



An analysis of the Arizona high school athletic insurance program
by Michael Loren McCormick

A thesis submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION
Montana State University
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Abstract:

The hypothesis to be tested in this study was: Present accident insurance programs covering Arizona high school athletic programs are not adequately protecting parents against high expense and the premiums are preventing many students from participating.

The purpose of the study was to determine the possibility of improving the state athletes insurance program so that schools could provide a comprehensive coverage which would be financially within the reach of every Arizona high school student who wished to participate and one which would protect parents against high expense for premiums and treatment not covered by the policy.

The investigating procedures included the use of a state-wide questionnaire supplemented by personal interviewing of administrators, coaches, and students. Comparable programs in other states were studied for information that might be helpful in developing a more comprehensive Arizona plan.

The results of the study indicate that Arizona school administrators estimate that more than 1400 boys have been deprived of athletic participation during the past three years due to inability to pay insurance premiums. Other findings include; 1. School officials favor a state-wide athletic insurance policy, 2. School officials favor including athletic insurance premiums in the regular school budget, 3. Arizona urban area schools report the greatest number of students unable to pay the premiums.

Based upon the results of the study, a plan was proposed in which all students participating would be covered on a state-wide accident insurance plan without individual premium payments. The cost of the insurance would be borne by the entire school system rather than the participants. Justification for this is related to the over-all value of an athletic program to the system. Financing options are presented as suggestions to make it feasible for all districts to participate in a state-wide plan.

AN ANALYSIS OF THE ARIZONA HIGH SCHOOL
ATHLETIC INSURANCE PROGRAM

by

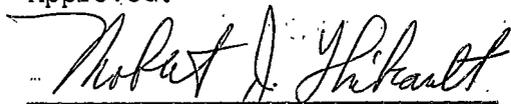
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A thesis submitted to the Graduate Faculty in partial
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ABSTRACT

The hypothesis to be tested in this study was: Present accident insurance programs covering Arizona high school athletic programs are not adequately protecting parents against high expense and the premiums are preventing many students from participating.

The purpose of the study was to determine the possibility of improving the state athletes insurance program so that schools could provide a comprehensive coverage which would be financially within the reach of every Arizona high school student who wished to participate and one which would protect parents against high expense for premiums and treatment not covered by the policy.

The investigating procedures included the use of a state-wide questionnaire supplemented by personal interviewing of administrators, coaches, and students. Comparable programs in other states were studied for information that might be helpful in developing a more comprehensive Arizona plan.

The results of the study indicate that Arizona school administrators estimate that more than 1400 boys have been deprived of athletic participation during the past three years due to inability to pay insurance premiums. Other findings include; 1. School officials favor a state-wide athletic insurance policy, 2. School officials favor including athletic insurance premiums in the regular school budget, 3. Arizona urban area schools report the greatest number of students unable to pay the premiums.

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CHAPTER I

INTRODUCTION

In a society of rising medical costs and increased emphasis on legal liability, school administrators must be increasingly concerned with athletic injury insurance. Athletic participation has become as much a part of the American school system as textbooks and teachers. Today it is difficult, if not impossible, to find a high school that does not sponsor at least one sport on an interscholastic basis. Rural communities have been known to refuse consolidation with neighboring communities because they did not wish to relinquish their sports program. Civic pride, as well as school pride, is frequently in direct ratio to the success or failure of the high school athletic teams.

In an address to the 7th National Conference on the Medical Aspects of Sports, a guest speaker, Dr. James Appel, credited sports with being a responsible element in developing our superior standard of living. He pointed out that participation in a sports program teaches the cooperation and the competitive spirit which have been so important in our development of self discipline.

To a large degree, we owe our superior standard of living to our freedom to compete. Much of our progress in science and industry can be attributed to it. But cooperation is an equally important and comparable factor. The success of many ventures depends on cooperative effort. In our democratic way of life, we depend to a great degree upon the judicious mixture of both competition and cooperation. Participation in a well organized sports program gives our younger people an opportunity to learn not only how to compete but also how to cooperate in accord with a set of rules. This requires the admirable quality of self-

discipline.¹

In the United States, sports have become a social institution and millions participate actively while millions more confine their activity to the role of spectators. As a business enterprise alone it represents an annual expenditure by the American public of over \$20 billion.² While average cost for commercials on a popular weekly show in prime time was costing \$46,000 a minute. Columbia Broadcasting System asked \$70,000 a minute from the National Football League sponsors during the 1969 season. This comparison is an indication of the public interest in sporting events in our society.³

Although some educators may express doubt as to the value of Interscholastic Athletics in the public high school, it is unlikely that the general public would accept a discontinuance of the program. The schools find that there are many values in an activities program. One of these values is that activity participation decreases truancy. In a survey of Philadelphia public schools in 1961, White found that truancy

¹James Appel, "Sports Medicine in Perspective", The Journal of the National Athletic Trainers Association, (Winter, 1966), p.16.

²Kenyon, Gerald, John Loy, "Toward a Sociology of Sport", Journal of Health, Physical Education and Recreation, Vol. 36, #5, May, 1965, p.24.

³Stanley, Frank, "Greed is the Name of the Game," TV Guide, (August, 1969), p.6.

and participation were closely related. Fewer boys involved in clubs and athletic participation were truancy problems.⁴ An additional argument for the values of athletic participation was put forth by Psychiatrist D'Elia Frank in his statement that competition is a socially accepted outlet for natural aggressive feelings.

Competitive sports allows us to express aggressive feelings without doing anyone appreciable damage. For that reason they are quite desirable. We all deplore brutality and mindlessness, and I think competitive sports help us to overcome them. It seems unlikely that one who has sublimated his aggressive impulses in this controlled way is quite apt to seek socially unaccepted outlets for them.⁵

Administrators find the activities program is an effective public relations media because people are more inclined to become interested in this phase of the school program. In Leslie Kindred's book, School Public Relations, he lists school spirit, parent participation, local pride, and school visits by parents among the values of student activities.

⁴Solomon L. White, "The Relationship of Certain Attributes to Attendance Problems in the Philadelphia Public Schools" (unpublished Doctor's thesis, Temple University, Philadelphia, 1961).

⁵D'Elia Frank, Newsletter, Medicine in Sports, Vol. 8, #5 (Sept. 1968).

Student activities are an effective medium for publicizing the school and interpreting its work to the community. They are high in public relations value for the following important reasons, among others:

1. They bring parents and patrons to the schools.
2. They develop local pride in the school system.
3. They develop school spirit among pupils.
4. They offer excellent opportunities for parent and lay participation in the school program.⁶

Educators during the 1920's found that students would compete with or without sanction of school authorities. The schools adopted supervision of the program somewhat in self defense when the unsupervised activities began to create problems for them.

The first period in the development of secondary interscholastic relations has been called the period of opposition, the opposers being school authorities. ---- However, despite the attitude of the educational authorities, the students played interscholastically under the name of the school. Coached and backed by townsmen who were always seeking a thrill and boosting town enterprises, these teams, without training rules, regulations, or restraint, brought so much disgrace upon the school that it was forced to recognize them for self-protection.

The foregoing statements by authors Appel, Kenyon, Frank, White and Kindred are illustrative of the point that athletic programs are accepted by educators and by the general public as an integral part of

⁶Leslie Kindred, School Public Relations (New Jersey: Prentice-Hall, Inc. 1957), p. 269.

⁷Harry McKown, Extracurricular Activities (New York: MacMillan Company, 1927), p. 237.

our school programs. Despite this wide acceptance of athletics in our society and in our schools, there seems to be a serious disregard of the responsibility for providing a high school athletic injury insurance program. In the publication, Modern Principles of Athletic Training, it was indicated that the public takes the attitude that the sports program is not a legal liability of the school. It went on to state, however, that trainers and other school officials do have a responsibility to see that each player is covered by insurance and that we must expect injury in an athletic program due to the very nature of the program.

Most states, although recognizing athletics as a bonafide school activity, classify it as extramural and therefore do not extend to it the legal responsibilities they assume for the regular class activities. ----- Insurance is a responsibility of the trainer, to the extent of working closely with the school, the athletic administrator, and the coach to see that every athlete is adequately covered by a good reliable company. ----- By their very nature sports activities invite injury. The all out exertion required, the numerous situations requiring body contact, and play that involves the striking and throwing of missiles establish hazards that are either directly or indirectly responsible for the many and varied injuries suffered by athletes.⁸

Arizona administrators and coaches had expressed concern with the problem of providing protection and some had voiced dissatisfaction with the present system. Data was not available to substantiate the belief that some boys were being excluded and some may have been play-

⁸Arnheim, Daniel, Carl Klafs, Modern Principles of Athletic Training (Saint Louis: C.V. Mosby Company, 1963), p.472.

ing without any coverage. Increased awareness of the athletic insurance problem by the Arizona Interscholastic Association prompted a request to the writer to meet with their board of directors. The Arizona Interscholastic Association is the governing body for all interscholastic competition in Arizona. The opportunity to become involved in attempting to solve this problem was warmly welcomed by the writer because of a long time concern and interest in the problem. As a player, coach, school administrator, and insurance representative, the writer has been confronted by the problem in various aspects. A personal injury in high school placed a tremendous financial stress upon the widowed mother of the writer and this was the first realization that schools did not provide full financial protection to an injured athlete. In later years, as a coach and school administrator, the occasions were all too frequent when a parent vigorously objected to being held responsible for medical expenses incurred as a result of an injury in interscholastic competition. The problem of liability has been the basis of court cases and school officials are warned that they can expect an increase in the number of suits as well as in the size of settlements.⁹

Some specific areas of concern expressed to the writer by the members of the Arizona Interscholastic Association board of directors

⁹A.A. Savastano, M.D., "Report from Rhode Island Conferenc", Medicine in Sports, Vol. 9, #2, March 1969.

were:

1. The steadily increasing cost of the insurance protection.
2. An increasing number of claims where it was found that the athlete had no insurance coverage.
3. A growing belief that boys were not enrolling in the athletic program because of financial inability to pay the insurance premiums.
4. The number of cases where parents reported that the amount of coverage on the policy still left a sizeable expense for the parent.

An indication of the degree of concern by the Arizona coaches with this problem of athletic injury insurance was expressed in their attempt to promote state legislation to solve the problem. At the request of the coaches association, a bill to legalize district payment of insurance premiums for Arizona high school athletes was submitted in the State Legislature by Senator Kenneth Cardella and Representative Anthony Buehl of Pima County. The bills did not get out of committee in the 1969 legislative session, but Senator Cardella and Representative Buehl intend to introduce the bills again. The writer has been asked by the coaches association to make the results of this study available to Senator Cardella and Representative Buehl.

To analyze the adequacy of the present athletic insurance system in Arizona high schools it was deemed necessary to determine the answers to questions in three major areas; safety, present coverage, and participation. In the area of safety the pertinent questions to be

answered were:

1. Were the schools following proper procedures to prevent athletic injury as much as possible?
2. Were the coaches enforcing the safety rules set up by the Interscholastic Association?

The second area involved present insurance coverage. Questions requiring answers in this category were:

1. Did the present insurance program guarantee that every participant will be covered?
2. Was the premium level responsible for the failure of some students to participate?
3. Were parents being subjected to major medical expenditures for athletic injuries?

The third area of questioning was designed to provide a statistical basis for presenting specifications to insurance companies if it was deemed advisable to prepare specifications for a state-wide bid on the injury insurance program. Primary considerations here involved:

1. How many schools participated in each sport?
2. How many students participated in football at the varsity and subvarsity level?
3. How many contests were scheduled in each activity?

The writer believed that by compiling the answers to these questions a decision could be made as to the need for change and this information could serve as the basis of recommended improvement.

The conviction that a better approach to the Arizona program of athletic insurance was feasible led to the decision to undertake this

study. The writer sincerely believed that the values of interscholastic competition were so extensive that a student should not be deprived of these values because he came from an economically underprivileged home.

Statement of the Problem

The purpose of this investigation was to determine the adequacy of the present system of providing athletic injury insurance for Arizona high school athletes and to determine whether or not some students were excluded from athletic participation due to the cost of the insurance plans.

The hypotheses for the study were that many boys were being deprived of the values of an athletic program because of the present insurance system, that parents were frequently faced with extensive medical expense even though they carried an insurance policy, and that the present system allowed an athlete to compete without insurance because the schools did not have a method of checking for insurance coverage. Before participating in interscholastic athletics in Arizona high schools each student, or his parent, was required to purchase a school insurance policy or state that they had a substitute policy. The problem was in the parent's ability to pay the premium. This meant that financial circumstances of a family could determine the availability of a school activity. To determine the extent of the problem the investigation was designed to determine the following:

1. Did the athletic insurance program guarantee protection for all participants in the interscholastic program?
2. Was the insurance premium level excluding some students from participation?
3. Were data available to provide commercial insurance carriers the necessary information they would need to bid on a state-wide program?
4. Were schools following proper safety precautions to prevent injuries?
5. Were present policies offering coverage for major medical expenditures?
6. Did school officials desire a state-wide program of insurance?
7. Were schools enrolling enough students in the school sponsored plans to create a favorable bid situation?
8. What provisions were being made to pay premiums for financially handicapped students?

Importance of the Study

This study of athletic injury insurance protection was believed to be important to the students, parents, and school officials in the state of Arizona. The students were involved because some were excluded from participation and also because some were participating without insurance protection. The importance to the parents concerned their inability to pay premiums for their child's insurance and, in some instances, they were responsible for extensive medical expense even when they had purchased a protection policy. School officials, under the present system, had been faced with the dilemma of not knowing

what type of coverage many students had and also of trying to justify the exclusion of a student who could not purchase a school policy. These serious problems could not be solved until sufficient data were collected and presented to those in a position to act.

The Arizona schools under the present system assumed that a boy had adequate coverage merely because he presented a statement from his home that he had a policy. A noted insurance expert, William Vance, in his book, Handbook on the Law of Insurance, advises that caution should be exercised in accepting accident insurance policies since many cover only specific accidents and many hazards are excluded.

Many accident policies cover only specific types of accidents and even broad coverage accident policies exclude specified hazards. These policies and the reported cases interpreting them are numerous and in order to determine the insurers liability in any case, the terms of the particular policy must be examined with care.¹⁰

If school officials and school boards were to be convinced of the seriousness of this problem, a study of this type could be of great help in showing the need to improve the present system of protection for interscholastic sports.

The study is also important because it involves some basic beliefs of school administrators concerning the values of athletic participation and the individual rights of each student to participate. The

¹⁰Vance, William H., Handbook On the Law of Insurance, West Publishing Company, 1951, p.948.

present system stated that a boy could not play if he was unable to purchase the school insurance policy or show evidence that his parents had purchased a substitute policy. This study could be the basis of a change in the system of insurance protection so that every participant in the state could have equal coverage and no one would be deprived of the program on the basis of inability to purchase an insurance policy.

To many young athletes, a chance to participate is more than just recreation. They look to the interscholastic program as a means of earning a college scholarship and possibly a professional career. With community emphasis on Little League Baseball, Pop Warner Football, and elementary school basketball programs, the youth comes into high school with basic skills and an enthusiastic attitude towards competition. Continued participation in high school may be instrumental in keeping the student in school. The publicity given to bonuses paid to star athletes such as O. J. Simpson, Joe Namath, Lew Alcindor and Pete Marovich receive a great deal of publicity and may create a desire to consider athletics as an occupation. This is evident by checking rosters of professional teams and noting that a large majority have attended college. As a specific example, the Phoenix Suns professional basketball team did not have one player who did not attend college and nine of the 12 had college degrees. The possibilities of an athletic career are diminished immeasurably, if not completely

erased, if a student does not participate while in high school. This study hopefully will be a determining factor in assuring that more students have an equal opportunity for this high school training,

Procedures

The data for the study was obtained through the administration of a three part questionnaire. This questionnaire, page 71, Appendix A, was designed to accumulate information as the basis for an analysis of the present athletic insurance program. Provisions of present policies, the number of participants involved, and the safety procedures practiced in the Arizona high schools were the three areas investigated on a state-wide basis. A cover letter from the investigator, Appendix B, page 77 and a letter from the Arizona Interscholastic Association, Appendix B, page 78 were mailed with the questionnaire to every high school in the State of Arizona. One hundred per cent of the high schools were included rather than a sampling of schools as it was deemed important to obtain information from every school and to provide an opportunity for each school to express an opinion concerning the adequacy of the insurance program carried by their school. Eighty-seven per cent of the schools responded with a completed questionnaire,

The data from the completed questionnaires was recorded manually on three charts. The charts were based upon the three areas of the questionnaire; participation, safety, and insurance. The section

covering participation put special emphasis on football since this sport had the greatest affect upon premium rates in an athletic accident policy. Each chart was divided into five sections in order that data for each of the five classes of schools could be isolated. The classes; AAA, AA, A, B, and C are based upon student enrollment with class C representing the smallest and AAA the largest schools. These divisions have been established by the Arizona Interscholastic Association and are as follows:

AAA - 1400 and over

AA - 750 - 1400

A - 400 - 750

B - 150 - 400

C - 150 or less¹¹

To provide a follow-up on results of the questionnaire, personal interviews were scheduled in some schools. The choice of schools was based upon response to the questionnaire. If the school indicated an unusually high number of boys excluded, an interview was scheduled.

In obtaining comparative information from other states a letter, Appendix C, page 88, was written to Interscholastic Association Executive Secretaries in 17 states. They were asked for information concerning the athletic insurance program in their state. This

¹¹Arizona Interscholastic Association, Handbook 1968-69, Phoenix, Arizona.

material was analyzed in terms of comparative cost and comparative coverage to aid in formulating a recommended plan if it was determined that a change should be made in the Arizona plan.

A final procedure consisted of a review of the claims experience of the Blue Cross-Blue Shield program. This carrier, Blue Cross-Blue Shield, wrote a majority of the school sponsored policies in the state during the preceding year. These claim statistics were reviewed in light of the type of injury most frequently occurring and the dollar volume of claims in various sports.

Delimitations

This study was limited to interscholastic competition in the 124 high schools in the State of Arizona. Varsity, Junior Varsity and Freshmen activities were included. In 1967-68 every school in the state sponsoring interscholastic teams were members of the Arizona Interscholastic Association. The study was limited to the one state in order to analyze this specific problem in relation to the present status in Arizona.

Definition of Terms

The following terms may be unfamiliar to the reader not closely associated with insurance and Arizona schools.

1. AIA - The Arizona Interscholastic Association. The organization responsible for scheduling and supervising the extra curricular activities involving competition between two or more schools in the State of Arizona.

2. Indemnity - compensation against loss.
3. Liability - obligated according to law or equity.
4. Coinsurance - the sharing of expense between insured and insurer.
5. C O B - coordination of benefits - two insurers will pay only 100% of loss rather than duplication payment which might exceed 100%.
6. Deductible - that portion of a loss paid by the insured before the insurer becomes involved.
7. Loss ratio - dollars paid for claims compared to total premium collected.
8. Self administered program - The Interscholastic Association collects premiums and pays claims rather than placing the insurance with a commercial carrier.

Organization of the Remainder of the Thesis

In the second chapter the writer summarized the literature consulted and outlined the highlights of insurance coverage in other states. The preparation and administration of the questionnaire and an explanation of other steps in the investigation were covered in chapter three. Chapter four, a report of the findings, is a discussion of the results of each of the three areas of investigation; participation, safety, and insurance. Chapter five states the conclusions reached from the analysis of the findings and includes a series of recommendations.

Summary

Public interest and acceptance of the athletic interscholastic program is well established in the American society yet school officials have failed to accept the responsibility of providing insurance for the participants. The hypothesis is offered that many students are being deprived of athletic participation due to the inability to pay insurance premiums. Two related hypotheses contend that parents are faced with large medical expenses even though they have purchased the school policy and that students may participate without insurance due to the lack of a systematic verification system.

To collect data for the study a three part questionnaire was administered to the Arizona high schools. One hundred eight or 87 per cent of the 124 high schools in the state responded to the inquiry. The number of schools participating, the safety procedures followed in the schools and present insurance coverage constituted the three divisions of the questionnaire.

Following the administration of the questionnaire, some personal interviews were conducted as a follow-up. Information was also obtained from 17 states for the purpose of comparing insurance coverage and practices.

The chapter is concluded with a statement of delimitation and a definition of terms used in the text. Insurance terms, such as liability, coinsurance, indemnity, loss ratio and coordination of

of benefits were described since they are not commonly used by the public. The major limitation of the study was that only the athletic program was considered rather than including all school activities that are involved in insurance claims.

CHAPTER II

REVIEW OF LITERATURE

In order to compare the Arizona athletic insurance program and to gain ideas for improvement, 17 states were contacted for information concerning their insurance program. In this chapter the highlights of some of these programs as well as material from other literature will be discussed. It was not the intent to make a detailed study of programs in other states since this would not have a bearing upon the basic hypothesis that Arizona boys were being deprived of athletics due to financial inability to pay premiums. The information was acquired primarily as background material for recommendations if a need was shown for a new plan in Arizona.

A letter was written to the Executive Secretary of each of the Interscholastic Associations in 12 western states. A copy of this letter is in Appendix C, page 81. A second letter, Appendix C, page 80, was mailed to five additional states - Iowa, Michigan, Minnesota, New York and Wisconsin. The responses from these states included the completion of a short questionnaire and the submission of copies of the state programs.

The western states were chosen as it was assumed that their medical costs, premiums, etc., would be similar to Arizona. The other five states were chosen because the Assistant Executive Secretary of the National Federation of State High School Athletic Associations, David C. Arnold, had informed the writer by letter that these five

states administered their own insurance programs. Three western states, California, Oregon and North Dakota, also operated their own programs making eight states with self-administered programs and leaving 42 states where the programs were underwritten by commercial carriers.¹

In a self-administered program the Association acts as the insurer. They collect premiums directly and pay claims from this premium income.

Wisconsin has operated a self-administered program since 1930. It was the first state to inaugurate this type program. A choice of two plans were offered to the Wisconsin schools. One plan was a scheduled benefit program and the other, a non-scheduled program, paid all medical expense up to a maximum of \$2000.00. Each plan had a catastrophic rider which paid 90 per cent of expenses above the regular plan up to \$10,000.00. Schools also were offered a payment option. They could purchase a blanket coverage based upon their school enrollment or they could offer the policy to individual students at a higher per student cost. In each case the policy premium more than doubled if football coverage was included.

In the first year of operation, 1930, the Wisconsin Benefit Plan paid 101 claims for a total of \$5,330.00. In the 1967-68 school year the same program paid 36,000 claims and a total of \$875,000. Sixty

¹Personal correspondence of the writer, a letter from David C. Arnold, Assistant Executive Secretary National Association of State High School Associations, Chicago, Illinois, March 24, 1969.

thousand athletes and 430,000 other pupils were covered in Wisconsin during the school year 1967-68.

Wisconsin claims statistics show that football has an injury ratio twice as high as non-football athletics and the average claim is over 25 per cent higher for the football injuries. Wrestling ranks second to football on injury ratio. Football injuries accounted for almost 60 per cent of the total injuries in Wisconsin in 1967-68.²

In Minnesota, authorization for a self-administered program is given to the Interscholastic Association by their league constitution. Their publications put strong emphasis on the fact that this is merely an assistance program and meticulously avoids the word "insurance" because of the implication of full coverage. The handbook for the schools, as well as the material sent home to parents, states: "The Athletic Accident Benefit Plan provides financial assistance to meet the costs of medical, dental, and hospital services rendered as a result of accidental injuries incurred in supervised high school athletic activities. The Plan provides limited coverage only".³

²Wisconsin, Wisconsin Interscholastic Athlete Association, Benefit Plan Summary. Stevens Point, Wisconsin, 1968.

³Minnesota, Minnesota State High School League, The Forty-Sixth Annual Official Handbook, Minneapolis, Minnesota. 1968-69.

Some states, Montana being one example, have previously administered state-wide programs but discarded them when more commercial companies entered the school accident insurance field. Montana discarded the program in the fall of school year 1961-62 and schools now choose their carriers at the local district level and financing is at the option of each district.

The Montana Interscholastic Association also stressed "assistance" rather than "insurance" when they were administering the state-wide program.

The Athletic Association Benefit Plan has been developed by the Montana High School Association to provide financial assistance to meet medical and dental expenses incurred as a result of injuries received in athletic participation. The Plan is not insurance.⁴

Allowing each school to pick their own insurance program can lead to a wide variation of programs and some students could have inferior coverage. John McGee, in his book *General Insurance*, stresses the fact that there is no such thing as a "standard" policy in the health and accident field.

There is no standard accident or health policy; competition has brought scores of contracts onto the market. If emphasis is placed upon the premiums, which is particularly low, the coverage under the contract may be expected to be limited.⁵

⁴Montana, Montana High School Association, Official Handbook. Helena, Montana. 1960-61. p.98.

⁵John H. Magee, General Insurance (Chicago: Richard D. Irwin, Inc., 1947), p.678.

The State of North Dakota approached the problem as an assistance to parents, similar to the Minnesota plan, in that they stressed that the state-wide program was an "assistance" plan. The Interscholastic Association administered the plan independently of any commercial carrier. The major difference between the North Dakota and Minnesota plan involved the financing. The North Dakota plan was financed on the theory that participating students should not be involved in premium payment. The School District was responsible for payment of the premium in accordance with the total enrollment. Schools had the option of joining this state-wide plan or going to a commercial carrier. In the school year 1968-69, 95 per cent of all eligible schools chose to enroll in the state-wide program. District funds provided approximately 75 per cent of the premium dollars in North Dakota schools. The remaining 25 per cent was paid in a variety of methods determined by local administration.⁶

The New York State Interscholastic Association also administered a program of insurance. The New York public high schools were offered two options of purchasing coverage. A blanket coverage for all students could be purchased at a per pupil per year rate, or the school could offer the coverage to pupils on an individual policy basis. The latter case involved a much higher per pupil per year

⁶North Dakota, North Dakota High Activities Association, What is the Accident Benefit Plan? Valley City, North Dakota. 1969.

rate. The New York plan, in both options, offered an alternate rate for double indemnity. This option, if chosen, would pay twice the amount listed on the indemnity schedule. An appropriate additional charge corresponded to the base rate for blanket or individual protection. The availability of the double indemnity option was an indication of the belief that the basic plan was inadequate to cover current medical costs.⁷

Plans offered by state associations and by commercial carriers frequently offered another option which affected cost. This option allowed the student to be either covered while at school or on a 24 hour basis. In the latter case the student was purchasing coverage for any accidental injury rather than for athletic injury only. Within these two options, the policies generally had another choice which involved the inclusion or exclusion of football injury. The extra premium charged to include football was, in most cases, as much or more than the base premium. Underwriters and actuaries obviously recognized the degree of exposure in this contact sport. An example of individual rates offered in one program for school only and for 24 hour coverage was as follows:

⁷New York, New York State High School Athletic Protection Plan, Inc. Complete Regulations. Schenectady, New York. 1967.

1. At school coverage
 - a. Grade 9-12 - \$5.00 per year
 - b. Grade 9 include football - \$11.00 per year
 - c. Grade 10-12 include football - \$24.00 per year
2. Twenty-four hour coverage
 - a. Grade 9-12 - \$15.00 per year
 - b. Grade 9 include football - \$24.00 per year
 - c. Grade 10-12 include football - \$34.00 per year⁸

The California Interscholastic Federation Protection Fund was incorporated in 1939 to assist the parents in paying medical costs for pupils injured while participating in interscholastic games or practice during the season of the sport. The Fund, like those in other states having self-administered programs, was explicit in the literature concerning the fact that it was not a full insurance plan. The California brochure outlining coverage stated:

California Interscholastic Federation Protection Fund does not guarantee full payment of claims submitted in connection with athletic injuries. California Interscholastic Federation Protection Fund provides scheduled benefits-----for services rendered within 365 days from date of first medical care. Benefits are available only if the first medical care is rendered within 120 days from date of injury.⁹

⁸Student "3500" Accident Plan, Arizona Blue-Cross - Blue-Shield Brochure, Phoenix, Arizona, 1968.

⁹California, California Interscholastic Federation Protection Fund-General Information Bulletin, Santa Barbara, California 1968-69.

A study by Charles Smerin in New York schools concluded that there was a trend toward greater financing of the athletic programs by public funds. It did not specifically mention insurance but the philosophy of recognizing athletic programs as a taxpayers responsibility could eventually include injury insurance.

There is a developing trend for increased financial support from Boards of Education budget funds for the interscholastic athletic program. The results of these investigations indicate that written board of education policies for interscholastic athletic programs should be developed, based on the philosophy and practice of all curricular offerings. Boards of education should become involved in a program of broader support from budget funds for the interscholastic program, if it receives less financial support, comparatively, from this source than does the academic program. These findings carry implications for further research in the field.¹⁰

The investigator reviewed articles in various professional publications in search of related literature. There was a great deal written about athletic injuries but insurance coverage was rarely discussed. Journals and Research Quarterlies of the American Association of Health Physical Education and Recreation, School Boards Journals, Athletic Journal, School Executive, The Journal of the National Athletic Trainers Association, Scholastic Coach, and the Nations Schools were publications searched for related information. Dissertation abstracts for the past ten years were reviewed for related studies. The majority of the research involving insurance in schools dealt

¹⁰Charles Smerin, "A Study of Certain Problems in the Financing of Interscholastic Athletic Programs in High Schools, "Dissertation Abstract (New York, New York: Temple University Press, 1968), Vol. 29, No. 4, p.1090A.

with property insurance and employee hospitalization but little was available concerning athletic insurance. An Arizona study in 1965 by Joseph Schieffer concerning community attitudes towards athletics bears out the contention in Chapter I of this study that athletic programs are generally accepted by the public. Schieffer found that 75 per cent of the public contacted had accepted high school athletics as an integral part of the high school program.¹¹

The amount of research on athletic injuries was limited and what has been done has been primarily in college. The American Medical Association has cooperated with college coaches on an annual conference to discuss prevention and care of injury. One of their members, John Yost, discussed the lack of research in a recent article concerning the Nebraska Schools.

One of the difficulties in evaluating athletics and the morbidity is the lack of research having been done on the general nature of athletic injuries. For over 30 years an accurate registry of all deaths from football has been maintained. Aside from this, only spotty information can be obtained concerning the number of injuries, the type of injuries and the morbidity from these injuries. What studies have been done have primarily been done on a college level.¹²

¹¹Dissertation Abstracts Volume 26 #8 - Joseph Schieffer, Ed. D - University of Arizona 1965 "Community attitudes towards Interscholastic Athletics in a selected School District".

¹²John Yost, "Faculty Trainer - a New Program for Nebraska High Schools", The Journal of the National Athletic Trainers Association, (Summer, 1969, Vol. 4, #2, pp.10-11.

Summary

In the area of athletic insurance the majority of the states have left the choice of the program and the insurance carrier up to the local school districts. Eight states administered an assistance program which paid a limited schedule of benefits. The extra premium to include football on a school accident policy was generally equivalent to the base premium or, stated another way, it doubled the premium.

While the questionnaire response of the Executive Secretaries in the 11 western states indicated agreement in their belief that athletic insurance should be in the school budget, only two, Utah and Texas, responded that a majority of the schools in their states were paying the premiums. Eight of the 11 states did not have a state-wide requirement that students carry insurance when participating in interscholastic athletics.

A review of literature and research specifically related to Arizona revealed the same neglect of athletic injury insurance. This void supported the investigators belief that this study would be of value to Arizona schools and future students participating in the interscholastic program.

CHAPTER III

DESIGN OF THE STUDY

The data for this study was collected through the use of a questionnaire, a series of personal interviews, and a review of claims records for the years 1968-69. All of the information was collected in the State of Arizona. Those procedures are treated in detail in this chapter.

Preparation of the Questionnaire

A three part instrument, Appendix A, page 71, was used to compile data for the analysis of the Arizona High School athletic injury protection plan. The three sections of the instrument concentrated upon participation, safety, and insurance.

The participation section was designed to determine what sports were being offered in the schools, how many students were participating in football, and how many contests in each sport were scheduled throughout the school year. Additional emphasis was placed upon the sport of football since a majority of the injuries were found to occur in this sport. The data related to participation was deemed relevant because it would give information needed to determine the correlation between the frequency of injury and the amount of participation. It was hoped that this data would be meaningful in judging the need for insurance protection. This data also would be of vital interest to prospective insurance carriers if it was decided that the state program should be presented to commercial carriers for competitive bidding. It

was assumed that insurance companies would want to know how many participants were involved and how many games were to be played in each sport so that they could estimate the frequency of claims for rate computation.

The second section of the questionnaire, safety, concentrated on the area of preventive steps taken in the schools to reduce the number of athletic injuries. The type of equipment used in the football program was the major area of concentration in this division. The type of equipment worn and whether or not the equipment was purchased by the student or school was considered of consequence in judging the effectiveness of the schools preventive program. Schools that purchased the protective equipment for athletes could exercise better control of the quality of equipment, hence this investigation was concerned with the determination of whether the school or student purchased various pieces of equipment. Payment for the equipment was also of interest because it could be a contributing factor in the basic hypothesis of this study which maintains that students are being deprived of athletic participation due to economic factors.

The third area in which data was collected involved the type of insurance protection the schools currently carried for the athletes. This section also utilized questions designed to collect data on the opinions of the school officials concerning the type of program they desired for their schools.

To formulate a valid instrument of measurement the following steps were taken in the preparation of the questionnaire.

1. The form of the instrument and the questions were designed in a manner that was believed could be quickly administered yet comprehensive in obtaining the data required.
2. The Executive Secretary of the Arizona Interscholastic Association and his assistant, both former coaches and school administrators, were asked to review the instrument. Following suggestions of these two educators, certain questions were restated for clarification and some additional questions were added.
3. The questionnaire was presented to a class in Education 500, a thesis seminar at Montana State University. The class was requested to review each item for clarity of intent as well as validity. The criticisms and suggestions of this group were helpful and resulted in many changes in the wording of the questions in order to avoid ambiguous meanings.
4. The revised instrument was next administered to a group of coaches and administrators in Montana on an individual basis. These men were asked to complete the form as though it applied to their schools. They were further

requested to make written comments on any question that they did not completely understand, or which they believed ambiguous. Following review of the comments a final revision was made to comply with the suggestions.

Administration of the Questionnaire

Immediately following the 1968 football season, the investigator mailed a questionnaire to the 124 high schools in Arizona. A cover letter, Appendix B, page 77, was sent explaining the purpose of the study. To encourage the high schools to cooperate by participating in the study, a letter, from Hiram Hendrickson, Executive Secretary of the Arizona Interscholastic Association, Appendix B, page 78, was also included. The response, 108 schools, or 87 per cent, indicated a high interest in the study and concern for the problem involved. The questionnaire was directed to the administrative head of each high school and he was asked to complete the questionnaire or ask the athletic director to do so. It was assumed that these educators would conscientiously answer the questions to the best of their ability. A self-addressed card was enclosed for requests of the study results and 87 schools, 70 per cent, returned the request cards.

Personal Interviews

A second method used in obtaining data was the personal interview. Schools were selected for follow-up interviews according to response

to the questionnaire. Schools which indicated an unusually high number of students unable to participate because of insurance premiums and schools which had indicated that their communities had been involved in a fund raising drive to pay medical expenses for an athletic injury were chosen for visitations. Coaches and administrators were cooperative in discussing these problems and their comments indicated that athletic injury insurance was a mutual problem of students, parents, and school officials.

Review of the Claims Record of Blue Cross - Blue Shield

The final phase of investigation involved a review of claims filed in 1968-69. This review was to aid in determining the types of injury claim most frequently filed, the frequency of injury in each sport, and the total dollar claim involved. The records of Blue Cross -Blue Shield were studied because that company wrote the coverage in 84 schools or 78 per cent of those reporting. It should be noted, however, that since coverage was not required by the schools, it did not mean that Blue Cross-Blue Shield coverage was carried by a majority of the participants. This point will be discussed in more detail in Chapter IV in the analysis of data found in the claims review. A record of the claims breakdown is in Appendix E, page 87.

Summary

The questionnaire was prepared and tested with several groups of educators before being administered to the schools.

Each school received two letters with the questionnaire. One letter was from the Arizona Interscholastic Association encouraging schools to participate in the study. The second letter was a cover letter from the investigator requesting that the administrator or the athletic director complete the questionnaire. The purpose of the study was explained in this second letter.

The questionnaire responses were tabulated for each of the three divisions. This was a manual tabulation charted separately for each division.

Personal interview selections were determined from the questionnaire tabulation. The choice of schools to visit was based upon unusual responses to specific questions.

A review of Blue Cross-Blue Shield claims for the year 1968-69 was made since this carrier wrote the greatest number of athletic insurance programs for the schools of Arizona.

CHAPTER IV

REPORT OF THE FINDINGS

In this chapter the data collected by use of the questionnaire was treated in accordance with the three separate divisions of the study. Participation, safety and present insurance coverage are presented in that order with a chart of results included for each division.

Participation of Activity and Size of School

The first item in division one of the questionnaire asked for an indication of the classification of the school. In Arizona the Interscholastic Association has designated the classification in accordance with pupil enrollment. These divisions were outlined in Chapter I showing the AAA to be the largest and class C the smallest schools.

The survey indicated the following: 38 schools were in class AAA; 12 schools were in class AA; 20 schools in class A; 25 schools in class B; 13 schools in class C. The survey results, Table I, page 36, indicated that every school sponsored a basketball team on an interscholastic basis and all but one competed in interscholastic football. Track, with 101 of 108 schools participating, ranked third in frequency while baseball with 100 schools ranked fourth. The survey showed that these four sports - baseball, basketball, football and track were the only sports offered in a great majority of the class C schools, those having 150 or less students. Only one class C school sponsored a wrestling team and one participated in interscholastic tennis.

TABLE I

Number of schools participating in athletic activities and the number of athletic contests scheduled for each classification.

| | Classification of Schools* | | | | | State Totals |
|-------------------------------------|----------------------------|-----------------|----------------------|-----|-----|---------------------|
| | AAA | AA | A | B | C | |
| | 38 | 12 | 20 | 25 | 13 | |
| <u>Varsity Athletic Activities</u> | <u>Number</u> | <u>Schools</u> | <u>Participating</u> | | | |
| Baseball | 38 | 12 | 20 | 22 | 8 | 100 |
| Basketball | 38 | 12 | 20 | 25 | | 108 |
| Cross Country | 36 | 9 | 9 | 5 | | 59 |
| Football | 38 | 12 | 20 | 25 | 12 | 107 |
| Golf | 29 | 8 | 6 | 2 | | 45 |
| Gymnastics | 18 | 1 | 2 | | | 21 |
| Swimming | 20 | | | | | 20 |
| Tennis | 36 | 9 | 12 | 10 | 1 | 68 |
| Track | 38 | 11 | 20 | 23 | 9 | 101 |
| Wrestling | 35 | 10 | 12 | 6 | 1 | 64 |
| <u>Freshman Athletic Activities</u> | | | | | | |
| Baseball | 35 | 9 | 8 | 3 | 3 | 59 |
| Basketball | 36 | 12 | 19 | 20 | 7 | 94 |
| Cross Country | 29 | 2 | 2 | 1 | | 34 |
| Football | 36 | 12 | 16 | 9 | 5 | 78 |
| Golf | 5 | 1 | 4 | 1 | | 11 |
| Gymnastics | 6 | | | | | 6 |
| Swimming | 3 | | | | | 3 |
| Tennis | 31 | 2 | 3 | 1 | 1 | 38 |
| Track | 34 | 5 | 7 | 5 | 2 | 53 |
| Wrestling | 22 | 4 | 6 | | | 32 |
| <u>Athletic Activities</u> | <u>Number</u> | <u>Contests</u> | <u>Scheduled</u> | | | <u>State Totals</u> |
| Baseball | 621 | 195 | 305 | 399 | 75 | 1457 |
| Basketball | 675 | 229 | 375 | 479 | 233 | 1991 |
| Cross Country | 322 | 57 | 78 | | | 457 |
| Football | 376 | 108 | 188 | 221 | 92 | 985 |
| Track | 345 | 112 | 184 | 151 | 31 | 823 |
| Wrestling | 326 | 104 | 132 | | | 562 |

*Classification of School is according to student High School Enrollment.

- AAA - 1400 plus
- AA - 750 - 1400
- A - 400 - 750
- B - 150 - 400
- C - 150 or less

Individual sports were offered more frequently in the larger schools. Golf for example was offered as an interscholastic sport in 29 of the 38 AAA schools, eight of the 12 AA schools, six of the 20 A schools, two of the 25 B schools and none of the 12 C schools. A similar pattern was shown for tennis, wrestling, cross country and gymnastics. The 20 swimming teams were all found in the AAA schools.

The next item on the survey involved the number of schools sponsoring interscholastic competition for the freshman. Ninety-four schools, or 87 per cent of those reporting sponsored basketball and 78 schools, or 72 per cent of those reporting had interscholastic football. The pattern was the same as that found in varsity sports where the larger schools offered a much wider range of interscholastic competition.

Item five requested the number of games scheduled each year in each of the interscholastic sports. The total number of athletic contests scheduled throughout Arizona for the year 1968-69 was 6,699.

Safety Procedures Followed in Arizona High Schools

This division of the questionnaire was designed to supply data, Table 2, page 38, pertaining to the prevention of athletic injuries.

Item one asked "Does your school furnish football shoes?". The space for response was divided into varsity, junior varsity, and freshman categories. Eighty schools, or 74 per cent of those reporting, furnished shoes for varsity players while 62, or 57 per cent

TABLE II

Safety practices followed by Arizona schools

| | Classification of Schools | | | | |
|---|---------------------------|----|----|----|----|
| | AAA | AA | A | B | C |
| Schools playing football | 38 | 12 | 20 | 25 | 12 |
| Safety practice | Number of Schools | | | | |
| Schools furnishing football shoes | | | | | |
| Varsity | 25 | 10 | 14 | 21 | 10 |
| JV | 25 | 10 | 14 | 21 | 6 |
| Frosh | 25 | 10 | 12 | 12 | 4 |
| Type of cleat used | | | | | |
| Rubber | 9 | 4 | 3 | 7 | 2 |
| Plastic | 21 | 5 | 11 | 12 | 6 |
| Mixed | 9 | 3 | 6 | 6 | 4 |
| Aluminum | 0 | 0 | 0 | 0 | 0 |
| Additional official in football would improve safety | | | | | |
| Yes | 3 | | | 6 | 2 |
| No | 35 | 12 | 20 | 18 | 10 |
| Is a physician in attendance at football games? | | | | | |
| Yes | 38 | 11 | 17 | 19 | 1 |
| Type of mouthpiece used | | | | | |
| Fitted | 25 | 10 | 14 | 14 | 8 |
| Attached to chin strap | 10 | | 4 | 6 | 3 |
| Mixed | 3 | 2 | 2 | 5 | 1 |
| Does school provide mouthpiece? | | | | | |
| Varsity | 25 | 12 | 15 | 23 | 10 |
| JV | 25 | 12 | 15 | 22 | 4 |
| Frosh | 24 | 12 | 14 | 12 | 2 |
| Number of schools requiring optional equipment | | | | | |
| Ankle wraps | 7 | 6 | 3 | 10 | 2 |
| Rib pads | 14 | 4 | 5 | 14 | 9 |
| Does the one-week of required calisthenics preceding football practice reduce injury? | | | | | |
| Yes | 34 | 12 | 20 | 23 | 12 |
| No | 4 | 0 | 0 | 2 | 0 |

were providing shoes for the freshman football players. The importance of a shoe in terms of protection was stressed by the Rules Committee of the National Federation of Interscholastic Athletics. They ruled that all players must wear shoes and that the shoes must be of a protective nature.

The National Alliance football rules require that all players wear shoes. The definition of a shoe is that it shall be made of a material which covers the foot (canvas, leather, or plastic) attached to a firm sole of leather, rubber, or composition material which may have cleats which comply with the rules or which may be cleatless. Such a shoe offers participants protection and is the reason for the requirement in the National Alliance Code. Items which do not meet the requirement are ballet slippers, slipper socks, heavy socks with laces inserted and tennis shoes cut so that protection is reduced.¹

The requirement that a boy furnish his own shoes would make it more difficult for the school to exercise control over the type of shoe worn because parents might not wish to buy as expensive a shoe as the coach recommended.

The second item also related to the football shoes as it asked for information on the cleats. The results showed that 55 schools, or 51 per cent, use plastic cleats, 25 schools, or 26 per cent, use rubber cleats and the remaining schools are using a mixture of plastic and rubber. The Rules Committee of the National Federation of Interscholastic Associations suggested that long cleats were partially

¹Safety Sub committee Report, National Alliance Football Rules Committee Meeting, Sheraton-Biltmore Hotel, Atlanta, Georgia, January 9, 1969.

responsible for the number of ankle and knee injuries. A new rule passed in January, 1969 requires that no cleat be longer than one-half inch as of the fall season 1971. They recommended that the shorter cleat be adopted for the 1969 and 1970 seasons. The Rules Committee has recommended further study concerning the length of football cleats.²

After a study of knee injuries in Nebraska High Schools conducted by Daniel Hanley in 1963 he recommended elimination of the heel cleats and a shortening of the front cleats to lessen the number of knee injuries in football.

It is our impression that the incidence of knee injuries in football could be lessened and the severity of injury reduced by eliminating the heel cleats and replacing them with a flat, 7/8", rubber heel, thus allowing the foot to rotate when a torsion force is applied. The long, conical, front cleats should be replaced with shorter, broader, soccer type cleats.³

"Is your football field grass or skinned?" was item three in this section. Because only three Arizona schools were playing football on fields that were skinned, without any grass turf, the results on this item were not meaningful. The purpose of the question was to see if

²Safety Subcommittee Report, National Alliance Football Rules Committee Meeting, Sheraton-Biltmore Hotel, Atlanta, Georgia, January 9, 1969.

³Daniel Hanley, "An Attempt to do Something About Football Knee Injuries", Medicine in Sports, Vol. 3, No. 4, November, 1963.

there was a correlation between injuries and the type of field. The writers speculation that fewer knee and ankle injuries might be found on skinned fields was left unanswered.

The next item, "Do you feel an additional football official would reduce injuries?" received a strong no vote. The purpose of this question was to determine whether or not it was believed by school authorities that frequent injuries resulted from undetected roughness or illegal contact. Ninety-seven schools, or 90 per cent, said they did not feel the extra official would reduce the number of injuries. Eleven schools, only 10 per cent, favored an extra official while seven schools did not answer.

Twenty-two schools responded "No" to the next item: "Does your community have a resident physician?" This question concerned the availability of a physician to attend the interscholastic contests. Only four of the class C schools had a physician living in the community. Thirteen class B schools, 19 class A and all of the AA and AAA schools did have resident physicians.

The fact that it would be difficult to require a physician at every game is indicated in the data recorded from item six which asked, "If you do not have a resident physician how far away is the nearest hospital or resident physician?" Twelve schools were over ten miles and three schools were over 25 miles from the nearest medical facilities. The Arizona Interscholastic Association recommended that a

physician be available at each football contest but has not made this a requirement.⁴

Item number seven asked the following question: "Do you have a physician scheduled for attendance at interscholastic athletic contests?" Eighty-eight schools, or 81 per cent, indicated that a physician was in attendance at every football game. Eight schools made arrangements for a doctor at basketball games, five schools had a doctor at baseball games, and track meets, and four schools made this provision for their track meets.

To further complicate the problem of physician availability at the time of injury, it appeared that the majority of athletic injuries occur during the practice sessions. A 1968 study of high school injuries in Rhode Island by A.A. Savastano found that 62 per cent of all injuries during the year occurred during practice periods while only 38 per cent occurred during the games.⁵ The time spent in practice, approximately eight hours a week, compared to the duration of a game, less than two hours each week, would seem to be a logical reason for the high percentage of injuries during practice sessions.

Response to item eight, "What type of protective mouthpiece does your school use?", indicated that 73 schools, or 68 per cent of those

⁴Arizona Interscholastic Association, Handbook, 1968-69 - Phoenix, Arizona.

⁵A.A. Savastano, "Report from Rhode Island Conference". Medicine In Sports - Vol. 9 #2 - March 1969.

