scout should have a good fundamental knowledge of the game; a scout should understand his head coaches' coaching philosophy; a scout should have a trained eye for observation; a scout should have a good retention span; and that a scout should report the facts, without conjecture (25,9,29,36,60). Some coaches employ professional agencies, others use avid fans, coaching staff, or team members.

The procedure for collecting scouting data that were generally agreed upon by H. Furman, D. L. Teague, E. H. Lacy, J. McWilliams, F. D. Handler, and G. H. Allen include: a review of past records, films, and statistics of the team to be scouted; an early arrival to insure obtaining a good observation point; observation of warm-up activities to become familiar with players names, positions, and characteristics, accurate record of team strategy, techniques, and tendencies; and post-game association with other scouts, spectators, reporters, and coaches to obtain additional information (25,67,38,46,29,1).

The purpose of a scouting report is best summarized by G. Holgate (30:24-7) and G. Pinholster (60:32) from their respective articles in Scholastic Coach. Pinholster states that scouting relieves fear and uncertainty, promotes security, and gives the players a better understanding of the coaches likes and dislikes (60:52). While Holgate maintains that the values of scouting are providing routine weekly preparation, establishing an organized format, and revealing the relative strength and weakness of each upcoming opponent (30:24).

The techniques, method or media, of scouting vary with an individual coaches preference or whim. Most coaches seem to prefer some variation of a written report. J. Blount prefers the use of diagrams combined with a checklist form (8:30+). J. Olcott incorporates the punch card technique (56:12). Some coaches prefer to rely on mechanical devices to aid their scouting. T. Parac sites the computerized system (59:34+). W. V. Crouch employs the use of a portable tape recorder (18:42-4). Others prefer video-tape television, or 8mm or 16mm filming.

Not only do the techniques of scouting vary among coaching schools, but the type of information recorded in a scouting report also

varies with a coaches philosophy. A recent publication, Psychology of Coaching by Thomas Tutko has introduced the idea of psychological scouting. This process involves the uncovering of information about the personality strengths and weaknesses of an opponent. According to this philosophy an athlete that has a psychological weakness, such as, losing composure if irritated, has just as much of a weakness as the untalented athlete (102:198).

Two texts which present views of the application of scouting to wrestling include Kenney and Law's, Wrestling for High School and College (92:33) and Keith's, Complete Guide to Championship Wrestling (90:180). Kenney and Law present a paragraph on the merit of scouting as a method of preparing for an opponents maneuvers. Keith states that scouting is most opportune and beneficial during tournaments. His philosophy is that individual college wrestlers should scout their own opponent, with emphasis on securing notes on favorite holds and basic wrestling patterns of their future opponents.

Charles Ream author of the article "Scouting for Wrestling Wins", which appeared in the November 1960 issue of Athletic Journal should be recognized as the investigators most pertinent source of information directed specifically toward wrestling scouting (61:42+). Ream comments that few coaches take advantage of using scouting for wrestling. The following comments by Ream represent his views on the purpose, technique, and result of using scouting in wrestling.

In order to improve wrestling, it is essential to inaugurate a good scouting program. By scouting we mean employing a sound method of observing and recording the skills used by the opposing wrestlers (61:42).

Factors that he feels should be taken into consideration are: Environment, condition of the mat; officiating, quality; team comments, team favorites or spirit; wrestler profile, condition, strong and weak points; and summary, reason for win or loss.

At least half of the victories our team has enjoyed during the past ten years can be traced to the results of a good scouting report. The information is invaluable when preparing for a coming wrestling match (61:42).

In conclusion, recognition should be given to the fact that the issue of the ethics of scouting has remained in question to this date. Antagonist, such as Charles Bucher has declared that scouting should be eliminated or restricted, allowing more time and money to be put to a more advantageous use (82:258). The advocates, include innumerable coaches which assess the value of scouting as an unquestionable asset to coaching and improving the quality of sports competition.

## CHAPTER III

### PROCEDURE

#### I. SOURCE OF DATA

##### Class A Coaches

As part of the preliminary research, the investigator sent questionnaires to a cross section of Class A high school head wrestling coaches throughout the State of Washington. Only a small sampling was returned, but the cooperation assured clarity of the questions included in the questionnaire. The information obtained from these questionnaires was not used in computing information in the analysis of data.

##### Class AA Coaches

The information used in this study was obtained through two sources, (1) the use of a questionnaire; and (2) the use of followup interviews. Head wrestling coach, Eric Beardsley, of Central Washington State College, a committee member of this study, recommended the use of the Washington State, Class AA head wrestling coaches as the population to survey in this study. Forty-five of the fifty-two (86.5%) Class AA, head wrestling coach questionnaire recipients returned replies by the end of the third and final mailing. The answers from these forty-five returned questionnaires were used in the analysis of data section of this study.

Twenty-two of the forty-five questionnaire respondents were interviewed at random during the 1972 Washington State, Class AA, State



Wrestling Tournament, held at Western Washington State College in Bellingham, Washington. The replies to the interview questions were computed in the analysis of data portion of this study.

## II. METHOD OF COLLECTING DATA

An eight topic questionnaire was used as the main source of information. The questionnaire was of open end design to make allowance for varying ideas and methodology. Each topic of the questionnaire had a series of possible replies including other and space for comments. The respondent could respond by checking one or several answers, or check other and add comments.

A ten topic interview was used as a followup measure designed to reassure reliance of responses of the questionnaire. The interview questions included positive and negative replies. During the interview, the investigator asked a series of questions and recorded the responses. It was possible to get further insight into coaches attitudes toward scouting by the use of interviews. For an example of a questionnaire and interview questions, see Appendix A & B.

## III. ORGANIZATION OF DATA FOR TREATMENT

The data for this study was compiled through a comprehensive review of literature, the use of a questionnaire, and personal interviews. A review of literature revealed several basic questions about the nature of scouting applied to high school wrestling. From these basic questions a list of items was compiled to be investigated through the use of a questionnaire and personal interview.

The basic questions concerning the nature of scouting in scholastic wrestling included:

1. What is the nature of coaching training among Washington State, Class AA, head wrestling coaches?
2. What is the deviance of head wrestling coaching experience of these coaches?
3. How often is scouting employed by these coaches?
4. Who does the scouting for these coaches?
5. What techniques, or medias are used by these coaches to record scouting information?
6. What techniques or medias, are preferred by these coaches to record scouting information?
7. What general information is desired to the context of a scouting report for these coaches?
8. What specific individual or team information is desired in the context of a scouting report for these coaches?
9. Does scouting information prove valuable in wrestling for these coaches?
10. Will the amount of coaching experience be an influential factor in determining the amount of scouting used by the coaches?
11. Do these coaches believe that the most reliable scouting report is compiled by themselves as scouts?
12. Do these coaches believe that coaches having athletic experience in wrestling will be as likely to scout as coaches without athletic experience in wrestling?
13. Do these coaches believe that information from their scouting reports should be revealed to their wrestlers?

14. Do these coaches believe that scouting for wrestling will influence the outcome of a participant's or team's match?

## CHAPTER IV

### ANALYSIS OF DATA

The main sources of information used to expose the nature of the use of scouting in wrestling for Washington State, Class AA, were the use of a questionnaire and the personal interview. As mentioned in Chapter III, data was obtained from a series of questions asked about wrestling scouting. Data from these questions on the questionnaire and interview are presented first in the form of frequencies and percentages, see Table I and II, and second by comparing the use of scouting with the amount of coaching experience.

#### Results of the Questionnaire Data

Respondents to the questionnaire questions were given the freedom to reply to one or several responses on all questions in the questionnaire. The first question on the questionnaire was designed to reveal the coaching training of those questioned. Seventy-one percent admitted reading knowledge of the sport. Sixty percent claimed collegiate athletic experience and fifty-one percent stated high school athletic experience. Fifty-three percent had class instruction. Eleven percent had no previous experience. Fifteen percent checked other, which included YMCA, clinics workshops, junior high, international judo, and carnivals.

The second question included coaching experience with three categories for head coaching experience. Sixty-four percent of the

TABLE I  
SCOUTING METHODS IN WRESTLING

Questions	Frequency	Percentage
1. Coaching Training		
A. No previous experience	5	11.1111%
B. Reading knowledge	32	71.1111
C. Class instruction	24	53.3333
D. Athletic experience, high school	23	51.1111
E. Athletic experience, collegiate	27	60.0000
F. Other	7	15.5555
2. Coaching Experience		
A. 0-1 years at present institution	9	20.0000
B. 2-3 years at present institution	7	15.5555
C. 4- or more years at present institution	29	64.4444
D. Years at previous institution, No. of years _____	13	28.8888
E. Assistant Coaching, No. of years _____	16	35.5555
F. Other	3	6.6666
3. Use of Scouting Report		
A. Never use scouting	9	20.0000
B. For dual match competition only	11	24.4444
C. For tournaments only	2	4.4444
D. For B and C	18	40.0000
E. Other	5	11.1111

TABLE I (continued)

Questions	Frequency	Percentage
4. Who Does Scouting		
A. Team member	11	24.4444%
B. Avid fan	4	8.8888
C. Assistant coach	27	60.0000
D. Faculty member	1	2.2222
E. Head coach	33	73.3333
F. Other	12	26.6666
5. General Scouting Media		
A. Analysis of news reports	27	60.0000
B. Observation (mental notes)	22	48.8888
C. Written report	29	64.4444
D. Filming (8mm or 16mm)	3	6.6666
E. Tape Recording (vocal)	8	17.7777
F. Video Television	5	11.1111
G. Statistical Analysis	17	37.7777
H. Other	4	8.8888
6. Preferred Scouting Media		
A. Analysis of news reports	11	24.4444
B. Observation (mental notes)	18	40.0000
C. Written report	24	53.3333
D. Filming (8mm or 16mm)	9	20.0000
E. Tape recording	8	17.7777
F. Video television	13	28.8888
G. Statistical Analysis	9	20.0000
H. Other	4	8.8888

TABLE I (continued)

Questions	Frequency	Percentage
7. General Information Desired in Content of Report		
A. History of team performance	9	20.0000%
B. Individual athletic records	17	37.7777
C. Basic team skill techniques	36	80.0000
D. Individual skill techniques	38	84.4444
E. Team physiological make-up	4	8.8888
F. Individual physiological description	10	22.2222
G. Other	3	6.6666
8. Specific Information Desired in Content of Scouting Report		
A. Strategy	26	57.7777
B. Aggressiveness	22	48.8888
C. Form	14	31.1111
D. Speed	21	46.6666
E. Mobility	15	33.3333
F. Strength	21	46.6666
G. Conditioning	25	55.5555
H. Moves	32	71.1111
I. Frequency	29	64.4444
J. Somatotype	8	17.7777
K. Vulnerability	28	62.2222
L. Composure	6	13.3333
M. Attitude	14	31.1111
N. Other	7	15.5555

TABLE II

WASHINGTON, CLASS AA, WRESTLING COACHES'  
ATTITUDE TOWARD SCOUTING

Question	Yes		No		Abstain	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1. Have you found that the comparative results of individual contestants in wrestling to be impractical and misleading, because of the variable of pairing individuals?			22	100.000		
2. Knowing that the written scouting report technique is the most popular technique used by double A wrestling coaches in Washington. Are you in agreement that the written report is the best technique?	6	27.272	16	72.727		



TABLE II (continued)

Question	Yes		No		Abstain	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
3. Knowing that the majority of the double A wrestling coaches of Washington agree that a combination of scouting techniques used in conjunction with each other, rather than using one primary technique, is the most desired method of scouting; as a scout would you do likewise?	20	90.909	2	9.090		
4. In your observations of high school class double A wrestling teams, have you found that the individual team members show enough similarities to report team tendencies?	22	100.000				

TABLE II (continued)

Question	Yes		No		Abstain	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
5. Do you believe that an apprentice coach, with two or three years of high school wrestling coaching experience, would be more likely to scout than the beginning (less orientated) novice coach, who has none or only one year of high school wrestling coaching experience?	14	63.636	7	36.363		
6. Do you believe that an apprentice coach, with two or three years of high school wrestling coaching experience would be more likely to use scouting than an experienced, journeyman coach, with four or more years, who has more established methods of coaching?	5	22.272	17	77.727		

TABLE II (continued)

Question	Yes		No		Abstain	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
7. Do you believe that coaches with athletic experience in wrestling (high school or collegiate) would be as likely to scout as the coach without athletic experience?	20	90.909	0	0.000	2	9.090
8. Do you believe that the most reliable scouting report is one compiled by the head coach?	17	77.272	5	22.727		
9. After gathering the information from a scouting report do you believe that a coach should reveal the scouted information to his wrestlers?	20	90.909	2	9.090		
10. Have you encountered a wrestling situation in which you believe that the use of a good scouting report has directly influenced the outcome of a participant's or team's match?	20	90.909	2	9.090		

coaches had four or more years of head coaching experience. Sixteen percent had two to three years experience, and twenty percent had zero to one year experience. Thirty-six percent claimed assistant coaching experience. Seven percent stated other, including other sports, judo, and summer camps.

Question three dealt with exposing the frequency of which scouting is used by the wrestling coaches. Forty percent of the coaches used scouting for both dual meets and tournaments. Twenty-four percent have used scouting primarily for dual meets. Four percent scout for tournaments only. Twenty percent stated they never use scouting. Eleven percent noted other, including only close or tough matches, two or three, and three occasionally.

Who does the scouting for these coaches? Seventy-three percent of the head coaches perform their own scouting. Sixty percent employ their assistant coaches. Twenty-five percent use team members. Eight percent stated an avid fan. Two percent use faculty members. Twenty-six percent claimed other, including two using junior high coaches, other coaches, wrestlers scout their own opponent, no one available, and five not replying.

What techniques or medias, are used by these coaches to record scouting information? Sixty-four percent use a written report. Sixty percent state analysis of new reports. Forty-eight percent rely on observation or mental notes. Thirty-seven percent record statistical analysis. Seventeen percent favor tape recording. Eleven percent use video television. Six percent claim filming with an eight or sixteen mm camera. Eight percent stated other including two using wrestling newsletter, and two not replying.

What techniques or medias are preferred by these coaches to record scouting information? Fifty-three percent preferred using a written report, forty percent observation or mental notes, twenty-eight percent video television, twenty-four percent analysis of new reports, twenty percent filming with an eight or sixteen mm camera, twenty percent statistical analysis, seventeen percent tape recording, and eight percent other, including four no replys.

What general information is desired in the context of a scouting report for these coaches? Eighty-four percent note individual skill techniques. Eighty percent note basic team skill techniques. Thirty-seven percent desire individual athletic records. Twenty-two percent prefer an individual physiological description. Twenty percent seek a history of team performance. Eight percent desire team physiological make-up. Six percent replied other, including psychological aspect and two no replys.

What specific individual or team information is desired in the context of a scouting report for these coaches? Seventy-one percent prefer to note the specific moves used by individual or group scouted. Sixty-four percent desire to note the frequency of the moves. Sixty-two percent seek knowledge of the vulnerability. Fifty-seven percent desire record of strategy. Fifty-five percent note conditioning. Forty-eight record aggressiveness. Forty-six percent list strength. Forty-six percent note speed. Thirty-three percent record mobility. Thirty-one desire to know a wrestler's or teams form. Thirty-one percent are interested in individual or team attitude. Seventeen percent seek knowledge of somatotype or body build. Thirteen percent record composure.

Fifteen percent noted others including first move, pressure, and five no replys.

### Results of the Interview Data

Respondents to questions asked through a personal interview were asked to reply yes or no to the following questions. Those interviewed were allowed to discuss any point in question and respondents could abstain from answering any question which they did not feel qualified to answer.

The first question asked during the interviews stated, have you found that comparative results of individual contestants in wrestling to be impractical and misleading because of the variable of pairing individuals? All respondents to the interview replied yes.

The second question was knowing that the written scouting report technique is the most popular technique used by AA wrestling coaches in Washington, are you in agreement that the written report is the best technique? Twenty-seven percent replied yes, and seventy-three percent replied no.

Question three stated, knowing that the majority of wrestling coaches in the State of Washington agree that a combination of scouting techniques used in conjunction with each other, rather than using one primary technique, is the most desired method of scouting; as a scout, would you do likewise? Ninety-one percent replied yes and nine percent replied no.

Question number four asked, in your observation of high school Class double A wrestling teams, have you found that the individual team members show enough similarities to report team tendencies? All respondents replied yes.

The fifth question was, do you believe that an apprentice coach, with two or three years of high school wrestling coaching experience, would be more likely to scout than the beginning (less orientated) novice coach, who has none or only one year of high school wrestling coaching experience? Sixty-four percent replied yes and thirty-six percent replied no.

Question six stated, do you believe that an apprentice coach, with two or three years of high school wrestling coaching experience, would be more likely to use scouting than an experienced, journeyman coach, with four or more years, who has more established methods of coaching? Twenty-two percent replied yes and seventy-eight percent replied no.

Question number seven asked, do you believe that coaches with athletic experience in wrestling, high school or collegiate, would be as likely to scout as the coach without athletic experience? Ninety-one percent replied yes and nine percent abstained for reasons of uncertainty.

The eighth question was, do you believe that the most reliable scouting report is one compiled by the head coach? Seventy-seven percent replied yes and twenty-three percent replied no.

The ninth question stated, after gathering the information from a scouting reports do you believe that a coach should reveal the scouted information to his wrestlers? Ninety-one percent replied yes and nine percent replied no.

The final question in the interview asked, have you encountered a wrestling situation in which you believe that the use of a good scouting report has directly influenced the outcome of a participant's

of team's match? Ninety-one percent replied yes and nine percent replied no.

The statistic Complex Chi Square ( $\chi^2$ ) and the Contingency Coefficient (C) was used to test the relationship between the amount of scouting and coaching experience. Complex chi square and the contingency coefficient is used when you have frequency data and you are comparing the effects of two variables, and there are two or more groups on either of the two variables. The formula can be used to test the hypothesis of no relationship between the variables. If the chi square test shows that there is a relationship between the variables the contingency coefficient can be computed to give an indication of the degree of relationship (81:209).

The variables of this study are the amount of scouting and coaching experience. Each of these variables are divided into three categories. The amount of scouting is divided into no scouting, occasional scout, and extensive scouting. Coaching experience is divided into novice, apprentice, and journeyman. Chi square is used to determine if a certain distribution differs from an estimated theoretical distribution. In this study the observed distribution is based on the replies of coaches answering a series of questions on a questionnaire. It can be determined whether the observed frequencies differ from the frequencies that are expected by the degree of distribution from the stated theoretical distribution.

A distribution of measures differs from what would be expected if the distribution does not follow the shape of the normal distribution (108:42).

The complex chi square formula in this study will be applied to a 3 x 3 table or nine fold table. This nine fold table will be referred



to as the contingency table. The frequency in each cell of this contingency table were filled by recording the coaches' response to their coaching experience and their amount of scouting. The data from the contingency table was then computed by applying the formula for complex chi square,  $X^2 = \sum \frac{(o-e)^2}{e}$ . O in the formula refers to the observed responses, and e refers to the expected responses.

How the expected is obtained must be known before the formula can be tabulated. The mean by which e, the expected, is obtained is by multiplying each row, R by each column, C, and dividing the results by the total number of responses, or T. The formula would be  $E = \frac{RXC}{T}$ . To illustrate how these expected frequencies are obtained for each cell the contingency table used for this study will follow. The observed cell frequencies will be represented by using letters to replace numbers.

A	B	C	A + B + C = M
D	E	F	D + E + F = N
G	H	I	G + H + I = O
A+D+G=J	B+E+H=K	C+F+I=L	T = TOTAL

The expected cell frequency for cell A, is obtained by multiplying Row one, J times, column one, M and dividing by the total cases, T. Similarly, the expected frequencies for cell D, is obtained by multiplying J times N and dividing by T. See Appendix C for sample problem (108:43).

After obtaining the expected and the observed responses for each cell the investigator then applies the formula by subtracting the expected from the observed frequency, squaring the difference, and dividing the result by the expected frequency. The sum of these equals chi square,  $x^2$ .

A table is then used to interpret chi square in terms of degrees of freedom based upon a three by three contingency table. The degrees of freedom, d.f., are found by applying the following formula. Degrees of freedom equals total number of rows minus one times number of columns minus one, or  $d.f. = (R-1) (C-1)$ . In this study the number of rows equal three, therefore  $d.f. = (3-1) (3-1) = 2 \times 2 = 4$ .

The chi square table is then consulted to locate the level of significance of chi square at the five percent level with four degrees of freedom. In order for chi square to be significant at the five percent level with four degrees of freedom, chi square must be 9.488 or higher.

Computing the formula to compare the relationship between coaching experience and the amount of scouting, chi square was found to be 6.516510. The contingency coefficient, C, is found by taking the result of the chi square and applying it to the following formula,  $C = \sqrt{\frac{x^2}{x^2+N}}$ . This formula is interpreted as the contingency coefficient, C, equals the square root of chi square,  $x^2$ , divided by chi square,  $x^2$ , plus the total amount of cases, N. In this study C is equal to .355658.

Interpreting the results of the complex chi square and contingency coefficient formulas, chi square at 6.516510 did not equal or surpass the 9.488 level in which chi square needs to be significant with four degrees of freedom at the five percent level. The contingency

coefficient, 3.55658, which is similar in meaning to the correlation coefficient, has already been shown not to be significantly different from zero in the chi square test (81:213). Therefore, it can be concluded that coaching experience and the amount of scouting are not significantly related.

The investigator believes that the reason why coaching experience and the amount of scouting are not significantly related is that the use of scouting has not been proven to be as important as its status in the major sports fields of football, basketball, and baseball. The investigator also contends that the techniques and data used in scouting wrestling are not sophisticated enough to provide coaches with a valuable scouting report.

To insure extensive use of scouting in wrestling, wrestling scouting reports must be comprehensive enough to assist both the experienced wrestler and coach. It also must be proven a beneficial factor in improving the quality of competition and an aid to successful wrestling and coaching.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

This survey has shown the present status of wrestling scouting among Washington, Class AA, wrestling coaches. The study also has made available the level of coaching experience among these coaches. Reference has been given to the various methods or techniques of scouting, as well as the desired content of a wrestling scouting report. A survey of these coaches attitudes toward scouting should provide the reader with knowledge of the current thoughts about the use of scouting.

It was intended that this study reveal some of the scouting and coaching practices of Washington, Class AA, wrestling coaches. It is hoped that the reader, by studying the results of this survey will gain knowledge of the current scouting and coaching practices, and will seek to apply this knowledge to his own philosophy about the values of scouting in wrestling.

It is the opinion of the investigator that knowledge gained from this study will aid interested coaches in developing a scouting format for wrestling.

As concluding comments, it is the investigators opinion that there is value in applying scouting to wrestling. It is hoped that this study will stimulate further thought on the subject, and that the merits of scouting prove evident through stimulated interest in applying scouting to wrestling.

Scouting in wrestling appears to lack the development of the level of scouting applied to the major sports areas of football, basketball, and baseball. As the popularity of amateur wrestling grows, and interest in promoting the caliber of competition increases, it is the investigator's premise that the need for a more comprehensive and useful scouting report will become more intense. Therefore, the investigator recommends that knowledgeable readers of this study, or recipients of this study's results, publish their thoughts about means of improving the design and the content of wrestling scouting reports. It is further recommended that a study be conducted on the effect of scouting on the win-loss records in high school wrestling.

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APPENDIX A

APPENDIX A

QUESTIONS ASKED ABOUT METHODS OF SCOUTING  
WRESTLING ON RESEARCH QUESTIONNAIRE

WRESTLING SCOUTING TECHNIQUES QUESTIONNAIRE

Introduction: The purpose of this survey is to determine the quantity and quality of scouting prior to dual matches and tournament competition by Washington State, Class A, wrestling coaches. In order to make this study significant and complete your cooperation will be sincerely appreciated and the results of this study may be of benefit to you in your coaching as well as benefiting the quality of wrestling coaching strategy within the State of Washington. As a participant in the study, the results will be mailed directly to you upon completion of the study.

Instructions: Please check one or a combination of responses to the statements below. For clarity, space has been made available to make comments in cases where none of the responses specifically apply to your situation. If the statement does not apply, please specify (Does Not Apply). If you have any information which you feel would be beneficial to the study, e.g. a copy of your scouting form, please include this in your reply. For your convenience a self-addressed, stamped envelop has been included with this form.

1. Coaching Training

- A. No previous experience
- B. Reading knowledge
- C. Class instruction

## APPENDIX A (continued)

- D. Athletic experience, high school
- E. Athletic experience, collegiate
- F. Other (Specify) \_\_\_\_\_

## 2. Head coaching experience

- A. 0-1 year at present institution
- B. 2-3 years at present institution
- C. 4-or more years at present institution
- D. Years at previous institutions, Specify number of years \_\_\_\_\_
- E. Assistant coaching, specify number of years \_\_\_\_\_
- F. Other (Specify) \_\_\_\_\_

## 3. Use of scouting report

- A. Never use scouting
- B. For dual match competition only
- C. For tournaments only
- D. For B. and C.
- E. Other (Specify) \_\_\_\_\_

## 4. Who does scouting

- A. Team member
- B. Avid fan
- C. Assistant Coach
- D. Faculty member
- E. Head Coach
- F. Other (Specify) \_\_\_\_\_



## APPENDIX A (continued)

## 5. General scouting media

- A. Analysis of news reports
- B. Observation (relying on mental notes)
- C. Written report
- D. Filming (8mm or 16mm)
- E. Tape recording (vocal)
- F. Video television
- G. Statistical analysis (e.g. scorebook, etc.)
- H. Other (Specify) \_\_\_\_\_

## 6. Preferred scouting media

- A. Analysis of news reports
- B. Observation (relying on mental notes)
- C. Written report
- D. Filming (8mm or 16mm)
- E. Tape recording (vocal)
- F. Video television
- G. Statistical analysis (e.g. scorebook, etc.)
- H. Other (Specify) \_\_\_\_\_

## 7. General information desired in content of scouting report

- A. History of team performance
- B. Individual athletes records
- C. Basic team skill techniques
- D. Individual skill techniques
- E. Team physiological make-up
- F. Individual physiological description

## APPENDIX A (continued)

\_\_\_ G. Other (Specify) \_\_\_\_\_

8. Specific individual or team information included in your scouting report

\_\_\_ A. Strategy (technique used for set-ups)

\_\_\_ B. Aggressiveness (offensive or defensive)

\_\_\_ C. Form (standard or unorthodox)

\_\_\_ D. Speed (slow, medium, or fast)

\_\_\_ E. Mobility (forward or lateral)

\_\_\_ F. Strength (power)

\_\_\_ G. Conditioning (endurance)

\_\_\_ H. Moves (description)

\_\_\_ I. Frequency (moves attempted or succeeded or favored)

\_\_\_ J. Somatotype (body build)

\_\_\_ K. Vulnerability (strengths or weaknesses)

\_\_\_ L. Composure (tense or relaxed)

\_\_\_ M. Attitude (desire)

\_\_\_ N. Other (Specify) \_\_\_\_\_

APPENDIX B

## APPENDIX B

### QUESTIONS ASKED ABOUT COACHES ATTITUDE TOWARD SCOUTING WRESTLING ON RESEARCH INTERVIEWS

1. Have you found that the comparative results of individual contestants in wrestling to be impractical and misleading, because of the variable of pairing individuals? (A over B, B over C, therefore A over C)
2. Knowing that the written scouting report technique is the most popular technique used by double A wrestling coaches in Washington, are you in agreement that the written report is the best technique?
3. Knowing that the majority of the double A wrestling coaches of Washington agree that a combination of scouting techniques used in conjunction with each other, rather than using one primary technique, is the most desired method of scouting; as a scout would you do likewise?
4. In your observations of high school class double A wrestling teams, have you found that individual team members show enough similarities to report team tendencies?
5. Do you believe that an apprentice coach, with two or three years of high school wrestling coaching experience, would be more likely to scout than the beginning (less orientated) novice coach, who has none or only one year of high school wrestling experience?
6. Do you believe that an apprentice coach, with two or three years of high school coaching experience, would be more likely to use scouting than an experienced, journeyman coach, with four or more years, who has more established methods of coaching?
7. Do you believe that coaches with athletic experience in wrestling (high school or collegiate) would be as likely to scout as the coach without athletic experience?
8. Do you believe that the most reliable scouting report is one compiled by the head coach?
9. After gathering the information from a scouting report do you believe that a coach should reveal the scouted information to his wrestlers?
10. Have you encountered a wrestling situation in which you believe that the use of a good scouting report has directly influenced the outcome of a participant's or team's match?

APPENDIX C

APPENDIX C

ILLUSTRATION OF COMPLEX CHI SQUARE AND  
CONTINGENCY COEFFICIENT PROBLEM

For clarification, the following example will show the computations for the complex chi square and contingency coefficient used in this study. The problem was based on two questions on the survey questionnaire, the amount of scouting and the coaching experience level. Each variable is divided into three categories: coaching experience, novice, apprentice, and journeyman; and amount of scouting, no scouting, occasional scouting, and extensive scouting.

AMOUNT OF SCOUTING

COACHING EXPERIENCE	NO SCOUTING	OCCASIONAL	EXTENSIVE	
Novice	A 1	B 1	C 5	A+B+C=7
Apprentice	D 1	E 4	F 5	D+E+F=10
Journeyman	G 7	H 2	I 19	G+H+I=28
	A+D+G = 9	B+E+H = 7	C+F+I = 29	TOTAL = 45

$$\text{Cell A:E} = \frac{7 \times 9}{45} = \frac{63}{45} = 1.400$$

$$\text{Cell B:E} = \frac{7 \times 7}{45} = \frac{49}{45} = 1.088$$

$$\text{Cell C:E} = \frac{7 \times 29}{45} = \frac{203}{45} = 4.511$$

$$\text{Cell D:E} = \frac{10 \times 9}{45} = \frac{90}{45} = 2.000$$

$$\text{Cell E:E} = \frac{10 \times 7}{45} = \frac{70}{45} = 1.555$$

$$\text{Cell F:E} = \frac{10 \times 29}{45} = \frac{290}{45} = 6.444$$

$$\text{Cell G:E} = \frac{28 \times 9}{45} = \frac{252}{45} = 5.600$$

$$\text{Cell H:E} = \frac{28 \times 7}{45} = \frac{196}{45} = 4.355$$

$$\text{Cell I:E} = \frac{28 \times 29}{45} = \frac{812}{45} = 18.044$$

$$x^2 = \sum \frac{(o-e)^2}{e} \quad \text{Where E = expected and O = observed}$$

$$\begin{aligned} x^2 = & \text{Cell A } \frac{(1-1.400)^2}{1.400} + \text{Cell B } \frac{(1-1.088)^2}{1.088} + \text{Cell C } \frac{(5-4.511)^2}{4.511} \\ & + \text{Cell D } \frac{(1-2.000)^2}{2.000} + \text{Cell E } \frac{(4-1.555)^2}{1.555} + \text{Cell F } \frac{(5-6.444)^2}{6.444} \\ & + \text{Cell G } \frac{(7-5.600)^2}{5.600} + \text{Cell H } \frac{(2-4.355)^2}{4.355} + \text{Cell I } \frac{(19-18.044)^2}{18.044} \end{aligned}$$

$$\begin{aligned} x^2 = & \frac{(.400)^2}{1.400} + \frac{(.088)^2}{1.088} + \frac{(.489)^2}{4.511} + \frac{(1.000)^2}{2.000} + \frac{(2.445)^2}{1.555} + \frac{(1.444)^2}{6.444} \\ & + \frac{(1.400)^2}{5.600} + \frac{(2.355)^2}{4.355} + \frac{(.956)^2}{18.044} \end{aligned}$$

$$\begin{aligned} x^2 = & \frac{.160}{1.400} + \frac{.007744}{1.088} + \frac{.239121}{4.511} + \frac{1.000}{2.000} + \frac{5.978025}{1.555} + \frac{2.085136}{6.444} \\ & + \frac{1.96}{5.6} + \frac{5.546025}{4.355} + \frac{.913936}{18.044} \end{aligned}$$

$$\begin{aligned} x^2 = & .114285 + .007117 + .053008 + .5000 + 3.844389 + .323577 \\ & + .35000 + 1.273484 + .050650 \end{aligned}$$

$$x^2 = 6.516510$$

The relationship between the contingency coefficient (C) and chi square is stated in the next formula.

## APPENDIX C (continued)

$$C = \frac{\sqrt{x^2}}{\sqrt{x^2 + N}} \quad N = \text{The total number of cases which is 45.}$$

$$C = \frac{\sqrt{6.516510}}{\sqrt{6.516510 + 45}}$$

$$C = \frac{\sqrt{6.516510}}{\sqrt{51.516510}}$$

$$C = \sqrt{.126493}$$

$$C = .355658$$