

A STUDY OF GIRLS' BASKETBALL IN KANSAS

A THESIS

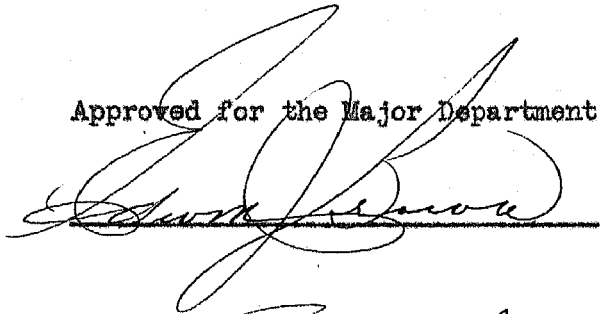
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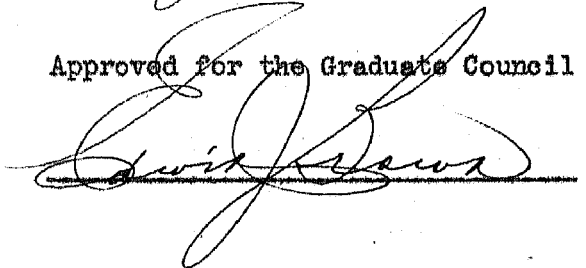
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CHAPTER I

INTRODUCTION

THE NATURE OF THE STUDY

This is a study of the status of girls' basketball in Kansas. It describes the growth and development of the game as presented by one hundred former players, eighty-six principals of Kansas high schools, and sixty-two Kansas physicians. The intent of the study is to try to give a clear and valid description of girls' interscholastic basketball in Kansas and to interpret the present status of the sport reliably.

THE PURPOSE OF THE STUDY

Many schools of Kansas in the past few years have dropped girls' basketball while a few have introduced it into their athletic program. The reasons for these changes seem to be only opinions and beliefs rather than actual data or facts which would make the changes seem advisable.

In an attempt to obtain the best available facts on girls' basketball, inquiry blanks were sent to women who formerly played basketball in high school. They were women who have had time to discover the harmful or beneficial after-effects, if any, and to recognize and appreciate the values of the game where, and if any, such values exist. To gain additional information, physicians and principals were consulted.

In making this research the thought kept constantly in mind has been, "If girls are harmed by playing basketball, the game should be dropped from

the high school curriculum. If basketball leaves no harmful effects, girls should not be deprived of a good wholesome sport."

THE SOURCES OF DATA

The data used in this study have come from articles gathered through libraries and through the inquiries sent to former players, principals, and physicians. Persons scattered over all sections of Kansas were selected for the investigation.

The names of former players were secured through personal interviews with school men and friends not in school work, and by consulting high school yearbooks.

The doctors' names were secured through a medical directory with emphasis on reaching a representative group of physicians in Kansas.

The inquiries for principals were sent to schools of different sized enrollments, with the largest per cent being sent to third class schools where interscholastic girls' basketball is most commonly played.

The inquiry blanks used in this study may be found in Appendix A. The letters that were enclosed with the inquiry are in Appendix B.

CHAPTER II

HISTORY AND GROWTH OF BASKETBALL

Knowledge of the history and growth of girls' basketball is essential in developing significant and meaningful reasons for making this study. The materials used were gathered from libraries and will cover the following phases: 1. The development of basketball. 2. The extent to which girls' basketball has been and is being played. 3. The growth of girls' basketball. 4. The present status of girls' basketball.

According to Marsh,¹ athletics started in our schools in about 1880, beginning in boarding schools where pupils, relieved from home duties, had too much time for loafing. The movement spread rapidly, first to the private day schools, and second, to the public high schools.

"Basketball sprang from the ingenious mind of James Naismith, an instructor in the gymnasium of the Y.M.C.A. Training College, Springfield, Mass."²

Dr. Naismith first thought of the skill required to throw a soccer football into a basket.³ The sight of an ordinary peach basket is said to have completed his idea and from that beginning, basketball developed.

¹ W. R. Marsh, "School Athletics"; Journal of Education, Vol. LXV, p. 65. (January 17, 1907.)

² Editorial, "How Sports Grow"; The Literary Digest, Vol. LII, p. 318. (February 5, 1916.)

³ B. Bulger, "Army of Basketball"; The Saturday Evening Post, Vol. CCIV, p. 43. (January 9, 1932.)

There was no limit to the number of persons on a team, at first.

Immediately the players sensed the possibilities of strategy. The only way in which the ball could be advanced, without throwing it, was by bouncing it along the floor. That was technically called dribbling, and it quickly developed into an art.

The first time Dr. Naismith put his idea into practice was in 1891, and by 1894 the game had spread to foreign countries.⁴ Women had played the game even before 1894.

Dr. Naismith was appointed physical education and chapel director at the University of Kansas⁵ in 1898. He brought the game to that university, and records show intercollegiate competition in the spring of 1899. Games were played with Nebraska as early as 1902 and 1903. When the original Missouri Valley Conference was formed in 1907, basketball competition soon followed with Kansas, Missouri, Kansas State, Washington, Drake, and Grinnell scheduling games.

Basketball has changed little since Naismith's day.⁶ The size of the ball, the diameter of the basket and its height from the floor, the number of men on a team--these details have, of course, been standardized. But in virtually every other respect basketball is the identical game which Dr. Naismith deliverately invented to eliminate tedium from gymnasium work.

It was in 1892 that Mrs. Senda Berenson Abbott, first editor of the

⁴ Editorial, loc. cit.

⁵ W. A. Dill, "Dr. Naismith Makes a Basket"; The Christian Science Monitor, p. 6. (May 27, 1936.)

⁶ Editorial, loc. cit.

Women's Basketball Guide, made adaptations of the game which prevails in women's basketball today.⁷ Although this simple game was designed to avoid roughness, it was obviously a little too strenuous for girls.⁸ Mrs. Abbott, who was at that time Miss Berenson, introduced the game as part of the physical education work for women at Smith College in 1893. In order to lessen the physical strain, however, the floor was divided into three sections by plainly marked lines.

Baskets were originally closed at the bottom.⁹ Much playing time was consumed while the players waited for a referee to climb a ladder to get the ball out of the basket after each goal was scored. Open-bottom baskets were introduced in 1908. Goals that were closed at the bottom were still advertised in the Official Guides in 1918.

Until 1923, guarding in only the vertical plane was permitted in the rules for girls. In 1923 the rules were changed so that guarding was allowed in any plane as long as there was no personal contact.

Although the court is still divided into sections, the two-division game is fast replacing the three-division game in popularity.

In 1920 Miss Richards¹⁰ examined the entrance records of twelve hundred students at Smith College, which admits girls from many and various

⁷ W. E. Meissner, "Ladies of the Court"; The Christian Science Monitor, p. 3. (March 9, 1938.)

⁸ Bulger, op. cit., p. 142.

⁹ Meissner, loc. cit.

¹⁰ Elizabeth Richards, "Everyday Problems in Girls' Basketball"; American Physical Education Review, pp. 407-11. (December, 1920.)

secondary schools all over the country. From these she found that four hundred, or one third of the total group, had not played basketball. If these figures are representative, then about two thirds of the girls in high school, at this time, were playing basketball. There is, of course, no evidence that the sampling presents an accurate picture of the country as a whole.

From a study made in 1931, it was found that 90 per cent of the approximately 16,000 four-year high schools and senior and junior colleges in the country maintain inter-institutional basketball teams.¹¹ Allowing twenty men to each of these 14,400 squads would produce the interesting total of 228,000 youth participating in the game in those institutions. In addition, there were the intramural games in which the ratio of players was figured at more than three to one, bringing the total of players in secondary schools to an estimated million. The figures above do not take into account, of course, the twenty million children, a great many of whom also play basketball, who were in public schools other than senior high schools.

There were still other teams and other organizations that played the game. Officials estimated the number of youths playing the game under Y.M.C.A. auspices at approximately 100,000, and the number in industrial, religious, and welfare organizations, in the American Legion, in the boy scouts, and in similar groups at 200,000 and more. That was in the United States alone. Dr. James Naismith has estimated that eighteen million persons all over the world play basketball during any given calendar year.

¹¹ Editorial, "Basketball's Bottomless Net Holds a Great Popular Vote"; The Literary Digest, Vol. CXI, pp. 38-40. (October 31, 1931.)

The figures are, of course, for both sexes.

The first interscholastic athletic contests in high schools were not supported, recognized, or controlled by the school authorities.¹² As such contests attracted the attention of the public and interest in them was aroused, the athletic programs became more extensive and the need for supervision on the part of school authorities became apparent. There is no doubt but that the popularity of basketball surpasses that of any other high school game.

A questionnaire study was made by Newman¹³ in which he included all of the high school principals in Kansas. His study showed that 69 per cent of the principals returned their questionnaires. The data were taken from the school records of the last semester of the school year, 1931-32, and the first semester of the school year, 1932-33.

Ninety-eight per cent of the schools that reported on Newman's inquiry in 1932-33 included basketball among their interscholastic athletic contests. However, an increasing number of schools were abandoning the practice of promoting such contests for girls. The study showed that a little less than half of the schools conduct interscholastic athletics for girls in Kansas.

A more recent study made by Miss Hinton¹⁴ showed forty-two of the eighty-two schools reporting to have competition with other schools for

¹² L. C. Newman, "Athletics in Secondary Schools of Kansas"; in The Kansas Teacher, Vol. XXXIX, pp. 13-15. (April, 1934.)

¹³ Ibid., p. 15.

¹⁴ Evelyn A. Hinton, "Girls' Basketball in Kansas"; in The Kansas Teacher, Vol. XXXVIII, p. 11. (January, 1934.)

girls. This was approximately fifty per cent of the total.

Probably the one big reason for the apparent decline of girls' basketball is the intramural athletics movement,¹⁵ which came into full swing about 1925. "Of the 327 secondary schools included in Dr. Brammell's study, 231 reported a program of intramural athletics," states an editorial in School and Society. The part of the report which deals with interscholastic athletics calls attention to the fact that, almost without exception, the 327 selected schools report that they engaged in interscholastic contests especially for boys. A number of schools were abandoning interscholastic contests for girls.

A study reported by Delaporte¹⁶ in 1922, indicated that intramural athletics for girls occupy a prominent part of the physical education program in every high school.

When girls' basketball was at its greatest popularity, it is reasonable to assume that about 60 per cent of the secondary schools of the nation were participating. In the study reported in the following pages, an estimate of the status of competitive basketball for girls in Kansas high schools is made.

¹⁵ Editorial, "The Status of Intramural and Interscholastic Athletics"; in School and Society, Vol. XXXIX, pp. 266-7. (March 3, 1934.)

¹⁶ E. C. Delaporte, "Administration and Control of Athletics in the Public Schools"; in American Physical Education Review, pp. 100-102. (March, 1922.)

CHAPTER III

REACTIONS OF FORMER PLAYERS TO GIRLS' BASKETBALL

As has been explained previously, the information presented in this chapter and in the two following chapters was obtained through a check-type inquiry or "questionnaire."

One hundred returns from 128 questionnaires sent to former players of girls' basketball were received and compiled. This means that 78.1 per cent of the former players answered the questionnaires.

The returns indicated that the questionnaires reached a group that had played an average of 3.39 years or seasons of basketball.¹ Figure 1, on the following page, indicates that the largest per cent of the girls played from thirteen to fifteen games a season. These figures were, of course, approximations and eight of the returns stated they could not even approximate the number of games played.

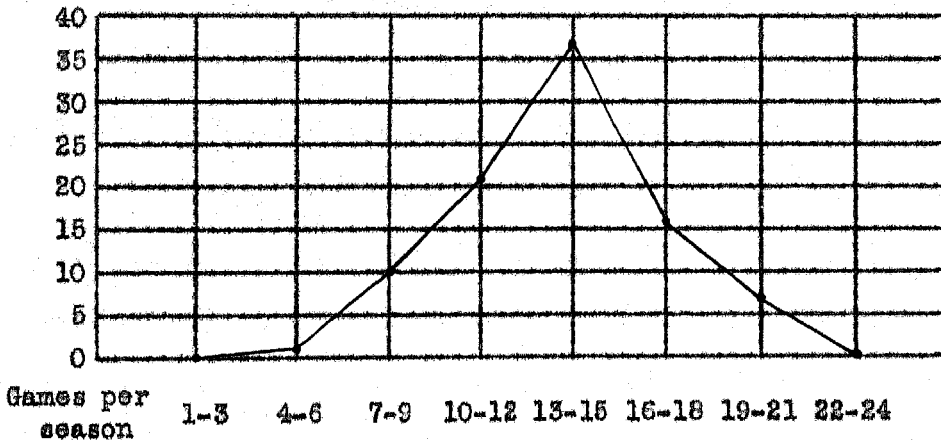
Table I on page 12 has been worked out on a percentage basis. The items for the table were taken from the questionnaire, a copy of which may be found in Appendix A.

An investigation of Table I shows that 11 per cent of the girls report that they had been seriously injured while playing basketball. The figures, of course, are relative as there is no evidence of how serious the injuries were, or of how many "serious" injuries were forgotten during the

¹ Any mention of basketball throughout the study from this point on should be interpreted to mean girls' interscholastic basketball.

intervening years. Of this 11 per cent, five or 5 per cent felt that they have specific weaknesses caused from playing basketball. The other six said they had weaknesses resulting from basketball, but not caused by any specific injury they had received. However, from this 11 per cent who were seriously injured, only two said they would do away with interscholastic basketball for girls entirely. The other nine that said they would do away with basketball were not girls who had received injuries; they probably received some of the ill-effects from basketball that were given by the physicians such as: "Misplacement of female organs," "Heart trouble," "Difficulty in child birth," "Permanent physical disability," and "Irregularity of menstruation."

Number of
girls



Read figure thus: one girl played from 4 to 6 games a season, ten girls played from 7 to 9, etc.

FIGURE 1

APPROXIMATE NUMBER OF GAMES PER SEASON PLAYED
BY GIRLS IN KANSAS HIGH SCHOOLS

In Table I it appears that if the girls were not coached by a man they would be coached by a woman. The discrepancy lies in the fact that some were coached by both.

One of the significant factors of the table shows that eighty-two of the one hundred former players thought tournaments advisable but only nineteen felt that it was all right to play more than one game a day. The sincere answers to the questionnaires and accompanying letters make these data seem acceptable as a representative cross-section of opinions from former girl basketball players.

In forty-two of the one hundred cases the girls were allowed to determine their own "fitness"; the other fifty-eight were not allowed to determine their "fitness." The answers received from the former players were not consistent, because fifty-nine of the one hundred answered yes to the question, "Did others decide the girls' fitness?"

A significant factor to be considered is that forty-eight or 48 per cent stated they had missed games because of periodic illness. However, fifty-eight or 58 per cent stated they were not allowed to determine their "fitness." It was found through an investigation of the inquiries that only thirty-three, of these fifty-eight, actually did miss games because of periodic illness. This would indicate that although in many cases the girls were not allowed to determine their own "fitness" they were not kept from the game. Also the data show that fifty-three of the one hundred had played more than one game a day.

TABLE I

QUESTIONNAIRE RETURNS FROM ONE HUNDRED FORMER
PLAYERS OF GIRLS BASKETBALL IN KANSAS

	per cent answering "yes"	per cent answering "no"	per cent having no opinion
Were you ever seriously injured while playing?	11	89	0
Were the girls allowed to decide their own fitness?	42	58	0
Did others decide the girls' fitness?	59	39	2
Were you coached by a man?	49	51	0
Were you coached by a woman?	78	22	0
Did you ever play in a tournament?	87	13	0
Did you ever play more than one game a day?	53	43	4
Did you miss a game because of periodic illness?	48	52	0
Have you had any weakness from basketball?	11	89	0
Would you do away with basketball for girls?	11	89	0
Would you put it in every high school?	83	17	0
Are tournaments advisable?	82	17	1
Where one game a day is played?	79	18	3
Where more than one game a day is played?	19	80	1

Read table thus: 11 per cent of the former players answered the first question "yes," 89 per cent answered "no," zero per cent had no opinion on the question, etc.

The returns indicate that over half, fifty-three of the one hundred, had played more than one game a day during tournaments, but only nineteen or 19 per cent believed it to be advisable for girls to play more than one game a day.

The facts show that the former players are in favor of interscholastic basketball. In eighty-three of the cases they believed it advisable for every high school. A comparative analysis of the status of basketball in Kansas may be found in Chapter V, which should give a basis for judging the data more accurately.

In Table II below is a record of the types of injuries received by the girls while playing.

TABLE II
INJURIES RECEIVED BY GIRLS
WHILE PLAYING BASKETBALL

Nature of Injury	No. of cases
Ligaments torn loose in knee	1
Dislocation of bone in foot	1
Sprained ankle	2
Finger out of place	1
Head bump	1
Sprained wrist	1
Sprained knee	1
Sprained finger	1
Sprained back	1
Sprains	1

The injuries reported were not considered serious by the girls because, from what has already been pointed out, only two of the eleven girls

receiving the injuries believed that basketball should be excluded from an athletic program. The physicians were asked if they considered such injuries as these to be a handicap to girls in later life; in 13 (20.9%) of the cases they answered "yes." In 14 (22.6%) of the cases, the physicians knew of cases of ill health that could be traced to girls' basketball.

The information given by the former players and physicians would indicate that injuries such as sprains, bumps, dislocations, etc., received by girls in basketball are not very important; if the girls receive serious injury, probably it manifests itself in the form of ill-health in later life.

CHAPTER IV

REACTIONS OF PRINCIPALS TO GIRLS' BASKETBALL

This chapter, dealing with the status of girls' basketball in Kansas, presents material which was gathered from questionnaires received from eighty-six Kansas high school principals. It shows the reasons why the principals would abolish girls' basketball, the extent to which girls' basketball has been and is being played, and the reasons why girls' inter-scholastic basketball has been dropped in many schools.

In this part of the study, one hundred principals were selected and of these, fourteen did not answer the inquiry.

Of the eighty-six principals that did answer the inquiry, sixty-nine indicated that their schools had played girls' basketball. This is 80.2 per cent of the schools reporting. Of the total schools returning answers, twenty-one or 24.4 per cent are still playing. This would indicate that forty-eight of these sixty-nine schools have dropped the sport, which is 69.6 per cent of the number that have played.

In Table III a discrepancy in the second item was caused by incorrect scoring on the part of the principals. If the first item was scored "no," in the questionnaire,¹ the second question was not to be scored; however, some principals failed to recognize this and scored both negative. These two questions appeared thus: 1. Has your school played girls' basketball? 2. If "yes" are you still playing the game? If the second question had

¹ See Appendix A, "Principal's Reactions to Basketball for Girls."

been answered correctly, there would have been sixty-nine marking it "yes" or "no"; but there were seventy-four. Some said they were not playing girls' basketball, after stating that their school had never played. This small error does not lessen the effectiveness of the question because the correction makes clear how many schools are now playing girls' basketball. The percentages of the second question were figured on the basis of the total number reporting. Of the total reporting, 21 (24.4%) of the eighty-six schools are still playing basketball. This shows a rapid decline from the reports brought out in Chapter II. The reader will remember that the former studies reported about 50 per cent of the schools playing girls' basketball, whereas the findings of this study show approximately half that percentage.

It will be remembered that in Chapter III 11 per cent of the former players believed that basketball should be abolished. This is a much smaller number than the 65.1 per cent of the principals (Table III) who believed that it should be abolished.

In answer to the question, "Did it 'lose' money?" 57 (66.3%) said it had not lost money and 24 (27.9%) did not know whether it was a money maker or not. It was evident by a few of the answers from the principals that girls' basketball is carrying the financial burden of much of the school's athletic program. This might be the reason that some of our smaller schools are still participating in the sport.

The principals were asked to evaluate the inadequacy of the equipment. It appears that they did not have any definite rules or principles in judging the adequacy or inadequacy of the equipment worn by girls.

TABLE III

QUESTIONNAIRE RETURNS FROM EIGHTY-SIX
PRINCIPALS IN KANSAS SCHOOLS

	per cent answering "yes"	per cent answering "no"	per cent having no opinion
Has school played girls' basketball?	80.2 (69)	17.5 (15)	2.3 (2)
If "yes" are you still playing?	24.4 (21)	61.6 (53)	14 (12)
Did it "lose" money?	5.8 (5)	66.3 (57)	27.9 (24)
Was equipment inadequate?	15.1 (13)	59.3 (51)	25.6 (22)
Was public sentiment against it?	23.3 (20)	54.7 (47)	22 (19)
Was it difficult to secure games?	14 (12)	62.7 (54)	23.3 (20)
Did any girl suffer serious injuries?	10.5 (9)	61.6 (53)	27.9 (24)
Was there any wide-spread feeling that the game was too strenuous?	37.3 (32)	40.7 (35)	22 (19)
"Fitness" of the sport? (costume or exhibition phase)	23.2 (20)	53.6 (46)	23.2 (20)
Should it be abolished?	65.1 (56)	33.7 (29)	1.2 (1)

Read table thus: 80.2 per cent of the schools reported playing girls' basketball, 17.5 per cent had not played, and 2.3 per cent did not answer either way, etc.

In 13 (15.1%) of the cases, the principals believed that the equipment was inadequate and 22 (25.6%) were unable to judge the adequacy of the uniforms. This is an indication that 40.7 per cent or thirty-five of the eighty-six either did not think the equipment was adequate or did not have any definite answer.

In responding to the question, "Was public sentiment against it?"

19 (22%) did not know the opinions of the communities on the question. There were 20 (23.3%) who stated that public sentiment was against basketball, and 47 (54.7%) believed that their community sentiment was not against the sport. The reliability is questionable.

In fifty-four of the eighty-six answers, the principals thought it was not difficult to secure games; however, 20 (23.3%) did not score the item. This was undoubtedly due, to a great extent, to the fact that many of the principals were not in their present locations when basketball was being played and it was hard for them to determine a correct and valid answer to the question. The changing of location by school principals might also be an implication why such a large per cent of the principals failed to answer certain sections of the inquiry.

It is important to notice the close agreement between the per cent of injuries listed by the former players and the principals. In 9 (10.5%) of the answers the principals believed girls had received injuries, and in 11 (11%) the girls stated they had received injuries while playing. However, in one specific case the principal believed it not a fair question to ask, "Did any girl suffer serious injury while playing?" His reason was that many injuries were not reported and that he did not know of many of the injuries that actually existed. There were, no doubt, other principals who wondered if this question could be answered correctly but replied to the best of their knowledge.

In 32 (37.3%), the principals believed that there was a widespread feeling that the game was too strenuous for the girls. However, 19 (22%) did not know if any such feeling existed, and there were 35 (40.7%)

believing that the game was not too strenuous.

The costume or exhibition phase of the game received reply from 20 (23.2%) of those answering and an equal number did not have any opinion on the question. A little over half, 46 (53.6%) believed that this was not a factor worthy of consideration.

In the cases where the schools had dropped basketball, the principals were asked to give the reason for such action. With some of the similar reasons combined, it was found, as is shown in Table IV, that the largest single reason for schools dropping the sport from their program of athletics was the conviction of administrators that the bad features exceeded the benefits to be derived. This reason accounted for 24.5 per cent of the answers. In 22.6 per cent of the answers, the principals did not give any reason for dropping the sport from the athletic program. Again, there is evidence that the school administrators do not know whether the sport should be classed "good," "bad," or "indifferent" for girls.

Table IV is based on the reasons girls' basketball was actually dropped from the high school athletic program. Although some of these reasons were marked by only one of the principals they are all important in studying the status of girls' basketball.

The reasons for dropping basketball, other than the ones already mentioned, are: in 7 (13.2%) of the cases, the principals believed that the game was too strenuous for the girls; in 4 (7.5%) public sentiment was against it; lack of interest constituted 3 (5.7%) of the answers; the joining of the G.A.A., which prohibits its members from interscholastic competition, accounted for 3 (5.7%) of the reasons; "lack of competition"

claimed 3 (5.7%); "no gymnasium facilities" were 2 (3.8%); and objection of parents, boys games, moral and physical reasons, cut expenses, league disbanded, death of girl, all accounted for 1 (1.9%) of the answers.

TABLE IV

REASONS PRINCIPALS DROPPED GIRLS'
BASKETBALL IN KANSAS

Reasons	number giving reason	per cent
Conviction of administrators	13	24.5
No reason given	12	22.6
Too strenuous	7	13.2
Public sentiment	4	7.5
Lack of interest	3	5.7
G. A. A.	3	5.7
Lack of competition	3	5.7
No gymnasium	2	3.8
Objection of parents	1	1.9
Boys games	1	1.9
Moral and physical reasons	1	1.9
Cut expenses	1	1.9
League disbanded	1	1.9
Death of girl	1	1.9

Read table thus: Replying to the question, "If you are not playing basketball, why was it dropped?" 13 or 24.5% of the principals said basketball was dropped because of the conviction of administrators, etc.

The girl's death, mentioned above, did not result directly from basketball. The girl played shortly after recovering from a bad cold and pneumonia resulted.

The principals, if they thought basketball should be abolished,

were asked in the questionnaire to state the three main reasons for the decision. The reasons were combined into fourteen groups.

From an analysis of Table V, it is evident that the first eight items do show close agreement. In the lower six items, the agreement is not close enough to warrant any conclusions. It is not significant to call attention to the fact that one would be in favor of abolishing the sport because of inadequacy of dressing-room facilities, that another would drop it because of the tournaments, that still another believed commercialism was arising, that two believed girls were not good sports, that four said they had been advised against it, and that five argued that competition is too much of a nervous strain for the girls.

The first eight items are significant because of the agreement of the principals. Since there is some agreement on these items they are evidently important in the minds of a comparatively large cross-section of the principals in Kansas.

The reason receiving the largest number of tallies was "exercise too strenuous," and that receiving the next largest number was "competition causes girls to play when they are not physically 'fit.'" Twenty-three or 15.5 per cent listed that basketball was too strenuous an exercise for girls; 19 or 12.9 per cent gave the reason, "competition causes girls to play when they are not physically 'fit'"; 17 or 11.5 per cent objected because of the difficulty in supervision; 16 or 10.8 per cent opposed for financial reasons and inability to secure competent coaches; 16 or 10.8 per cent believed better exercise could be substituted; 16 or 10.8 per

TABLE V
REASONS BASKETBALL SHOULD BE ABOLISHED

	number reporting	percentage of whole
Exercise too strenuous	23	15.5
Competition causes girls to play when they are not physically "fit"	19	12.2
Difficulty of supervision	17	11.5
Financial reasons and inability to secure competent coaches	16	10.8
Better exercise can be substituted	16	10.8
No interest and competition	16	10.8
Injuries and health of girls	14	9.4
The game is too much of an exhibition and unlady-like	13	8.8
Competition is too much of a nervous strain	5	3.4
Physical education authorities and doctors advise against it	4	2.7
Girls are not good sports	2	1.4
Commercialism	1	.7
Tournament participation	1	.7
Inadequacy of dressing room facilities	1	.7

Read table thus: Replying to the question, "If you feel that inter-school basketball for girls should be abolished entirely, will you please state what you consider to be the three main reasons?" 23 or 15.5 per cent of the principals gave the reason "Exercise too strenuous" for being one of their main reasons for abolishing basketball, etc.

stated the reason of lack of interest and competition; 14 or 9.4 per cent was because of injuries and health of girls; and 13 or 8.8 per cent believed the game was more or less of an exhibition and was unlady-like.

CHAPTER V

REACTIONS OF PHYSICIANS TO GIRLS' BASKETBALL

An analysis of the questionnaires sent to Kansas physicians is found in this chapter. From the one hundred questionnaires mailed, six never reached their destination because of changes in addresses and the death of three doctors. The information in this chapter is based on sixty-two or 66 per cent of the number that actually received the questionnaires. In addition to an analysis of the reports of these questionnaires, a comparative analysis of the answers received from former players, physicians, and principals on the questionnaires is given.

There were fourteen or 22.6 per cent of the doctors who had found cases of ill health that could be traced to girls' basketball. In the questionnaire there were several defects mentioned that have been used by school officials and communities for discontinuing girls' basketball.¹ The physicians were asked if they could trace any of the named items to basketball, and 20 doctors (32.3%) answered that they could. This indicates that nearly one third of the physicians could trace some of these named items to basketball. It is important to know that from the way the question was stated, this material was factual as far as the physicians were concerned. From this factual data, the physicians' answers, because of their experience and professional training, may be much more reliable than the information gathered through other means. Are the

¹ See Appendix A, "Questionnaire to Physicians."

former players' reactions to the question governed, to some extent, by their feelings and by instances that have been forgotten?

Some of the ailments which were traced directly to basketball by physicians were as follows: 11 (17.7%) of the physicians knew of cases of misplacement of female organs; 10 (16.1%) knew of cases of heart trouble; 5 (8.1%) knew of cases of difficulty in child birth; 10 (16.1%) knew of permanent physical disability; and 10 (16.1%) knew of irregularity of menstruation. It is important to emphasize that this information was factual as far as the doctors could judge because of the way the questions were worded.

The physicians were asked if girls should be allowed to play in any strenuous game without a permit from a physician. In 90.3 per cent of the answers, the physicians believed girls should not be allowed to play without a permit. Yet forty-two of the one hundred girls reporting as mature women say they determined "their own fitness to play," and twenty-five of the fifty-eight that were not allowed to determine their own "fitness" answered that they had never missed a game because of periodic illness.

Although the physicians had found cases of ill health that could be traced to basketball, they seemed to believe that basketball actually had more healthful effects than it had harmful. In 49 (79%) of the answers returned, it was believed to be more healthful than harmful. There were 10 (16.1%) who believed that basketball was more harmful than healthful and 3 (4.9%) did not answer the question.

For the most part, the physicians were in favor of continuing the sport. It was believed by 49 (79%) that basketball should be continued;

TABLE VI

KANSAS PHYSICIANS' REACTIONS TO GIRLS' BASKETBALL

	per cent answering "yes"	per cent answering "no"	per cent having no opinion
Cases of ill health that can be traced to girls' basketball	22.6 (14)	70.9 (44)	6.5 (4)
In your experience are you able to trace any of the following items to girls' basketball	32.3 (20)	66.1 (41)	1.6 (1)
Misplacement of female organs	17.7 (11)	82.3 (51)	0
Heart trouble	16.1 (10)	82.3 (51)	1.6 (1)
Difficulty in child birth	8.1 (5)	90.3 (56)	1.6 (1)
Permanent physical disability	16.1 (10)	80.7 (50)	3.2 (2)
Irregularity of menstruation	16.1 (10)	82.3 (51)	1.6 (1)
Is basketball more healthful than harmful	79 (49)	16.1 (10)	4.9 (3)
Do you think girls basketball should be continued	79 (49)	16.1 (10)	4.9 (3)
Do you think it advisable to play girls' basketball	75.8 (47)	12.9 (8)	11.3 (7)
Do you think girls should play in tournaments?	79 (49)	19.4 (12)	1.6 (1)
Do you consider injuries such as sprains and bruises to be a handicap to girls	20.9 (13)	69.4 (43)	9.7 (6)
Should girls be permitted to play in any strenuous game without a physician's permit	8.1 (5)	90.3 (56)	1.6 (1)
Is basketball too strenuous an exercise during adolescence	29 (18)	69.4 (43)	1.6 (1)

Read table thus: 22.6 per cent answered the first question "yes," 70.9 per cent answered "no," 6.5 per cent had no opinion on the question, etc.

10 (16.1%) were not in favor of it; and 3 (4.9%) did not score the item.

If consistency is a mark of reliability, the doctors proved consistent and reliable in their answers because of the following: "Is basketball more healthful than harmful?" was answered "yes" by 49 (79%); "Do you think girls' basketball should be continued?" was answered "yes" by 49 (79%); "Do you think it advisable to play girls' basketball?" was answered "yes" by 47 (75.8%); and "Do you think girls should play in tournaments?" was answered "yes" in 49 (79%) of the returns.

About one fifth or 13 (20.9%) of the physicians believed that injuries such as sprains and bruises were a handicap to girls, and the reader will remember that 11 (11%) of the former players actually received injuries while playing. Figuring on the basis that 20.9 per cent of the physicians considered these injuries to be a handicap to the girls and that 11 per cent had been injured, the approximate per cent of injuries that is detrimental to the girls is only about 2.3 per cent.

Basketball during the adolescent period was believed to be a little more harmful than basketball in general. In 8 (12.9%) of the answers the doctors did not advise the playing of basketball, and in 18 (29%) they thought it was too strenuous a game during the adolescent period. In 43 (69.4%) of the answers they did not think it was too strenuous during adolescence; and 1 (1.6%) failed to express an opinion.

Table VII on the following page is a comparison of the answers received from former players, physicians, and principals. It gives, where possible, a comparison of the per cent that answered the question "yes." The figures in the table indicate that there has been some weakness caused

from basketball. In 22.6 per cent of the cases the doctors knew of cases of ill health that could be traced to basketball; but in only 16.1 per

TABLE VII

COMPARISON OF ANSWERS RECEIVED FROM FORMER
PLAYERS, PRINCIPALS, AND DOCTORS

	per cent of former players answering "yes"	per cent of principals answering "yes"	per cent of physicians answering "yes"
Girls receiving injuries from basketball	11 (11)	10.5 (9)	no question
Weakness or ill health caused from basketball	11 (11)	no question	22.6 (14)
Should basketball be continued	83 (83)	33.7 (29)	79 (49)
Should basketball be abolished	11 (11)	65.1 (56)	16.1 (10)
Is basketball too strenuous	no question	37.3 (32)	29 (18)
Is basketball more healthful than harmful	no question	no question	79 (49)
Is it advisable to play basketball	no question	no question	75.8 (47)
Are tournaments advisable	82 (82)	no question	79 (49)
Where more than one game a day is played?	19 (19)	no question	no question
Should girls play only with doctors' permit	no question	no question	90.3 (56)

Read table thus: 11 per cent of former players received injuries from basketball, 10.5 per cent of principals believed girls had received injuries while playing, no comparative question asked physicians, etc.

cent of the cases did the doctors think basketball should not be continued. Evidently the physicians, in some cases, believe the benefits outweigh the dangers.

The three sources differed most on the question: "Should basketball be abolished?" In favor of abolishing the game were: former players, 11 per cent; physicians, 16.1 per cent; principals, 65.1 per cent. The reader must determine who is in the best position to judge: the former player with the glamor of former days directing her thinking, the doctor with his position as a scientifically trained observer, or the principal who sees all the strengths and weaknesses with an eye unclouded by the emotion of the former player or by distance as may be true for the physician.

An analysis of Table VII has given the reader some items supporting agreement of certain questions, and it has in other instances presented conflicting results. A study of these individual items should give a more valid and comprehensive picture of the status of girls' basketball.

In item one, "Girls receiving injuries from basketball," there is a very close agreement between the answers received from former players and principals. The former players had received injuries in 11 (11%) of those reporting, and in 9 (10.5%) the principals knew of injuries resulting from the sport. The physicians were not asked a comparable question.

On the question of whether there is weakness or ill health caused from basketball, there was some agreement between the former players and physicians. In 11 (11%) of the answers the former players had weaknesses from the sport, and in 14 (22.6%) the doctors knew of ill health that was caused by basketball participation.

The principals were a little more inclined to believe that basketball was too strenuous for girls than were the physicians, but the answers do indicate some agreement. The principals believed basketball was too strenuous in 32 (57.3%) of the returns, and the physicians in 18 (29%). However, in 47 (75.8%) of the answers the physicians believed it advisable to play basketball.

The question on tournaments showed a close agreement between the answers received from the former players and the physicians. The tournaments were believed to be advisable by 49 or 79 per cent of the physicians, and by 82 or 82 per cent of the former players. The former players were the only ones asked if they thought it advisable to play more than one game a day; only 19 (19%) thought it advisable to play more than one game a day during tournaments. How tournaments could be conducted on this basis is hard to say.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

If this study has made a contribution to the field of women's athletics, it has been through the channels of presenting materials gathered from persons most acquainted with the situation: former players, who are now adult women, many of them mothers; principals of Kansas high schools; and physicians who have had contacts with girlbasketball players.

The greater part of the data was taken from inquiry blanks received from one hundred former players, eighty-six principals, and sixty-two physicians. The purpose has been:

1. To present the material received from the different sources.
2. To make a comparison of the answers received.
3. To give to the Kansas schools data and facts on the status of girls' basketball.

The following types of data were assembled from the various sources:

1. The history and growth of basketball.
2. Frequency curve for number of games played each season.
3. An analysis of the returns from one hundred former players.
4. Number and kinds of injuries received by girls in basketball.
5. An analysis of the returns from eighty-six principals.
6. The reasons basketball was dropped in certain communities.
7. The reasons principals believe basketball should not be continued.

8. An analysis of answers received from physicians.

9. A comparison of the data.

In summarizing, there are many items of importance:

1. Basketball is a sport that has spread very rapidly, it was invented in 1891.
2. About fifty per cent of the Kansas schools have at one time participated in girls' basketball.
3. The number of games played per season varied from four to six games on the one end of the scale to from twenty-two to twenty-four on the other.
4. There were 11 per cent of the girls who remembered receiving injuries while playing.
5. In 42 per cent of the answers, the former players were allowed to decide their own "fitness."
6. The former players, in 83 per cent of the returns, were in favor of having competitive basketball for women in every high school.
7. The former players were not in favor of playing more than one game a day during tournaments.
8. The injuries reported were not of a serious nature.
9. Girls' basketball is being played in 24.4 per cent of the schools that answered the inquiry.
10. The principals were opposed to basketball for girls in 65.1 per cent of the answers.
11. The main reason that girls' basketball was dropped from the high school curriculum was "Conviction of Administrators."

12. The outstanding reason why principals believe basketball should be abolished was that the exercise was too strenuous.
13. In 22.6 per cent of the answers, the physicians had found cases of ill health that could be traced to basketball.
14. The physicians, in 79 per cent of the returns, believed it all right to continue the sport.
15. Better than 90 per cent of the physicians believed girls should be made to have a doctor's permit before being allowed to play.

CONCLUSIONS

1. In most instances, where facts were asked for the answers showed close agreements; but where opinions were relied upon the returns gave conflicting results. This is evidenced by:
 - a. Injuries reported received from basketball. (Table VII, page 27; Table I, page 12; Table III, page 17.)
 - b. Weaknesses or ill health caused from basketball. (Table VII, page 27; Table I, page 12; Table VI, page 25.)
 - c. "Should basketball be continued?" (Table VII, page 27; Table I, page 12; Table III, page 17; Table VI, page 25.)
 - d. "Is basketball too strenuous?" (Table VII, page 27; Table III, page 17; Table VI, page 25.)
 - e. "Are tournaments advisable?" (Table VII, page 27; Table I, page 12; Table VI, page 25.)
 - f. "Should basketball be abolished?" (Table VII, page 27; Table I, page 12; Table III, page 17; Table VI, page 25.)

2. The types of injuries received by girls were not serious. (Table II, page 13; Table VI, page 25.)
3. Many reasons were given for dropping girls' basketball. (Table IV, page 20.)
4. There were eight important reasons why principals believed basketball should be abolished. (Table V, page 22.)

RECOMMENDATIONS

The results of this study of basketball for women in Kansas high schools, incomplete though it admittedly is, indicate the need of a state-wide survey of the situation. The following suggestions are offered for what they are worth:

1. That the Kansas State Activities Association conduct such a survey or better finance the survey under the direction of a competent worker.
2. That the suggested study determine norms both as to fact and opinion from several interested groups. Among those included should be found: principals, former players, townspeople, teachers other than coaches, coaches, physicians, nurses, and health authorities other than doctors and nurses.
3. That the results of the survey be published and that the future status of the game be determined by evidence secured from the research.
4. That, if continued as a result of the survey, the sport be strictly supervised as to equipment, coaches, schedules, tournaments, and medical examination for players.

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APPENDIX A

QUESTIONNAIRE TO PHYSICIANS

Factual

Encircle answer

- | | | |
|-----|----|---|
| Yes | No | 1. Do you know of any cases of ill health that could be traced back to girls' basketball? |
| Yes | No | 2. In your experience are you able to place any of the following named items directly to girls' basketball? |
| Yes | No | a. Misplacement of female organs. |
| Yes | No | b. Heart trouble in some one of its various phases. |
| Yes | No | c. Difficulty in child birth. |
| Yes | No | d. Permanent physical disability. |
| Yes | No | e. Irregularity of menstruation. |

Opinion

- | | | |
|-----|----|---|
| Yes | No | 1. Is basketball more healthful than it is harmful? |
| Yes | No | 2. Do you think girls' basketball should be continued? |
| Yes | No | 3. Do you think it advisable to play girls' basketball if only one game a week is played? |
| Yes | No | 4. Do you think girls should play in tournaments if only one game a day is played? |
| Yes | No | 5. Do you consider injuries such as sprains, bruises and other minor types of injuries to be a handicap to girls in their later life? |
| Yes | No | 6. Should girls be permitted to play in any strenuous game without a permit from a physician? |
| Yes | No | 7. Is basketball too strenuous an exercise during the adolescent stages? |

PRINCIPAL'S REACTIONS TO BASKETBALL FOR GIRLS

Factual data regarding the status of inter-scholastic basketball for girls.

All questions refer to this type of participation.

Encircle answer

- | | | |
|-----|----|---|
| Yes | No | Has your school played girls' basketball? |
| Yes | No | If "Yes," are you still playing the game? |
| | | If "No," why was it dropped? _____ |
| Yes | No | a. Did it "lose" money? |
| Yes | No | b. Was equipment inadequate? |
| Yes | No | c. Was public sentiment against it? |
| Yes | No | d. Was it difficult to secure participants? |
| Yes | No | e. Did any girl ever suffer a serious injury while playing? |
| Yes | No | f. Was there any wide-spread feeling that the game was too strenuous for girls? |
| Yes | No | g. Was there a question as to the "fitness" of the sport for girls because of the costume or exhibition phase involved? |

Opinion regarding girls' basketball.

Encircle answer

- | | | |
|-----|----|---|
| Yes | No | Should inter-school basketball for girls be abolished in Kansas high schools? |
|-----|----|---|

If you feel that inter-school basketball for girls should be abolished entirely, will you please state what you consider to be the three main reasons on the back of this sheet? Thank you very much for your help in this matter.

DATA SHEET FOR FORMER PLAYER

Factual data regarding the desirability of inter-scholastic basketball for girls. All questions refer to this type of activity only.

Encircle correct answer

- | | |
|----------------|--|
| 1 - 2 - 3 - 4 | 1. How many years did you play basketball? |
| Yes No | 2. Were you ever seriously injured while playing? (Consider sprains, serious bumps, fractures, etc. If "Yes," state what injury. _____) |
| Girls Decided | 3. Were the girls on your team allowed to decide their own fitness for play or did a school nurse, doctor, or a schoolwoman make the decision? |
| Yes No | |
| Others Decided | |
| Yes No | |
| Yes No | 4. Were you coached by a man? |
| Yes No | 5. Were you coached by a woman? |
| _____ | 6. Approximately how many games a season did you play? |
| Yes No | 7. Did you ever play in a tournament? |
| Yes No | 8. Did you play more than one game a day? |
| Yes No | 9. Did you ever miss a game because of periodic illness? |

Opinion

- | | |
|-------------|---|
| Yes No | 1. Have you ever had any weakness or illness which in your <u>opinion</u> traces directly to basketball? |
| Yes No | 2. Were it in your power to do so, would you do away with inter-scholastic basketball competition for girls entirely? |
| Yes No | 3. Were it in your power to do so, would you put inter-scholastic basketball for girls into every high school? |
| Yes No | 4. Are tournaments advisable for girls? |
| Yes No | a. Where but one game a day is played? |
| Yes No | b. Where more than one game a day is played? |

APPENDIX B

BEVERLY RURAL HIGH SCHOOL

BEVERLY, KANSAS

March 5, 1938

I am making a study of girls' basketball to find if it is a desirable sport for Kansas high school girls. This is a subject that is of interest to all Kansas school men.

In making this study I need the assistance of Kansas medical men to help secure my information. If girls' basketball is harmful and injurious to girls, it must be discontinued. If it is not harmful, we do not want to deprive girls of playing. While your reaction is, of course, opinion only, it is upon opinion that we must depend until we can get facts.

School administrators, former players (now mature), coaches, and physicians are being consulted. I needn't tell you, Doctor, that your help is appreciated. The consensus of opinion thus secured will be made available.

Please fill in the blank and return it in the enclosed stamped envelope. Thank you!

Cordially yours,

JDS JS
Enc.

BEVERLY RURAL HIGH SCHOOL

BEVERLY, KANSAS

March 5, 1938

Kansas schoolmen are trying to decide whether or not to drop inter-school basketball for girls. Some are for, some against. The writer has no opinion in the matter but is trying to find logical, consistent, and perhaps good reasons for whatever action is taken. He is writing to one hundred women who played inter-school basketball for two or more years while in high school. You are one of the selected women. Your name will not be used and as an individual your statement will not be published.

Will you please answer each question as carefully as you can, giving FACTS where asked for and known and OPINION where requested. Your statement is in the interest of girls who are now attending high school. If basketball is bad for them, we must stop it; if not bad, we must not deprive them of good, clean sport.

Thank you for your help. Results of the study will be made available.

Very truly yours,

JDS JS
Enc.

BEVERLY RURAL HIGH SCHOOL

BEVERLY, KANSAS

March 5, 1938

Because the question of whether or not to encourage BASKETBALL FOR GIRLS is one which is troubling the principals of smaller high schools no small amount, I am trying to make a rather thorough analysis of the subject from various viewpoints. Among persons I am consulting are high school principals; girls (now women in their own homes or in professional work) who have played inter-scholastic basketball; physicians and surgeons -- in fact, I am trying to secure as complete an evaluation as is possible of the situation. The writer has no convictions in the matter and is not trying to prove anything. Findings of the study, if worth publishing, will of course be made public.

I dislike questionnaires as much as you do and recognize their unreliability, but OPINION and some types of data are available from no other source. If you can not answer the questions I am asking, yourself, will you please give them to someone in the school who can do so? Your name will not be used, nor will your school be named without your permission. I needn't tell you that your help is appreciated.

Very truly yours,

JDS JS
Enc.

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