

A COMPARISON OF PRINCIPALS' AND COACHES' ESTIMATES
FOR NECESSARY FOOTBALL PROGRAM EXPENDITURES

A Thesis
Presented to
the Faculty of the Division of Physical Education
Kansas State Teachers College of Emporia

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

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ACKNOWLEDGMENTS

The writer wishes to express his appreciation to Dr. George Milton, his major advisor, and Dr. Ray Heath, for their assistance and guidance during this study.

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Chapter 1

INTRODUCTION

The increased cost of interscholastic athletics has become a problem for most schools. The available monies for athletics has become increasingly difficult to obtain and cannot cover the necessary items, due to increases in cost of equipment and facilities, and due to other programs being added to the curriculum.

In some schools a discrepancy sometimes existed in the perceptions of the coach and the administration as to how much money is needed to finance athletic programs. To further complicate matters, a continuous struggle between the head coach of the sport and the individual (usually the principal) having responsibility for the total school curriculum (programs) occasionally arose in terms of financial request. This dispute centered around the fact that the coach can always use more of something which is the latest, whereas the person responsible for making the budget can always see one or two more years of use for the present equipment. The coach felt that he needed a certain amount to provide a program which is geared to winning and to the safety of his athletes. The administration perceived the athletic program as a major area of expenditure and they are often called upon to account for or justify expenditures in

this area of the curriculum.

Statement of the Problem

The major area of concern of this study was to determine whether there would be a significant difference between the estimated financial needs for a season of interscholastic football as determined by the head coaches and by the principals of selected high schools in the State of Missouri.

Statement of the Hypothesis

There was no significant difference between the estimated financial needs for a season of interscholastic football as determined by the head coaches and by the principals of selected high schools in the State of Missouri.

Purpose of the Study

This was a study to establish a suggested budget for interscholastic football for a season of competition which could be utilized by all classifications of high schools in the State of Missouri.

Significance of the Study

Each year as new coaches enter the field of football, there was a problem as to how much and how many of an item will be needed for a season: by standardizing a budget, it is hoped that some of the problems would be deleted. Also, the administration would know the approximate amount needed for the football program; therefore, less friction would be

encountered between the coach and the administration concerning budget preparation.

DEFINITIONS OF TERMS USED

The following definition of terms apply in this study:

Classification of schools. This represents the following classifications:

Class A	250 students and under
Class AA	251 students to 500 students
Class AAA	501 students to 1200 students
Class AAAA	1201 students and above

Coaching jury. This is a committee of football coaches selected from each class division of the State of Missouri.

LIMITATIONS OF THE STUDY

This study had several limitations: first, only randomly selected high schools in the State of Missouri were involved. Secondly, only eighty principals and eighty coaches were contacted. Third, the jury consisted of only twenty-eight coaches. A fourth limitation was that the study concerned only football.

Chapter 2

REVIEW OF THE RELATED LITERATURE

The review of the literature will be divided into two categories, which are, the History of Interscholastic Athletics, and the Financing and Budgeting an Athletic Program.

History of Interscholastic Athletics

It was not by accident that interscholastic athletics came into existence. Athletic competition in high schools has come to be an American tradition and institution. "In no other country have interscholastic athletics developed to the same extent as in the United States." (3:472)

In the early days of school sports the students formed informal groups for competition and little organization was needed. The activities were extracurricular (outside the curriculum) and intramural (within the school) entirely. (11:470) In the early part of the 1900's, competition became keener and interschool athletics were starting to unfold. During these early days, football was the number one target for those finding fault with interschool athletics. (16:262) At first, administrators were reluctant to accept athletics in the total school program, but they soon realized that interscholastic athletics were beneficial to the schools. (4:182)

Like most of the changes in policy, curriculum additions, and emphasis, competitive athletics have come into the school system "from the outside." Communities have been expedient in adding such courses as commercial work, physical education, mechanical and industrial arts, and music to the curricula of their schools. Likewise, communities and student interest have added interscholastic athletics to the high school programs. (3:472) Furthermore, such activities came into the schools not because school administrators visualized athletics as an educational tool, but because the pupils themselves demanded this form of expression. Competitive athletics secured a foothold in secondary schools primarily as the result of the desire on the part of boys and girls for physical activity and expression; athletics were literally forced into the curriculum. (7:604) "Athletics have been called the one contribution of the students themselves to American education." (3:472)

While the schools were practically all committed to the idea that all of the students should participate in athletic activities, it was probably safe to say that not half of the boys in the secondary schools during the early part of the 1900's were seriously engaged in athletic sports. This being true, it has been suggested that athletics will grow in educational institutions until almost all the young men enrolled in these institutions will be engaged in some form of athletics. (6:305)

When this new phase of activity came into being, it was not accepted by all schools. As athletics developed in interest and in scope, it was natural that contests were arranged between schools. Many schools in the smugness of their historical backgrounds had no time for this new and nonacademic activity. Other schools seized upon it as a means of promoting their institutions and attracting interest and attention to them. (3:472) In 1902 a meeting of the National Education Association on school athletics said, "It was the general opinion of those present, who represented more than twenty states and territories, that the real boy and girl can be reached most effectively through properly regulated athletics." (6:305)

Athletic contests have been organized and administered to secure definite educational outcomes. Williams expressed this opinion when he wrote:

Man is prepared by nature to engage in competitive activities of athletic character, that such profoundly affect his abilities, attitudes, and appreciations and that therefore the conduct of athletics is of tremendous importance in education. (11:470)

It was an accepted fact, according to Forsythe, that the development of high school athletics has been the result of outstanding pioneer work done by schoolmen who were instrumental in the formation of organizations for the supervision and control of interscholastic athletics. (3:472)

Around 1907, in New York City, General Wingate, James E. Sullivan, Dr. Luther H. Gulick, and Mr. Gustavus T. Kerby, who were leaders in physical education at the time, organized

the Public Schools Athletic League. (1:689)

At first, school athletics were influenced by local communities, then larger groups formed associations and leagues. As the leagues grew and athletics developed, state-wide organizations for supervision and control of interscholastic athletics was formed around 1895, which was primarily voluntary. (3:472) In 1920, the National Federation of State High School Athletic Associations were organized. "As its name implies, this body is an organization of state athletic associations rather than of individual schools." (3:472) The objectives of the federation were described as "formulating standards, unifying eligibility codes, and encouraging the setting up of athletic administrations designed to develop the character of the players and spectators." (6:305) Development in high school administration of athletics advanced until virtually every state had its interscholastic athletic association and rules. (6:305)

Almost every athletic season has been marked by the criticism of those who wish to abolish games, and contests of every kind. Numerous evils have been cited by those who find in play destructive social forces. In 1884, Eugene L. Richards, an associate professor at Yale outlined several evils of athletics. Among these evils were:

1. The excessive amount of time required for exercise.
2. Some students give too much time to athletics.
3. The evil of betting.
4. The disorders consequent upon victories.
5. Athletics benefit the few, and those few are those least requiring the exercise.
6. Athletics are expensive.

7. It is said, that the system may develop men, but it only makes fine brutes of them, and sets before the school a false standard of excellence. (13:143)

But in spite of the evils and opinions of those who "view with alarm" the strength and virility of the sport remained. (11:470)

In response to the evils of athletics, there were men who denounced those evils. One of the most prominent was President Charles Williams Eliot of Harvard. President Eliot was an enthusiastic advocate of physical education and athletics. In a Presidential report of 1812, President Eliot pointed out:

athletic sports have "infused" into boys and young men a greater respect for bodily excellence and a desire to attain it; they have supplied a new and effective motive for resisting all sins which weaken and corrupt the body; they have quickened admiration for such manly qualities as courage, fortitude, and presence of mind in emergencies and under difficulties. (6:305)

Also, denouncing the evils of athletics, Father Francis Meyer, told the 1927 meeting of the National Catholic Education Association, he was "overwhelmed at recalling the physical, moral, and educational values accruing from athletics." (6:305)

Financing of the Athletic Program

One of the most serious problems confronting administrators today and for most of the past years has been financing the athletic program without placing the school in financial crisis. Some schools relied solely for support on gate receipts; and "it is difficult to find good reason why

this income should not be accepted if it can be controlled by the institution." (7:604) Other schools received compensation from the school board.

In regard to gate receipts for support of the athletic program, the following was stated from Katterle:

Dependency on gate receipts for financing the athletic program brings about pressures from the public that are detrimental. Commercialism is inevitable. A winning team is an opportunity to build a good athletic fund. (12:53-54)

Of course the ideal situation would be for the Board of Education to consider athletics as a part of the curriculum and pay for them out of the general fund.

In regard to the Board of Education supporting the athletic program, Williams and Brownell declared:

In the final analysis financial support for interschool athletics should be obtained from the board of education in the same manner that other school activities are maintained. (10:439)

This would make the administrator's job an easier one and relieve him of many headaches that were the direct result of trying to finance the interscholastic athletic program.

Also, regarding financing and the Board of Education support, Mckown expressed this opinion:

Let the board of education subsidize athletics. If, as has been suggested before, a winning team is necessary for financial reasons, in order that there may be a team next season or that other extracurricular activities of the school may be given financial support, then there is nothing to be done but to have a winning team. But if the board of education pays all the bills, it will remove the most important single reason for the demand for a winning team, that of finances. And if this interscholastic program is educational, then there is as much logic in the board paying for it as there is in the board paying for education in English, Music, or anything

else. In short, the board should pay the entire bill. (5:666)

The source of funds has been of primary concern to the coach. He should be aware of the limits of his budget and the attitudes of the administration toward the use of this money. Williams and Brownell have written:

Many high school coaches spoiled by false favors which were shown them as college athletes, have unwittingly transferred college standards to the secondary school. As students they have had little knowledge of, nor were they concerned with, the financial organization which furnished equipment so lavishly. Transferred to the scene of high school coaching and confronted with the problem of ordering and paying for equipment as well as using it, they sometimes make mistakes. (14:66)

In a survey of three hundred sixty-six schools, during the period of 1923-24; with an enrollment of 750-3300 students, the cost for interscholastic athletics ranged from \$666.00 to \$2,904.00. (9:134)

The Budget in the Athletic Program

Every high school should have an athletic budget representing estimated receipts and expenditures for each event. Forsythe stated: "If projects, activities, or programs are to be successful, their approximate costs must be calculated in advance." (3:472)

It has now been generally recognized that there should be a financial plan for a definite period, a budget, based upon careful estimates of needs, expenditures and probable income. (11:420) Budget preparation involved such accepted practices as (1) collecting pertinent information, (2) drafting the budget, (3) adopting the budget, and

(4) executing the budget.

If various athletic activities were supported from a central source of funds, a budget was especially important because it gives each division reasonable assurance of the amount that will be available to it. (3:472) The person in charge of a given sport, such as football or track, then would know exactly the amount of money he has to spend and conducts his sport expenditures accordingly.

There have been many definitions of a budget; for example, the budget is a statement of estimated receipts and expenditures. It estimated or anticipated the needs of the department prior to the time of expenditures and insure the necessary economics. (10:439) But it will be considered herein as an intelligently prepared estimate of suggested future expenditures for a certain period.

Constructive planning has been necessary regardless of the size of the athletic program. Although there may have been some question about the amount of income to be realized, there can be no doubt as to the absolute minimum necessary to finance the program. Williams and Brownell agreed with the necessity of an athletic budget and made this observation:

In keeping with a principle previously suggested that budgets should be planned by schools, every high school should have an athletic budget representing estimated receipts and expenditures for each event.
(15:76)

The budget has been an asset to the administration. They have justified expenditures to the taxpayer when necessary. Also, the administration knew how much money was

being spent each year.

The athletic budget has been an aid to the athletic department and the coach of each sport. The budget enabled the coach to know ahead of the season what he needed to purchase.

The school budget has not become a panacea for all financial and educational ills. It will work no miracles but, as a tool, as a means toward the end of facilitating instruction, it has become a useful and necessary instrument.

(2:610)

SUMMARY

The ultimate justification for athletics in secondary schools, was the welfare of the individual boy or girl. Any contribution that athletics can make to his welfare should be encouraged; all that tends to impair should be discouraged and, if possible abolished. These goals have been conditional upon the purposes that athletics were made to serve. In the face of many discordant and unworthy aims, the effort to direct them toward educational ends is worthwhile.

Proper administration of budget and finance has been essential to efficient operation of the interscholastic athletic program. The control of athletic finances should be the responsibility of those normally in charge of financial matters. The board of education should represent the final authority for budget preparation.

Chapter 3

METHODS AND PROCEDURES

INTRODUCTION

The major area of concern of this study was to determine whether there would be a significant difference between the estimated financial needs for a season of inter-scholastic football as determined by the head coaches and by the principals of selected high schools in the State of Missouri.

TESTING DEVICE

A questionnaire was formulated by looking through previously written theses and securing information from catalogs, sporting goods stores, and personal interviews with coaches and principals concerning the items needed for a football budget.

A jury of seven coaches from each of the four class divisions were gathered by looking through the state athletic directory and interviewed personally to determine whether they agreed or disagreed with the proposed budget.

TESTING PROCEDURE

The schools in the four class divisions were randomly selected by writing their names on paper and drawing them out

of a box separately by class division.

On November 30, 1971, a form letter and questionnaire was sent to twenty coaches and twenty principals in each division of the schools selected.

The coaches and principals of the selected schools were requested to fill out the form separately of each other and return it in a self-addressed stamped envelope. By December 7, 1971, the coaches returned thirty-six useable forms and the principals thirteen forms. In two weeks, a follow-up letter was sent to the coaches and principals that had not returned the questionnaires. From the follow-up letter an additional eight responses were received from coaches and one from principals, making a total of 55 percent return from the coaches and 17 percent return from the principals.

After tabulation, the data was analyzed and conclusions were drawn. This information was presented as part of the final report.

ANALYSIS OF DATA

The treatment of data involved computing the frequency and percentages of responses in each of the categories of the budget. Further, computation of a Mann-Whitney U-test was made for each item to find whether a significant difference exists between the responses of the group of coaches and the group of principals.

The Mann-Whitney U-test required data on at least an ordinal scale, and this data was assumed to be continuously distributed. It did not require normality of distribution nor homogeneity of variance for the groups under study. This was one of the most useful of the non-parametric tests. Following was the Mann-Whitney U-test as outlined by Siegal. (8:312)

The two formulas used to calculate the values of U were as follows:

$$U = n_1 n_2 + \frac{n_1 (n_1 + 1)}{2} - R_1$$

and

$$U = n_1 n_2 + \frac{n_2 (n_2 + 1)}{2} - R_2$$

where: n_1 = the number of cases in the smaller of two independent groups.

n_2 = the number of cases in the larger of two independent groups.

R_1 = sum of the ranks for the smaller of the two independent groups.

R_2 = sum of the ranks for the larger of the two independent groups.

In calculating the two values of U: The smaller value obtained was the value utilized to test for significant differences between two independent groups. The .05 level of significance was selected as that required for statistical significance.

In cases where $n_2 > 20$, the sampling distribution of U rapidly approached the normal curve distribution, with:

$$\text{Mean} = \bar{X} = \frac{n_1 n_2}{2}$$

and

$$\text{Standard deviation} = \sigma_X = \sqrt{\frac{(n_1)(n_2)(n_1+n_2+1)}{12}}$$

Therefore, to determine the Z value, the following formula was applicable:

$$Z = \frac{U - \frac{n_1 n_2}{2}}{\sqrt{\frac{(n_1)(n_2)(n_1 + n_2 + 1)}{12}}}$$

where the mean is zero and the standard deviation is one.

Chapter 4

PRESENTATION OF DATA

INTRODUCTION

The major area of concern of this study was to determine whether there would be a significant difference between the estimated financial needs for a season of interscholastic football as determined by the head coaches and by the principals of selected high schools in the State of Missouri.

There were one hundred sixty questionnaires sent to coaches and principals of selected high schools in the State of Missouri. The coaches returned forty-four forms and the principals fourteen forms, which was fifty-five percent and seventeen percent return respectively, from the two groups. This amounted to a total return of thirty-six percent.

There was a statistical analysis computed in studying the comparative difference between the group of coaches and the group of principals. This statistical method was the Mann-Whitney U-test as outlined by Siegal.

TREATMENT OF DATA

In a study such as this one it was common to first announce that the null hypothesis was being tested. Through such a device as the null hypothesis the researcher was bound

to state that no difference existed between the groups. If a significant difference was reached the null hypothesis would be rejected. But if the difference was not significant, the null hypothesis would be retained.

Table 1

Equipment (Personal)

There were thirteen items identified by the jury of coaches as personal equipment. From the questionnaires sent to the selected coaches and principals, the following thirteen item responses were computed according to the Mann-Whitney U-test. Table 1, which appears on page 19, was constructed to indicate the results.

When the two groups were compared on the item of game jerseys, there seemed to be a substantial difference between the raw mean scores in terms of what the coach and administration felt was necessary to carry out the duties of the head coach. The administration group had a mean sum of forty designated as the required number of jerseys, where the coaching group had a mean sum of forty-five. Upon further investigation and statistical treatment, a U of 33.5 resulted which was far from significant, as a U of ≤ 19 was required to reject the null hypothesis.

In looking at the largest difference of the mean scores, there was a difference of ten raw scores between the coaches and the principals for the number of helmets necessary for a season of interscholastic football. After

Table 1, Equipment (Personal)

ITEM	n ₁	n ₂	R ₁	R ₂	U	δ = .05	Σ	RMSP	RMSC
Helmet	5	19	32.5	272.5	12.5	≤ 19*		46	56
Shoulder Pads	5	17	43.5	209.5	28.5	≤ 17		50	57
Hip Pads	4	12	25	111	15	≤ 7		50	53
Rib Pads	6	12	61	113	32	≤ 14		10	10
Thigh Pads	6	21	73	304	52		-0.642	58	58
Knee Pads	6	21	77.5	300.5	56.5		-0.379	59	57
Socks	1	9	1.5	53.5	.50	≤ 0		80	80
Practice Shoes	4	11	17	103	7	≤ 6		47	57
Game Shoes	4	12	29	108.5	17	≤ 7		47	51
Practice Jersey	6	10	61.5	74.5	19.5	≤ 11		57	46
Game Jersey	5	19	44.5	251.5	33.5	≤ 19		40	45
Practice Pant	5	17	53	200	38	≤ 17		56	57
Game Pant	5	15	47	163	32	≤ 14		43	44

n₁ - No. of Principals

*Significant at the .05 level

n₂ - No. of Coaches

Σ - Value used when n₂ is greater than 20

R₁ - Sum of ranks for Principals

< Equal to

R₂ - Sum of ranks for Coaches

- Less than

U - Value used to test for significant difference

RMSP - Raw mean scores Principals

δ = .05 (value needed to reject U)

RMSC - Raw mean scores Coaches

administering the Mann-Whitney U-test, a U value of 12.5 resulted which was significant, as a value of ≤ 19 was required. As a result, the null hypothesis was rejected when the two groups were compared.

Another obvious difference was noted in practice shoes. The coaches suggested fifty-seven pair and the principals forty-seven pair which was a mean difference of ten pair in what the two groups proposed for a season of interscholastic football. It would seem that some significance would exist. In computing the two values of U, there was a difference of one, which showed the opinions of the two groups were close, but not enough to be significant.

Table 2

Equipment (Practice)

In the category of practice equipment, there were nine items suggested by the jury of coaches from a proposed budget for a season of interscholastic football. The results of the two groups were shown in Table 2 on page 21.

In examining the equipment chart, three was the largest mean difference between the group of principals and the group of coaches in any of the items. After using the Mann-Whitney U-test, no significant difference existed between the coaches and principals for this phase of the program.

In cases of the 7-man sled, 2-man sled, defensive bunker and reaction machine, where the data was not shown, either the principals or the coaches agreed with the proposed item

Table 2, Equipment (Practice)

ITEM	n_1	n_2	R_1	R_2	U	$\alpha = .05$	Σ	RMSP	RMSC
Footballs	5	21	43.5	307.5	28.5		1.561	11	14
7-Man Sled								1	1
2-Man Sled								1	1
Defensive Bunker								1	1
Cones	1	4	3	12	2	≤ 0		20	19
Air Dummies	4	14	32.5	138.5	22.5	≤ 9		7	9
Blocking Dummies	5	15	42	168	27	≤ 14		5	7
Reaction Machine								1	1
Linebacker Dummies	4	4	15	21	5	≤ 2		4	7

n_1 - No. of Principals

n_2 - No. of Coaches

R_1 - Sum of ranks for Principals

R_2 - Sum of ranks for Coaches

U - Value used to test for significant difference

$\alpha = .05$ (value needed to reject U)

Σ - Value used when n_2 is greater than 20

\leq Equal to

- Less than

RMSP - Raw mean scores Principals

RMSC - Raw mean scores Coaches

and therefore a n_1 or n_2 was not available for further analysis.

Table 3

Other Budget Expenses

In Table 3 on page 23 there appears a list of items the jury of coaches felt was necessary for a head coach to carry out his football program for one season of competition.

When the group of coaches and group of principals were compared by the mean sums, it seemed that a significant difference existed in several items. For instance, the item of meals away had a mean difference of forty dollars between the two groups. After applying the Mann-Whitney U-test, the result was a U of 14.5. Therefore, the null hypothesis was adopted because a U of ≤ 4 was needed to have a significant difference between coaches and principals.

The item of insurance showed a mean difference of eight hundred and fifty dollars in what the coaches and principals indicated was necessary for a football season. This would appear to be a large enough difference between the two groups for significance. A U of 3.5 was produced from the Mann-Whitney U-test, which was a close 1.5 value from statistical significance.

It was interesting to notice in the item of lodging, the coaches and principals had the same mean scores. This would imply that both groups had similar opinions and experiences in making arrangements for overnight accommodations.

Table 3, Other Budget Expenses

ITEM	n_1	n_2	R_1	R_2	U	$\alpha = .05$	Z	RMSP	RMSC
Transportation	9	18	117	242	72	\leq 42		311	334
Meals Away	4	9	24.5	66.5	14.5	\leq 4		222	262
Lodging								250	250
Guarantees								500	225
Scouting	9	18	125	253	80	\leq 42		137	125
Film and development per game	6	24	89	372	68		-0.207	58	83
Repair of Equipment	7	22	87	348	59		-0.917	356	481
Laundry	6	13	55.5	134.5	34.5	\leq 16		233	246
Coaching Clinics	5	13	51.5	119.5	28.5	\leq 12		167	164
Medical Supplies	6	16	76	177	41	\leq 21		383	410
Insurance	4	4	22.5	13.5	3.5	\leq 2		1535	685
Maintenance of Facilities	4	10	30	75	20	\leq 5		400	470
League Expense	2	7	8	37	5	\leq 1		77	91
Publicity and Advertising	1	10	2	64	1	\leq 0		25	89
Awards	5	13	48.5	122.5	31.5	\leq 12		103	91
Miscellaneous	3	12	24	96	18	\leq 4		200	250
Extra Pay for Coaching	6	13	58.5	131.5	37.5	\leq 16		808	819

n_1 - No. of Principals
 n_2 - No. of Coaches

R_1 - Sum of ranks for Principals
 R_2 - Sum of ranks for Coaches

U - Value used to test for significant difference

Z - Value used when n_2 is greater than 20

\leq Equal to
 $<$ Less than

$\alpha = .05$ (value needed to reject U)

RMSP - Raw mean scores Principals

RMSC - Raw mean scores Coaches

Chapter 5

SUMMARY, FINDINGS CONCLUSIONS AND RECOMMENDATIONS

It was the purpose of this study to investigate the difference in the opinions of coaches and principals from randomly selected high schools in the State of Missouri, concerning financial needs for a season of interscholastic football. With the results of this investigation, a suggested standardized budget was formulated for one season of interscholastic football.

A questionnaire was formulated by a jury of coaches and sent to one hundred sixty coaches and principals of randomly selected high schools in the State of Missouri, after the football season of 1971. When the fifty-eight forms from the two groups were returned, they were calculated by item and given statistical treatment to see if there was a significant difference between the two groups.

Findings

From the Mann-Whitney U-test, the article of helmets, which showed a raw mean score of forty-six for the principals and fifty-six for the coaches, was the only item out of thirty-nine suggested on the proposed budget, that showed a significant difference at the .05 level. This would suggest that the coaches and principals were in some conformity on

financing the athletic program.

The items of insurance, publicity and advertising, socks, cones, practice shoes and linebacker dummies were in close agreement between the two U values, but not close enough to have a significant difference.

Conclusions

Within the limitations of this study the following conclusions were made:

Only one article (helmets) was found to have significant difference according to the Mann-Whitney U-test, the other thirty-eight items had to accept the null hypothesis. In the cases of insurance, publicity and advertising, socks, cones, practice shoes and linebacker dummies, there were close agreement between the two U values, which would suggest that the two groups were close to significance on those items. But by looking at the tables, it can be seen that a large disagreement prevailed between the coaches and the principals.

The findings of this survey may not appear alarming, considering that only thirty-six percent of coaches and principals responded to the questionnaire.

It should be taken into consideration that in a survey of this type, one does not always get facts, but rather opinions. The opinions are sometimes based on previous experience, which would hint that some of the principals might have been former coaches, due to similarities in answers.

Recommendations for Further Study

As a result of the findings in this study, the following recommendations were suggested for further study:

1. A study of different classification schools and the procedures followed to finance the athletic program.

2. A study similar to this one, that would identify principals of selected high schools that had three years of previous coaching experience.

3. Select a school with a successful winning program for five years and compare with schools of losing programs for a similar time period. Study how they would look at financing the athletic program.

4. A study similar to this one, that would identify principals of selected high schools that had experience other than coaching.

BIBLIOGRAPHY

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A. BOOKS

1. Camkins, Dana E. School Athletics in Modern Education. New York: Elmgate Memorial Foundation, Inc., 1931.
2. DeYoung, Chris A. Budget in Public Schools. New York: Doubleday, Doran & Company, Inc., 1936.
3. Forsythe, Charles E. Administration of High School Athletics. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1962.
4. Johnson, Julie E. The Reference Shelf. New York: H.W. Wilson Co., 1929.
5. Mckown, Harry C. Extracurricular Activities. New York: Macmillan Co., 1952.
6. Ryan, Carson W. Jr. Literature of American School and College Athletics. New York: The Merrymount Press, 1929.
7. Scott, Harry A. Competitive Sports in Schools and Colleges. New York: Harper and Brothers, 1951.
8. Siegal, Signey. Non Parametric Statistics. New York: McGraw-Hill Co., 1956.
9. Wagenhorst, Lewis H. The Administration and Cost of High School Interscholastic Athletics. New York: Teachers College, Columbia University, 1926.
10. Williams, Jesse F. and Clifford L. Brownell. The Administration of Health Education and Physical Education. Philadelphia, London: W.B. Saunders Company, 1951.
11. Williams, Jesse F. and William L. Hughes, Athletics in Education. Philadelphia, London: W.B. Saunders Company, 1937.

B. PERIODICALS

12. Kafterle, Zeno B. "Administration of Athletics in Education," The School Executive, LXVIII, 8, (April, 1949), 53-54.
13. Richards, Eugene I. "Evils and their Remedies," Popular Science Monthly, D. Appleton and Co., 1884, 143.

C. UNPUBLISHED MATERIAL

14. Barger, James D. "A Study of Equipment Problems in Interscholastic Football of Selected High Schools in the North Central Association." Unpublished Master's Thesis, 1954, 76.
16. Wilson, Robert W. "Development of Interscholastic Athletics at Emporia High School." Unpublished Master's Thesis, 1958, 262.

APPENDIX A

STANDARDIZED BUDGET
FOOTBALL

This is a suggested standardized budget for a season of interscholastic football as determined by the head coaches and principals of randomly selected high schools in the State of Missouri.

<u>Equipment (Personal)</u>	<u>Suggested No.</u>
Helmet	53
Shoulder Pads	53
Hip Pads	51
Rib Pads	63
Thigh Pads	63
Knee Pads	80
Socks	52
Practice Shoes	50
Game Shoes	54
Practice Jersey	44
Game Jersey	63
Practice Pant	45
Game Pant	45

<u>Equipment (Practice)</u>	<u>Suggested No.</u>
Footballs	13
7-Man Sled	1
2-Man Sled	1
Defensive Bunker	1
Cones	16
Air Dummies	8
Blocking Dummies	7
Reaction Machine	1
Linebacker Dummies	5

Other Budget Expenses

Transportation, - 5 games away	\$448.00
Meals away	328.00
Lodging	250.00
Guarantees	408.00
Scouting	177.00
Film and development per game	65.00

Repair of Equipment	\$462.00
Laundry	209.00
Coaching Clinics	193.00
Medical Supplies	431.00
Insurance	873.00
Maintenance of facilities	423.00
League Expense (coaches meetings, etc.)	89.00
Publicity and Advertising	71.00
Awards	114.00
Miscellaneous	316.00
Extra pay for coaches	725.00

APPENDIX B

November, 1971

Dear Mr. _____, Principal: (Coach)

The following questionnaire is being sent to different schools in the class A, 2A, 3A, and 4A, divisions in the state of Missouri. The purpose of this questionnaire is to identify the financial needs of the interscholastic football program as expressed by the building principals and the head football coaches of selected high schools in Missouri.

The findings of this survey will be utilized as data in a master's thesis for the requirements for a Master of Science Degree at Kansas State Teachers College, Emporia, Kansas. This is being written by Hugo Hammond, an employee of Jefferson City High School, Jefferson City, Missouri. No names of people or schools will be used, and all information will be treated as strictly confidential.

I would appreciate your co-operation in filling out the form as completely as possible.

I would like to thank you for your assistance and urge that you return this form to me in the self-addressed, postage-free envelope enclosed.

Yours in Sports,

Hugo Hammond
Capital View Village #42
Jefferson City, Missouri 65101

Enclosures

Questionnaire

Dear Sir:

This budget, established by a jury of coaches, is for a forty-man squad for one football season.

Please make any necessary adjustments on the form so that it corresponds to your situation and meets with your approval.

Apply all figures to a squad of 40 boys

Equipment (Personal)

Item	Suggested Price	Suggested Number	Numerical Adjustment if needed Number
Helmet	\$ 23.00	58	_____
Shoulder pads	21.00	52	_____
Hip Pads	9.00	50	_____
Rib Pads	6.45	10	_____
Thigh Pads	3.65 pr.	75	_____
Knee Pads	1.98 pr.	75	_____
Socks	1.07 pr.	80	_____
Practice Shoes	9.00	52	_____
Game Shoes	15.00	52	_____
Practice Jersey	2.75	60	_____
Game Jersey	7.00	50	_____
Practice Pant	6.00	68	_____
Game Pant	7.95	50	_____

Equipment (Practice)

Footballs	22.50	16	_____
7-man sled	567.00	1	_____
2-man sled	200.00	1	_____
Defensive Bunker	100.00	1	_____
Cones	10 - 52	10	_____
Air Dummies	19.50	8	_____
Blocking Dummies	49.95	9	_____
Reaction Machines	389.00	1	_____
Linebacker Dummies	34.50	5	_____

Other Budget Expenses

Item	Suggested Amount	Numerical Adjustment if needed Amount
Transportation, 5 away games	\$ 700.00	_____
Meals Away	500.00	_____
Lodging	250.00	_____
Guarantees	500.00	_____
Scouting	270.00	_____
Film and Development per game	56.00	_____
Repair of Equipment	550.00	_____
Laundry	150.00	_____
Coaching Clinics	250.00	_____
Medical Supplies	500.00	_____
Insurance	400.00	_____
Maintenance of facilities	400.00	_____
League Expense (coaches meetings, etc.)	100.00	_____
Publicity and advertising	100.00	_____
Awards	150.00	_____
Miscellaneous	500.00	_____
Extra pay for coaching; if applicable	550.00	_____

Class _____

School _____

Name _____

December 1971

Hello again!

It has been a while since I first wrote you, and since I have not heard from you, I thought I would send you a little reminder.

Questionnaires often find their way into "file 13". I would appreciate it very much if this form would find its way back to me. You will be doing me a great favor if you will take time from your busy schedule and give me your ideas.

Please take time NOW to fill out the form and return it to me in the self-addressed, postage free envelope. I know your comments will be of value, and I surely will appreciate your help.

Thank you,

Hugo Hammond
Capital View Village #42
Jefferson City, Missouri 65101

Enclosures