

A MODEL TRAINING PROGRAM FOR WHEELCHAIR
BASKETBALL OFFICIALS

A THESIS

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We hereby recommend that the thesis prepared under
our supervision by Sara Ann Kennemer
entitled A Model Training Program for Wheelchair
Basketball Officials

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DEDICATION

This thesis is dedicated to my family and friends. I am grateful for their continued support through their prayers, patience, understanding, and assistance. Without their continued encouragement this thesis would never have been completed.

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I am sincerely grateful to Dr. Jean Tague, Dr. Jean Pyfer, and Dr. Jacquelyn Vaughan for serving on my committee.

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CHAPTER I

INTRODUCTION

The education and training of officials for basketball has been carefully planned and conducted for many years. This same care, however, has not occurred in the training of officials for wheelchair basketball.

Wheelchair basketball is relatively new to the areas of athletics and recreation.

Wheelchair Basketball evolved from the Veteran's Administration Hospitals during the Post World War II era. What started out as a rehabilitation tool for veteran paraplegics and amputees, has turned into a highly organized recreation activity for active physically disabled individuals throughout the world. (Adams, 1979, p. 13)

Although minimum adaptations have been made in the National Collegiate Athletic Association basketball rules, officials must still be trained in the application of the rules governing wheelchair basketball competition. Some of the adaptations required in wheelchair basketball were discussed by Adams (1979):

Adaptations to the traveling rule requires the player to dribble, pass, or shoot the ball after

two pushes on his tire. Games of two 20-minute halves are played on regulation courts with standard height baskets. Players are placed in three classes according to their level of disability to provide fair competition. (p. 13)

In view of the adaptations that have been made in the game of basketball, it seems quite clear the officials must have a knowledge of these adaptations in order to make the appropriate judgements in a similar but new game. Of special concern to leisure professionals, with regard to wheelchair basketball, is the severe shortage of trained officials. Information about this recent and rapidly developing sport is not generally known by those who officiate in traditional basketball (Hayes, Note 1; Rouse, Note 2).

This study was conducted to assist leisure professionals in their efforts to select the most effective methods of training wheelchair basketball officials. In addition, as a result of the study, a larger pool of qualified wheelchair basketball officials was available to serve the Dallas Metroplex in the furtherance of this sport.

Purpose of the Study

The purpose of the study was to determine which of four techniques for training basketball officials for wheelchair games was the most effective.

Statement Of The Problem

The problem selected for the study was to investigate the effectiveness of a variety of training techniques in the education of basketball officials for wheelchair games. Four training regimens were utilized with four groups of four individuals each, a total of 16 subjects. Each of the groups participated in one of the following training programs:

Training program 1. Each participating official received a wheelchair basketball rule book.

Training program 2. Each participating official received a wheelchair basketball rule book and verbal instructions.

Training program 3. Each participating official in this group was given a wheelchair basketball rule book, received verbal instructions, and viewed video tapes of wheelchair basketball games.

Training program 4. Each participating official in this group was given a wheelchair basketball rule book, received verbal instructions, and viewed video tapes of wheelchair basketball games and of themselves officiating.

The National Wheelchair Basketball Rules Examination was administered to all subjects on a pre and post test basis. In addition, each subject officiated one wheelchair

basketball game during which he was rated on his performance by two judges. The study was conducted at the Bachman Recreation Center in Dallas, Texas during the 1981-1982 basketball season. This center was under the jurisdiction of the City of Dallas Parks and Recreation Department.

Hypotheses

The following null hypotheses were examined at the .05 level of significance:

1. There is no difference among the knowledge test means of the four groups of officials trained by four different methods.
2. There is no significant difference in "correct call" officiating skills among referees who have been trained by four different methods.
3. There is no significant difference in "incorrect call" officiating skills among referees who have been trained by four different methods.
4. There is no significant difference in "missed call" officiating skills among referees who have been trained by four different methods.

Definitions and/or Explanations

To promote a clearer understanding of the investigation, the following definitions and/or explanations of terms were established for use throughout the study:

Player classification system. This system enables individuals with high levels of injury to participate in a team sport. In order to maintain equality in the teams, each player is classified according to the level of injury. The classification number of the player also serves as a point value for the team. Each team is required to list this number in the official scorebook. During a game, each team is restricted to a total of 12 points when tallying player classification. These classifications are defined by Shaver (1976):

1. Class I is the most severe. This individual suffers from spinal paraplegia at T-9 or above.
2. Class II player has spinal paraplegia at T-10 or below and has no muscular control of hips and thighs.
3. Class III is for all other disabilities. (p. 177)

Numerical value system. During a wheelchair basketball game, the classification value for each team on the floor must not exceed 12 points.

Thoracic vertebrae. Adults have four distinct curves in the spinal column. These curves are referred to as being concave and convex. The thoracic vertebrae are located in the second curve; this curve is convex. A T-9 would be an injury to the ninth thoracic vertebra, and a T-10 would be injury to the tenth thoracic vertebra.

National Collegiate Athletic Association (NCAA). This organization controls the rules and regulations of male college basketball competition.

National Wheelchair Basketball Association (NWBA). This organization established the rules, regulations and guidelines for wheelchair basketball. A summary of the NWBA rules may be found in appendix C.

Limitations Of The Study

The study was subjected to the following limitations:

1. The basketball officials from the Dallas Basketball Officials Association who participated in the study.
2. The degree to which the subjects were representative of the population from which they were drawn.
3. The degree of objectivity with which the judges evaluated each subject.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter includes a review of literature related to the study which aided the investigator in the development and understanding of this research. A survey of the literature revealed that this study did not duplicate any research available at the time of the study. In fact, a review of the literature indicated that the training techniques for basketball officiating was limited to regular basketball games. This could have been because wheelchair basketball was in its infancy at that time. The references reviewed are presented under the following general headings: (a) Basketball Officiating, (b) Wheelchair Basketball, and (c) Methods of Training.

Basketball Officiating

According to Bond (1978), basketball officials must be competent and well-trained in order to meet the high level of competition that exists today. In order to meet these criteria, Bond indicates the need for establishment of local boards in order that ratings could be transferred from one local board to another. Through the establishment of such boards, uniform standards could be made for all officials which would help ensure adequately trained and

experienced officials. Such an establishment, Bond indicated, would also help meet the demands for the increasing need of experienced officials.

Ryan (1981) indicated that the personality of an official is very important because it is displayed through the execution of the call. His response to the question, "What kind of person should not be an official?" was as follows: "A person who doesn't understand why he's there, which is to supervise and judge different things that are happening on the court" (p. 12).

Smith (1981) stated that her ability to achieve the status of an advanced official was based largely on "knowing the rules of basketball" (p. 52). Fermon (1981) indicated in an interview with one of the basketball commissioners that teamwork produces better officials. Basketball officials, according to Fermon, must have the ability to work as a cohesive unit in order to climb to the top and receive high ratings (p. 57).

Chapman (1981) expressed his concern about all levels of sports officiating that appear to be changing but are not necessarily moving in the right direction. Officiating is a learning experience for both the players and for the officials. Chapman seems to feel that this growing process is changing for the worse, because the coaches are not

doing their job in teaching fundamentals to the players. When an official makes a call the player and the coach blame the official instead of taking the blame themselves. Chapman feels that officials should make an effort to grow in order to be respected by players and coaches.

Moss (1981) in his sports officiating class, pointed out to his future officials that psychologically an official must be prepared. Moss stated:

My approach has been to deal with the psychological nature of officiating right from the start. It's critical that the sports official be self-confident. If he isn't, what can he do?

Actually, officiating is a splendid vehicle for developing self-confidence. Sell yourself, then sell yourself to others. (p. 52)

In order for an official to be able to maintain good mechanics and make the right calls, Moss stresses the importance of rule knowledge and the ability to concentrate. One requirement of students in the officiating class is to know what they look like when making a call, before ever stepping on a court. In order to accomplish this students are required to work in front of a mirror like those who study the martial arts. Dynamic and positive signals are developed through repetition, as well

as developing the proper style of making a signal. This process allows the official to concentrate on the play without having to give extra thought to the officiating style.

Ives (1981) explained the importance of officials moving into his/her proper position on the court in order to see all areas. "My pet peeve is the official who only moves a few feet during a passing game" (p. 37). The author agreed with the theory of wasted energy because of so many steps taken, he feels that it is best to be in position in order to make the correct call of a foul or infraction and not be caught out of position.

The author also explained the importance of officials communicating mentally with each other through eye contact. Positioning between the two officials on the court is extremely important in making the correct calls. Failure to see that your partner has made a substantial shift in his/her positioning, and you don't, could cause immediate trouble for the officials. Ives further stated:

How many times has a coach said you missed an off-side pick or foul? If you said 'I didn't see the play,' you are admitting you were not in position. I like nothing better than to

say 'I clearly saw the play and didn't think there was an infraction'. (p. 37)

Ives (1982) discussed the differences in officials making or not making calls. Some officials go strictly by the rule book while others develop a consistent technique. Although some officials realize how foolish it is to go directly by the book, some continue to follow it to the letter. Many times an official needs to learn to hold his/her whistle in order to avoid unnecessarily interruption of the flow of the game or even overlook the infraction by warning the players. When some referees ignore minor infractions and others call them, the inconsistencies cause some officials to appear to be poor officials. It is impossible for a rule book to exemplify every possibility of rule infractions. The actual meaning of a rule book is to provide the officials with the actual intent and purpose of the rule in order for an official to intelligently apply the judgement call for each play situation.

This author forewarned officials of the possibility of facing a quandry on how often an official should talk to players during a game. Ives pointed out that some coaches may think an official is assisting a team unfairly or of causing a mild reprimand from a coach. It seems that the safest approach for officials is to not say

anything unless personally addressed. The more skilled officials try to prevent unnecessary violations and fouls. On the other hand, Ives warns officials not to talk too much, but explains ways that will help prevent too much whistle blowing.

On an inbounds play, tell the player about the designated spot and remind him he has only one step in either direction. There's ample time to do this before you hand him the ball. Also, I feel it's fair to advise the defender not to step on the sideline or to put his hands over the line while guarding an inbounder. I usually say, 'Don't reach over.' After that, he knows his limitations. (p. 31)

Ives remarked that coaches are not perfect either, even though they should know the game rules. There are a few rules that are confusing. If a coach asks for clarification of a rule during a time-out and is nice about it, the official should accommodate the coach and explain the rule when time allows. Good communication between officials and coaches facilitates the manner in which the game is played. The author does recommend that in a positive, friendly manner suggestions could be made during a game. An official should not be officiating if his/her

purpose is to refuse to talk, or blow the whistle, or to be rude.

Wheelchair Basketball

Shaver (1976) explained the reason for wheelchair basketball and discussed the rules utilized in this sport.

Wheelchair basketball encourages individuals, who because of the severity of leg disability or disability of the lower portion of the body, such as paraplegia, polio, or leg amputation to participate and compete. The game, played in wheelchairs, which must meet specification, measurements, and quality, is played according to the rules of the National Collegiate Athletic Association (NCAA). There are variations to a minimum so as not to alter the basic game. (p. 177)

Shaver (1981) indicates that any individual accepting the task of being a wheelchair basketball coach needs to remember that coaching wheelchair basketball has the same basic requirements as that of the traditional game of basketball.

Basically the coaching of wheelchair basketball should be organized and administered the same as interscholastic and/or intercollegiate

basketball. To treat the game and the individual wheelchair athlete differently in terms of physical, psychological, emotional, and social aspects can be a common error. (p. viii)

This author continued to point out to coaches that the differences in the traditional game and the wheelchair game of basketball were minimal. In comparison, the two games of basketball are more alike than different. Shaver remarked:

The major difference in coaching wheelchair basketball is the added dimensions of the wheelchair itself and the player classification system that arose from the desire to encourage and extend the opportunities of participation to more individuals and to produce more equitable competition. (p. viii)

In most cases, wheelchair basketball players are introduced to the game because of no previous history of having experienced the wheelchair game. Many players are in the process of learning to maneuver their wheelchair plus learn the game of basketball. Shaver explained that each year wheelchair players start with the basics such as rules and regulations, fundamental skill development and the general concept of the game. This author reported:

Film taken at various local and national wheelchair basketball tournaments are shown to introduce the new players to the total concept of the game. (p. ix)

Taking into consideration the limitations of a wheelchair participant being able to maneuver around or jockey for a position, it is imperative that a wheelchair athlete learn the basic fundamental skills of basketball as well as being able to execute them. Wheelchair coaches and participants need to be aware of the difference in strategies from the traditional game of basketball and that of the wheelchair game. This author explains that the basic philosophy of a wheelchair athlete is the inability to overpower their opponent, therefore teams must play the percentages in terms of defensive and offensive techniques.

In a survey compiled by Paralyzed Veterans of America (1981), "The three most popular sports listed by individuals that participate in sports on a regular basis were basketball, swimming, and weightlifting" (p. 3). The survey further indicated the need for more publicity on wheelchair sports on all levels, local and national. Like most sports, the need for financial assistance exists in wheelchair sports. These wheelchair athletes are burdened with the additional expense of a sports chair and maintenance,

plus the regular expense of equipment and supplies an athlete would need in order to participate and/or practice for a team. The idea of more media coverage would possibly provide more recognition to the area of wheelchair sports which in turn would help companies and/or individuals become aware of the need for financial assistance as a sponsor or for donations providing teams with the opportunity to participate and be able to travel to tournaments. Another area of concern pointed out from the survey is the need to construct areas around gyms and other sports arenas so that they are more accessible for wheelchair participants and/or spectators.

Methods of Training

An officials clinic involving the Metropolitan Intercollegiate Karate League of New York was conducted at The City College of New York in 1974. Costello and Molina (1975) found that in their training of intercollegiate officials at this clinic, the use of videotaping improved the performance and behavior of their subjects. The authors pointed out that the subjects were able to "see themselves as others did" (p. 37).

Alexander and Fitch (1978) used video tape recorders in their study, training physical education majors at Murray State University to officiate basketball games.

This study was to provide for practical experience and to allow the subjects to view themselves officiating. "The purpose of this project was to test the feasibility of training and testing basketball game officials through the use of video tapes of basketball games" (p. 17). Three tape recorders were set up on the court, one at each end and one in the middle. Once the filming was completed instructors would view the tapes, making a note of the film counter as to the location of fouls or violations. When the subject would view the film with the instructor the subject would then indicate to the instructor that there was an infraction.

It was revealed that several limitations existed, for example, the filming was not in color, making it difficult to differentiate the team colors, inexperienced camera operators, improper lighting, and the need for a zoom lense for the camera. These authors concluded that video taping basketball officials in action and replaying them for the subjects to study is a feasible procedure for instruction.

DelRey (1970) conducted an investigation of the use of video taping and its effects on learning the fencing lunge. During this learning process, certain and uncertain motor skills were measured. During a three day period, the fencing lunge was modified for the study. Under the

condition of certainty was the motor skill execution of the fencing lunge toward one of two stationary targets, that when contacted was illuminated. The motor skill to be executed under the condition of uncertainty was the fencing lunge to one of two stationary targets without previous instructions concerning the illumination of the target. At Queens College, forty right handed female freshmen were selected as subjects for this study. The median age of the subjects was 19 years, with the ages ranging from 18 to 20 years. Randomly assigned, the subjects were members of one of four treatment conditions. Two of the experimental groups received directions from cue cards as well as being able to view themselves on video tape. This procedure took place twice a day during the duration of the study.

Form, accuracy and latency were measured during this study in order to evaluate the learning process. Three judges with the use of a rating scale evaluated the form of each subject along with viewing the video tape performance of each subject. Accuracy depended upon how close the subject placed the tip of the foil to the center of the target. Latency refers to the elapsed time from the illuminated signal meaning the lunge was completed and contact with the target has been made. The methods of evaluation used to obtain the scores for form, accuracy and

latency was an analysis of variance and the three dependent variables were computed using product-moment correlations.

The author indicated that the use of the video tape did help produce better form, and higher form scores were produced through certain controlled conditions rather than uncertain conditions. There was no significant evidence that would indicate the use of the video tape in producing the measurement of accuracy. Better accuracy was detected under conditions of certainty. The effect of the video tape on the conditions of certainty and uncertainty had no indications of a differential effect although the use of the video tape aided in producing shorter latency.

Caine (1967) reports on his study with college men and women who are beginner bowlers. The video taping of this study was conducted in a gymnasium rather than a bowling establishment. One group was video taped and viewed a replay of their approach in bowling, while the other group was exposed to the traditional teaching technique of the bowling approach. The author found evidence of no significant differences between the two groups. He attributed these findings to the false environmental structure of the study.

In 1971, Muhr conducted a study to determine the effects of the portable video tape recorder in teaching

batting techniques to seventeen members of a university junior varsity baseball team. The seventeen players were divided into two groups, both of which received the traditional coaching techniques for batting. The experimental group received an additional teaching method, the immediate feedback from the video tape recorder. During this five week study, three days out of the week each subject in the experimental program was video taped one time at bat. Each subject viewed the video tape and based on an eleven point criteria list, each player received a critique of the performance. Both groups were video taped once a week and an overall analysis of improvement was made.

Significantly both groups made improvements in their batting skills, but more improvement was made by the experimental group during this period. The experimental group showed improvement between the first and third week and again between the fourth and fifth weeks. The control group indicated no evidence of weekly improvement.

James (1969) explains the three fold purpose why coaches use the portable video tape. First, the coach uses it for immediate feedback after practices in order to study his/her own coaching techniques. Second, the video tape provides an opportunity to study skill improvement for the players. The third purpose for the video tape is

to allow immediate analysis by both the coach and the players. The author also mentions the main use of the video tape in physical education classes was again strictly for immediate feedback.

Robb and Teeple (1969) completed a study using the video tape with beginning students. The subjects participated in self-evaluation as well as being evaluated by the instructor. The subjects were allowed to rate their techniques used in the bowling approach prior to and preceding the skill performance. With the use of the video tape, the instructor rated the subjects through replay of the tape as well as rating the subject during execution of the skill. The authors found that the students' self-evaluations were not significantly altered prior to viewing the tapes, but the instructor made two error alterations upon viewing the tapes for ratings. The authors pointed out that once the taped performance had been viewed, the instructors were more apt to determine errors made in the performance than when the actual performance was being executed.

In 1972, Taylor conducted a study that involved subjects whose skill level was beyond that of a beginner. The author used the video tape recorder to determine the effectiveness of learning and/or improvement of the swimming

whip kick with subjects whose skills represent three levels. The three skill levels were divided into subgroups that received the following instructional aids: the video tape recorder only; verbal instructions only; and the control group that did not receive instructional aids.

Findings of the study indicated that those who possessed high levels of skill showed no significant differences between the instructional aids. The subjects of middle level skills that participated in the group which received aid from the video tape recorder and verbal feedback, and those who received verbal feedback only showed to be statistically superior in their improvement in comparison to the control group. Subjects participating in the low skill level, the video tape and the verbal feedback group only and to the control group. The low skill group that was exposed to the use of the video tape recorder only showed no significant difference in comparison with the middle level skill group that used the video tape and received verbal feedback.

Wood (1970) conducted a study utilizing two high school gymnastic teams, each consisting of 20 subjects. There was a control group and an experimental group, each team with its low and high skill level of performers was divided into groups. The subjects in the experimental

group used film loops of outstanding gymnasts, subject participation, and the use of the video tape recorder, whereas the control group used film loops and subject participation. The apparatus routines studied were parallel bars, side horse, rings, and the horizontal bars. The use of the video tape recorder was found to have produced significantly superior performance by the subjects of the horizontal bar by both skill levels. The subjects in the low skill level group which used the video tape recorder improved significantly with their routine on the parallel bars. There were no significant differences when comparing the other groups.

In 1971, Rockwell authored an article on the use of the video tape recorder in baseball. It was recommended to have immediate feedback on the tapes, however, the author described an instructional program where the subjects were filmed by video tape but did not view their performance until two or three days later.

Scott (1979) established a program in continuing education for engineers who otherwise would have few opportunities for advanced learnings. The University of Massachusetts offers "a full master's degree program in electrical and computer engineering, as well as selected undergraduate courses in several branches of engineering,

are available to students at off-campus industrial sites through the medium of video tape" (p. 16). Students have a week to use the tapes and get them returned. This type of system permits students to be flexible with their work schedule and eliminates conflicts with class schedules. The educational advantage of using video tapes is the availability of student usage, to replay lectures of portions of lectures as often as necessary.

The author indicated that in order to enhance this program it was necessary to have on-site tutors available to answer questions while the student is viewing the tapes. Studies have indicated that the students who took advantage of and used the tapes for replay, generally outperformed their peers who attended classroom lectures in the same courses.

This type of program was proven beneficial to the students as well as offering new advantages for the university. There seems to be a greater selection of students who enter the university and the video tape program seems to have made many new industries aware of the relatively inexpensive, high educational quality the school of engineering has to offer.

Attitudes of the faculty seem to have improved. The faculty members involved in this video tape program seem

to want to be in the program and are better prepared for classes. The author further stated:

Faculty teach video taped courses as part of their normal teaching load without extra pay. Faculty preparation has been somewhat better for classes that will be video taped. In fact, some instructors prepare their notes ahead of time, duplicate and distribute them (copies are delivered with the corresponding video tape to industrial sites) so that during class, students can concentrate on learning rather than copying. (p. 17)

It seems that this program has indeed improved the quality of the student, increased the growth of the university and made the faculty more aware of their class presentations.

CHAPTER III
PROCEDURES FOLLOWED IN THE DEVELOPMENT
OF THE STUDY

The purpose of the study was to investigate the effectiveness of a variety of training techniques in the education of basketball officials for wheelchair games. The investigator conducted the study during a wheelchair basketball tournament in the Spring of 1982. The following procedures were used in the development of the study.

Preliminary Procedures

After identifying the need for a model training program for wheelchair basketball officials, the investigator surveyed, studied, and gathered information from all available references and human resources. The development of a tentative outline was completed and presented to the members of the thesis committee for suggestions and/or corrections. Approval for the tentative outline was obtained once revisions were made in accordance with the suggestions made by the thesis committee. Approval to conduct the study at Bachman Recreation Center was granted by Jacquelyn L. Vaughan, Ph.D., Therapeutic Recreation Specialist for the Park and Recreation Department of the City of Dallas, Texas. Permission was granted by the

Human Subjects Review Committee and the revised and approved outline was filed in the form of a prospectus in the Office of the Provost of the Graduate School.

Selection and Description of Subjects

The investigator contacted the president of the Southwest Basketball Officials Association in Dallas, Texas and explained the intentions of the study. The investigator then attended one of the meetings of the association seeking volunteers to participate in the study. A total of 16 officials, two women and 14 men, volunteered to take part in the study. All of the subjects were members of the Southwest Basketball Officials Association of Dallas, Texas. The subjects worked full time in various types of professions, from housewife to company executive.

Selection and Duties of the Judges

The judges were selected because of their experience and knowledge of wheelchair basketball. Each judge had been a wheelchair basketball player and coach for more than eight years. One judge was the commissioner of the North Texas Wheelchair Basketball Conference. The judges were responsible for rating each subject according to his/her ability to make and apply judgement calls according to the rules and regulations of wheelchair basketball.

Selection of the Instrument

A review of the literature was made in order to select an instrument that could most thoroughly measure the effectiveness of a model training program for wheelchair basketball officials. After consulting with leaders in the field of wheelchair sports and reviewing the literature, the National Wheelchair Basketball Association Rule Examination was selected to be utilized in a pre and post examination. This examination was divided into seven sections:

(a) officials and their duties, (b) equipment, (c) definitions, (d) live ball and dead ball, (e) violations and penalties, (f) fouls and penalties, and (g) player classification and team balance. The 32 question examination called for true and false answers. The judges used a rating form devised by the investigator to score the subjects as they officiated.

Collection of Data

The investigator obtained the schedule of dates and times of the wheelchair basketball games to be held at Bachman Recreation Center. Arrangements were made by the investigator to meet with the 16 subjects, as a group, prior to officiating. At the first meeting, the investigator administered the National Wheelchair Basketball Association Rule Examination to each subject. Upon

completion of the examination, each subject was arbitrarily appointed to one of four groups. The first group of four subjects received a wheelchair basketball rule book, information on the time and date they were to officiate and were then dismissed. Groups 2, 3, and 4 were then presented with a schedule that identified the specific involvement for each group over the next two weeks. Each of the 12 subjects in the three groups were then given a wheelchair basketball rule book and verbal instructions. Group 2 was then dismissed. Groups 3 and 4 viewed a video tape recording of a wheelchair basketball game. Group 3 was then dismissed. The members of group 4 officiated a wheelchair basketball game in pairs while the investigator video taped each of the two games. Each subject in group 4 then viewed the video tape of him/herself officiating after the first half of the game. The 16 participants then officiated a wheelchair basketball game, in pairs. Each subject was evaluated on their officiating skills during the game by the judges. The judges tallied all correct and incorrect calls and the missed calls made by each subject. A certified wheelchair basketball official was present on the court at all times. Prior to this evaluation, the certified wheelchair official conducted a review session in the application of wheelchair basketball rules

with the two judges. A post knowledge test on the National Wheelchair Basketball Association Rule Examination was administered to the members of all four groups.

Treatment of the Data

The results of the posttest for each subject were matched to the corresponding pretest and hand tabulated. In analyzing the data on the knowledge test, a one-way analysis of covariance was utilized, while the Kruskal-Wallis one-way analysis of variance was used in analyzing the data on skill performance. The sum of the tallies made by the judges during their evaluation of each subject was also hand calculated.

Preparation of the Final Written Report

Preparation of the final written report included presentation of the findings, a summary of the findings, a statement of conclusion, implications of the findings and recommendations for further studies. References were compiled and an appendix developed to complete the written report.

CHAPTER IV

PRESENTATION OF THE FINDINGS

The purpose of this chapter is to present the findings of the study. Data obtained from the completion of the Model Training Program for Wheelchair Basketball Officials are presented in narrative and tabular form.

Description of the Subjects

As shown in Table 1, the participants ranged in age from 26 to 55 years. The largest single age group, 43.8%, was between 26 and 30 years of age. The second largest number of participants, 31.3%, was in the 31 to 35 year-old category. The majority of the participants (75.1%) were under the age of 35.

Table 1

Age Description of Participants

Age of Participants	Number	Percentage
26 - 30	7	43.8
31 - 35	5	31.3
36 - 40	1	6.2
41 - 45	1	6.2
46 - 50	1	6.2
51 - 55	1	6.2
Total	16	100.0

The number of male and female participants is shown in Table 2. There were 14 male subjects (87.6%) and two female subjects (12.4%) in the study.

Table 2
Sex of Participants

Sex	Number	Percentage
Male	14	87.6
Female	2	12.4
Total	16	100.0

Table 3 describes the employment categories of the participants at the time of the study. The majority of the subjects (56.3%) held the position of salesman. Two categories, High School Teacher and Businessman/Business Executive, had the next highest number with two subjects each.

Table 3
Description of the Employment Categories
of the Participants

Position	Number	Percentage
Salesman	9	56.3
Businessman/Business Executive	2	12.5
High School Teacher	2	12.4
Housewife	1	6.2
Clerk, Retail Store	1	6.2
Recreation Director	1	6.2
Total	16	100.0

Hypothesis Testing

The following section presents hypotheses one through four and a summary of the analysis of the data for each hypothesis.

Hypothesis One

There is no difference among the knowledge test means of the four groups of officials trained by four different methods.

Table 4 describes the adjusted posttest means of the four groups. On the pretest, posttest the four subjects in group 4 demonstrated the greatest significant change.

On the pretest there was an average of 14.75 questions answered incorrectly and on the posttest, 8, indicating an increase in group 4's knowledge of wheelchair basketball. For the subjects in groups 1 and 2 there was a decrease of less than 1 in the number of wrong answers, and for group 3 there was a decrease of more than 3 incorrect answers. Group 4, with a decrease in incorrect answers of more than 6, demonstrated the greatest increase in knowledge. A one-way analysis of covariance was employed to obtain the adjusted posttest means for the knowledge test. The adjusted posttest means were significant at the .05 level of significance. Therefore, the hypothesis was rejected.

Table 5 is a description of the analysis of covariance between and within groups. The analysis resulted in an F of 19.73 which was significant at p .0001. This indicates there is a significant difference among the four groups.

In locating which means were significantly different, the T-Test was used. The results as found in Table 6 indicate a significant difference between groups 1 and 4, 2 and 4, and 3 and 4.

Table 4
 Knowledge Test Pretest, Posttest, and
 Adjusted Posttest Means

Group	Pretest <u>M</u>	Posttest <u>M</u>	Adjusted Posttest <u>M</u>
1	14.00	13.25	13.36
2	12.75	11.00	11.85
3	15.25	12.50	11.87
4	14.75	8.00	7.67

Note. Group 1 received the wheelchair basketball rule book.

Group 2 received the wheelchair basketball rule book and verbal instructions.

Group 3 received the wheelchair basketball rule book, verbal instructions, and viewed a video tape of a wheelchair basketball game.

Group 4 received the wheelchair basketball rule book, verbal instructions, viewed a video tape of a wheelchair basketball game, and viewed a video tape of themselves officiating.

Table 5
Covariance

Source of Variance	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between	3	69.95	23.32	19.73*	.0001
Within	8	11.52	1.44		

Note. The significant difference is reflected by an asterisk.

Table 6
T-Test Matrix For Adjusted Groups Means
On 11 Degrees Of Freedom

Group	Book	Book Verbal Instructions	Book Verbal Instructions Video Tape	Book Verbal Instructions Video Tape Video Tape
1	--	--	--	--
2	-1.8832	--	--	--
3	-1.8617	0.0193	--	--
4	-7.2965*	-4.9293*	-5.4312*	--

Note. The significant difference is reflected by an asterisk.

The second, third, and fourth null hypotheses were examined at the .05 level of significance through the use of the Kruskal-Wallis analysis of covariance to reveal a significant difference in officiating skills. The three officiating skill areas evaluated were the number of correct, incorrect and missed calls.

Hypothesis Two

There is no significant difference in "correct call" officiating skills among referees who have been trained by four different methods.

The number of correct calls made by each of the four groups is shown in Table 7. The least number of correct calls made by a subject in group 4 was 55, while 66 correct calls was the highest score in this group, a range of 11. Group 1 had the lowest scores among the groups with 25 being the least number of correct calls and 44 representing the highest score made in this group, a range of 19. In comparing group 4 to group 3, only slight differences are evident. The least number of correct calls made by a subject in group 3 was 54, only one less correct call than the score of group 4. The highest number of correct calls recorded for group 3 was 61, just 5 less correct calls than those scored by group 4.

Table 7
Kruskal-Wallis Analysis of Number
of Correct Calls

Group ^a	Range Low/High	<u>M</u>	<u>SD</u>	<u>SEM</u>	<u>H</u>	<u>p</u>
1	$\frac{19}{25 \quad 44}$	35.75	8.06	4.03	-	-
2	$\frac{22}{37 \quad 59}$	45.25	9.95	4.98	-	-
					9.51	.023
3	$\frac{7}{54 \quad 61}$	57.75	2.99	1.50		
4	$\frac{11}{55 \quad 66}$	60.50	5.32	2.67		

^an = 4 subjects per group.

The number of correct calls was analyzed through the employment of the Kruskal-Wallis one-way analysis of variance. The results produced an H of 9.51 with a significant difference of p .023; therefore, hypothesis two was rejected.

Hypothesis Three

There is no significant difference in "incorrect calls" officiating skills among referees who have been trained by four different methods.

The number of incorrect calls made by each of the four groups is shown in Table 8. The least number of incorrect calls by a subject in group 4 was 6, while 10 correct calls was the highest score in this group, a range of 4. Group 1 had the lowest scores among the groups with 21 being the least number of incorrect calls and 38 representing the highest score made in this group, a range of 17. Very little difference is exhibited between groups 4 and 3. The least number of incorrect calls made by a subject in Group 3 was 5, only one less incorrect call than the score of group 4. The highest number of incorrect calls recorded for group 3 was 11, just 1 more than the score made by group 4.

The number of incorrect calls was analyzed through the employment of the Kruskal-Wallis one-way analysis of variance. The results produced an H of 11.56 with a significant difference of p .009. Therefore, hypothesis three was rejected.

Table 8
Kruskal-Wallis Analysis of Number
of Incorrect Calls

Group ^a	Range Low/High	<u>M</u>	<u>SD</u>	<u>SEM</u>	<u>H</u>	<u>p</u>
1	$\frac{17}{21 \quad 38}$	28.00	7.26	3.63		
2	$\frac{19}{12 \quad 31}$	22.00	7.87	3.94		
					11.56	.009
3	$\frac{6}{5 \quad 11}$	8.00	2.45	1.22		
4	$\frac{4}{6 \quad 10}$	8.25	2.06	1.03		

^an = 4 subjects per group.

Hypothesis Four

There is no significant difference in "missed call" officiating skills among referees who have been trained by four different methods.

The number of missed calls made by each of the four groups is shown in Table 9. The least number of missed calls by a subject in group 3 was 6, while 10 was the highest score in this group, a range of 4. The least number of missed calls in group 1 was 24, while one subject scores 60 missed calls, a range of 36. In comparing

group 3 to group 4 and group 1 to group 2, only slight differences are evident. The least number of missed calls in group 4 was 7, only one additional missed call than the score of group 3. The highest number of missed calls recorded for group 4 was 12, just two missed calls more than those scores by group 3. The lowest number of missed calls in group 1 was 24 while the lowest number in group 2 was 25. A greater difference is noted between the highest number of missed calls in group 1, 60, and the highest number of missed calls in group 2, 27.

Table 9
Kruskal-Wallis Analysis of
Missed Calls

Group ^a	Range Low/High	<u>M</u>	<u>SD</u>	<u>SEM</u>	<u>H</u>	<u>p</u>
1	$\frac{36}{24 \quad 60}$	37.00	16.12	8.06		
2	$\frac{2}{25 \quad 27}$	25.00	2.16	1.08	12.40	.006
3	$\frac{4}{6 \quad 10}$	8.00	1.63	0.816		
4	$\frac{5}{7 \quad 12}$	10.50	2.38	1.19		

^an = 4 subjects per group

The number of missed calls was analyzed through the use of the Kruskal-Wallis one-way analysis of variance. The results produced an H of 12.40 with a significant difference of p .006. Therefore, hypothesis four was rejected.

A comparison of the number of correct calls, incorrect calls, and missed calls between the four groups was made by utilizing a Nonparametric Multiple Comparisons Test. As shown in Table 10, a significant difference was demonstrated at the .05 level of significance when comparing the number of correct calls made between group 1 and group 2, group 1 and group 3, group 1 and group 4, and group 2 and group 3.

Table 11 reveals the comparisons of the number of incorrect calls made between the four groups. At the .05 level, a significant difference was found between groups 1 and 3, 1 and 4, 2 and 3, and 2 and 4.

Table 10
 Nonparametric Multiple Comparisons
 For Correct Calls

Comparisons	<u>Q</u>	Critical <u>Q</u> (.05)
Group 1 to 3	4.368*	3.310
Group 1 to 4	3.886*	3.630
Group 2 to 3	3.674*	2.770
Group 2 to 4	3.259	3.310
Group 1 to 2	2.756*	2.770
Group 3 to 4	1.123	2.770

Note. Q-value designated by an asterisk reflects significant differences.

Note. The subjects in group 1 were the recipients of a wheelchair basketball rule book; the subjects in group 2 received a wheelchair basketball rule book and verbal instructions; the subjects in group 3 were the recipients of a wheelchair basketball rule book, verbal instructions, viewed a video tape of a wheelchair basketball game; and the subjects in group 4 received a wheelchair basketball rule book, verbal instructions, viewed a video tape of a wheelchair basketball game, and viewed a video tape of themselves officiating.

Table 11
 Nonparametric Multiple Comparisons
 For Incorrect Calls

Comparisons	<u>Q</u>	Critical <u>Q</u> (.05)
Group 2 to 4	5.818*	2.770
Group 1 to 4	4.923*	3.310
Group 2 to 3	3.952*	3.310
Group 1 to 3	3.728*	3.630
Group 1 to 2	1.429	2.770
Group 4 to 3	0.000	2.770

Note. Q-value designated by an asterisk reflects significant differences.

The number of missed calls are shown in Table 12. A comparison between groups reveals a significant difference at the .05 level between groups 1 and 3, 1 and 4, 2 and 3, and 2 and 4.

Table 12
 Nonparametric Multiple Comparisons
 For Missed Calls

Comparisons	<u>Q</u>	Critical <u>Q</u> (.05)
Group 2 to 4	4.491*	2.770
Group 2 to 3	4.438*	3.310
Group 1 to 4	4.438*	3.310
Group 1 to 3	4.411*	3.630
Group 1 to 2	2.041	2.770
Group 4 to 3	2.041	2.770

Note. Q-value designated by an asterisk reflects significant differences.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Throughout the years, the education and training of basketball officials for the traditional game have been carefully planned and conducted. Relatively new to the areas of athletics and recreation is the sport of wheelchair basketball. To date, few basketball officials have been adequately trained to officiate this rapidly growing sport.

Wheelchair basketball had its beginning in the Veteran's Administration hospitals after World War II when it was utilized as a rehabilitation tool with veteran paraplegics and amputees. Since that time this sport has evolved into a highly organized recreational activity for disabled individuals.

Adaptations have been made in the National Collegiate Athletic Association basketball rules in order to accommodate the abilities of the wheelchair athlete. In order to maintain team equality, a classification system with a point value was devised, along with other rule adaptations such as the traveling rule, and the three second land violation. Although adaptations were minimal, there is a

need for officials to be trained in the application of the rules and regulations governing the game of wheelchair basketball.

In recent years, leisure professionals have been concerned with the severe shortage of trained wheelchair basketball officials. The rapid growth of the sport brought about a situation in which the supply was far short of the demand. This study was conducted to assist leisure professionals in their efforts to select an effective method of training wheelchair officials. As a result of the study a new pool of qualified wheelchair basketball officials was made available to serve this new sport.

The present study was undertaken to investigate which of four training regimens would be most effective in educating basketball officials for wheelchair games. Bachman Recreation Center in Dallas, Texas was the site selected for the study.

The population for the study was selected from the Southwest Basketball Officials Association in Dallas, Texas. Sixteen subjects participated in the study. A pretest, The National Wheelchair Basketball Rules Examination, was administered to the subjects at the beginning of the study and a posttest was administered after the completion of each training regimen. The examination was divided into

the following seven sections: (a) officials and their duties, (b) equipment, (c) definitions, (d) live ball and dead ball, (e) violations and penalties, (f) fouls and penalties, and (g) player classification and team balance. True and false answers were required on the 32 question test.

Each group of four subjects participated in one of the following training programs: (a) rule book only, (b) rule book and verbal instructions, (c) rule book, verbal instructions, viewed a video tape of a wheelchair basketball game; and (d) rule book, verbal instructions, viewed a video tape of a wheelchair basketball game, and viewed a video tape of themselves officiating. Each subject officiated one wheelchair basketball game during which they were evaluated on their performance by two judges. The evaluation form, devised by the investigator, was completed by the two judges, both of whom were wheelchair basketball player coaches.

The following null hypotheses were examined at the .05 level of significance:

(1) There is no difference among the knowledge test means of the four groups of officials trained by four different methods. A one-way analysis of covariance was utilized in analyzing the data on the adjusted posttest

means on the National Wheelchair Basketball Rules Examination. It was found that the four subjects in group 4 demonstrated the greatest significant change. There was a pretest average of 14.75 questions answered incorrectly and on the posttest 8, indicating an increase in their knowledge of wheelchair basketball. Subjects in groups 1 and 2 indicated a decrease of less than 1 in wrong answers, and group 3 had a decrease of more than 3 incorrect answers. Group 4 had a decrease in the number of incorrect answers of more than 6, demonstrating the greatest increase in knowledge. An analysis of covariance between the groups resulted in a F of 19.73 which was significant at p .0001, indicating a significant difference somewhere among the four groups. In locating which means were significantly different from the other means, the results of a T-test indicated a significant difference in groups 1 and 4, 2 and 4, and 3 and 4. Therefore, hypothesis one was rejected.

(2) There is no significant difference in "correctly call" officiating skills among referees who have been trained by four different methods. The number of correct calls made was analyzed through the employment of the Kruskal-Wallis one-way analysis of variance. Results of the Kruskal-Wallis produced an H of 9.51 with a significant difference of p .023. Therefore, hypothesis two was rejected.

(3) There is no significant difference in "incorrect call" officiating skills among referees who have been trained by four different methods. The Kruskal-Wallis one-way analysis of variance was used in analyzing the data on incorrect calls. The results produced an H of 11.56 with a significant difference of p .009. Therefore, hypothesis three was rejected.

(4) There is no significant difference in "missed call" officiating skills among referees who have been trained by four different methods. The Kruskal-Wallis one-way analysis of variance was used in analyzing the data on the number of missed calls. An H of 12.40 demonstrated a significant difference of p .006. Therefore, hypothesis four was rejected.

In comparing the number of correct calls, incorrect calls, and missed calls between the four groups, a Non-parametric Multiple Comparisons Test was utilized. At the .05 level, a significant difference was found between groups 1 and 2, groups 1 and 3, groups 1 and 4, and groups 2 and 3 in the number of correct calls. On the number of incorrect calls, a significant difference was found at the .05 level between groups 1 and 3, 1 and 4, 2 and 3, and 2 and 4. In comparing the number of missed calls, the results of the Nonparametric Multiple Comparisons Test

produced a significant difference at the .05 level between groups 1 and 3, 1 and 4, 2 and 3, and 2 and 4.

Discussion

Literature related to wheelchair basketball officials was void. The related literature in this investigation presented some recommendations and theories which have been authenticated by the data obtained in this study.

Bond (1978) stated that basketball officials must be competent and well-trained in order to meet the ever present competition. In the training program for wheelchair basketball officials, the subjects were evaluated on their knowledge of wheelchair basketball rules and regulations by completing a pre and posttest. The National Wheelchair Basketball Rules Examination was administered to each subject. The adjusted posttest means indicated that the subjects receiving more educational training proved to be more competent in the rules and regulations of wheelchair basketball.

Chapman (1981) seemed to be concerned about all levels of sports officiating because it appeared that the level of competence was in the decline. This author explained that officiating was a learning experience. The need for learning was also substantiated in the present study. The subjects who experienced the most comprehensive training

program evidenced the maximum performance skills in officiating when evaluated by experts.

An investigation by Muhr (1971) suggested that the use of the video tape recorder in teaching batting techniques proved to be significant. Both study groups conducted by Muhr indicated improvement in their batting skills. The same findings were evident in the present study. The subjects in groups 3 and 4 both received training through the utilization of video tape recorder. Each of the groups displayed higher scores on the post knowledge test and in the application of officiating skills.

Conclusions

The findings of the investigator were consistent with the published literature within the limitations of this study. The major conclusions which seem to be indicated by the data obtained are as follows:

1. The knowledge test scores did improve with increased training.
2. The training program which offered a rule book, verbal instructions, viewing a video tape of a wheelchair basketball game and of themselves officiating prior to being judged, did prove to be the most effective method of educating officials for wheelchair basketball.

Recommendations

The major recommendations which seem to be indicated by the data obtained in the study are as follows:

1. A replication of the present study over a longer period of time to determine the retention of wheelchair basketball knowledge and officiating skills.
2. A replication of the present study with a larger number of subjects to determine the influence of age, sex, occupation, and education.
3. A survey of traditional basketball officials to determine the awareness of and interest in learning wheelchair basketball rules and regulations.
4. A replication of the present study with a variety of instructors to determine the influence of the trainer with regard to wheelchair basketball knowledge and skill.
5. Universities should offer rules and regulations for wheelchair sports in regular officiating classes.

APPENDIX A

CONSENT FORM



CITY OF DALLAS

November 10, 1981

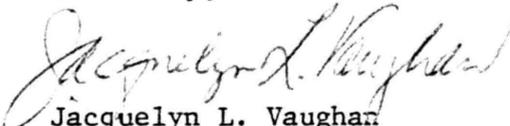
Sally Kennemer
2975 Carizzo
Dallas, Texas 75229

Dear Ms. Kennemer;

This is to verify that you have permission to conduct your study on "Training Wheelchair Basketball Official" at Bachman Recreation Center. If we can assist you in any other way, please do not hesitate to contact me.

Best wishes with your research.

Sincerely,


Jacquelyn L. Vaughan
Director

fr

APPENDIX B

WHEELCHAIR BASKETBALL OFFICIATING EVALUATION FORM

WHEELCHAIR BASKETBALL OFFICIATING
EVALUATION FORM

Subject	Number of Correct Calls	Total	Number of Incorrect Calls	Total	Number of Missed Calls	Total
GROUP I						
Game 1						
Subject 1						
Subject 2						
Game 2						
Subject 3						
Subject 4						
GROUP II						
Game 1						
Subject 5						
Subject 6						
Game 2						
Subject 7						
Subject 8						
GROUP III						
Game 1						
Subject 9						
Subject 10						
Game 2						
Subject 11						
Subject 12						
GROUP IV						
Game 1						
Subject 13						
Subject 14						
Game 2						
Subject 15						
Subject 16						

APPENDIX C

NATIONAL WHEELCHAIR BASKETBALL ASSOCIATION
RULES AND DEFINITIONS

National Wheelchair Basketball Assn. Rules and Definitions

Wheelchair basketball is played in accordance with NCAA Rules with very few exceptions. These exceptions are:

PLAYER

Any individual who, because of permanent severe leg disability or paralysis of the lower portion of the body, will benefit through participation in wheelchair basketball, and who would be denied the opportunity to play basketball were it not for the wheelchair adaptation, is eligible.

WHEELCHAIR

The approved chair is the standard Everest and Jennings Universal Model or its equivalent. The height of the seat must not exceed 21" from the floor. The height of the foot platform or first point of contact must be no more than 4 1/2" from the floor. Seat cushions are permitted for medical and therapeutic reasons: a medium weight foam rubber is permitted (2" maximum thickness for Class III players and 4" maximum thickness for all other players). A heel strap of 1 1/2" width (minimum) must be attached to the foot platform bars. Each chair must be equipped with a roll bar or other protective device to insure against damage to the playing surface.

CONTACT

The chair is considered a part of the player. General rules of contact in regular basketball (charging, blocking, etc.) apply to wheelchair basketball.

JUMP BALL

For any jump ball, each jumper shall remain firmly seated in his chair (i.e. not lift buttocks off seat by use of arm or leg or force of movement) and shall be in the jumping circle at a 45 degree angle to his own basket.

TIME LIMITS

An offensive player cannot remain more than 5 seconds in the free throw lane while the player's team is in possession of the ball.

DRIBBLE

A player in possession of the ball, may not push more than twice in succession with one or both hands in either direction without tapping the ball to the floor again. Taking more than two consecutive pushes constitutes a traveling violation. A player may, however, wheel the chair and bounce the ball simultaneously just as an able-bodied player runs and bounces the ball simultaneously in regular basketball.

LOSS OF BALL

If a man in possession of the ball makes any physical contact with the floor or tilts his chair so far forward that the footrests touch the floor or as far backward that the anti-tip (safety) casters touch the floor, it is a violation and the ball is awarded to the other team.

OUT OF BOUNDS

A player is considered out of bounds when he or any part of his wheelchair touches the floor on or outside the boundary.

PHYSICAL ADVANTAGE FOUL

Because of the varying causes and manifestations (degrees) of disability among participants, a basic rule of keeping firmly seated in the wheelchair at all times and not using a functional leg or leg stump for physical advantage over an opponent, is strictly enforced. An infraction of this rule (rebound, jump ball, etc.) constitutes a physical advantage foul. It is so recorded in the official score book. Three such fouls disqualify a player from the game. A free throw is awarded and the ball is given to the opposing team, out of bounds.

BACK COURT FOUL

A defensive player who commits a personal foul in his opponent's back court, shall be charged with a back court foul. The offended player shall be awarded two (2) free throws.

FALLING

If a player falls out of his chair during play, the officials will immediately suspend play if there is any chance of danger to the fallen player. If not, the officials will withhold their whistles until the particular play in progress has been completed. If a player falls out of his chair to gain possession of the ball or by falling keeps his opponents from gaining possession of the ball, the ball is awarded to the opposing team.

PLAYER CLASSIFICATION AND TEAM BALANCE: PURPOSES

To encourage more severely disabled individuals to participate.

To extend the opportunities of participation to more individuals.

To encourage new teams.

To make competition more equitable among existing and new teams.

To counter what seems to be a tendency on the part of some of the teams to have all lesser disabled people, thereby seemingly discouraging the more severely disabled and making for inequitable competition.

To maintain high standards of competition, quality of play and spectator interest.

PLAYER CLASSIFICATION

Class I—Complete motor loss at T-7 or above or comparable disability where there is total loss of muscle function originating at or above T-7.

Class II—Complete motor loss originating at T-8 and descending through and including L-2 where there may be motor power of hips and thighs. Also included in this class are amputees with bilateral hip disarticulation.

Class III—All other physical disabilities as related to lower extremity paralysis or paresis originating at or below L-3. All lower extremity amputees are included in this class except those with bilateral hip disarticulation (see Class II).

TEAM BALANCE

Each classification will be given a numerical value or factor as follows:

Class I—1 value point

Class II—2 value points

Class III—3 value points

At no time in a game shall a team have players participating with total points greater than twelve (12) on the floor at the same time.

CONTROL AND ENFORCEMENT

The official scorer is responsible for seeing that personnel on the floor for either team at any given time does not exceed the twelve (12) points. (This only has to be checked at the start of each half and at the time of substitutions. No checking of the total value points is necessary if a I substitutes for a I or II, or a II substitutes for a II or III. It is only necessary if a III substitutes for a II or a I, or a II substitutes for a I.)

If, at any time during a game, it is identified that a team exceeds the "player point limit," a Technical Foul is called against the violating team and handled as all other Technical Fouls, with a correction in the lineup being made at that time.

Any error in the listing of the classification of players in the scorebook, whether intentional or accidental, is the responsibility of the particular coach and justification for protest and forfeit.

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