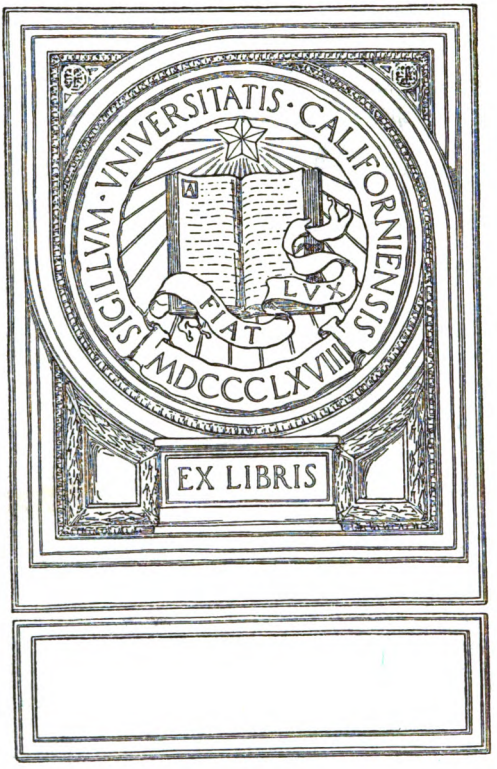
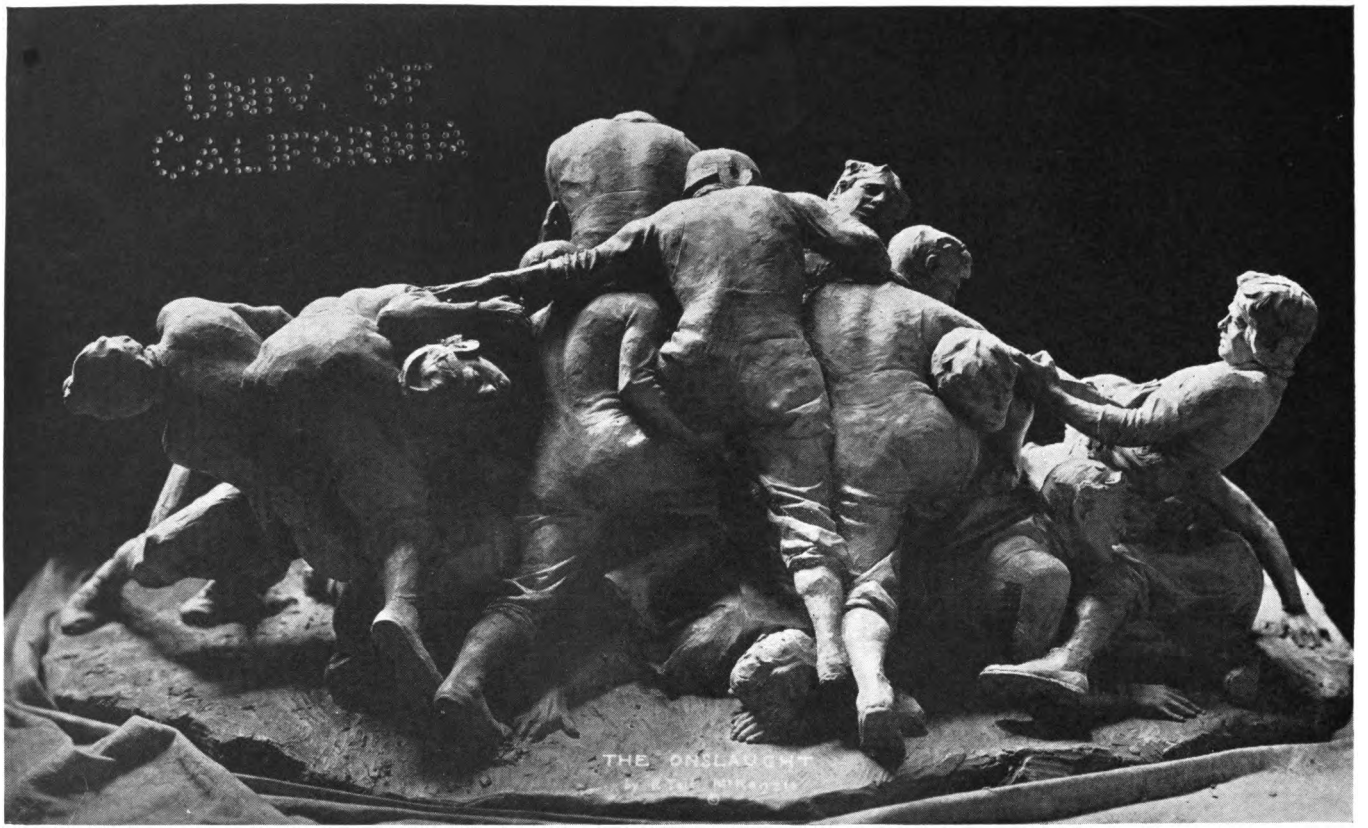
THE PHILOSOPHY OF ATHLETICS

ELMER BERRY





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THE ONSLAUGHT

THE PHILOSOPHY OF ATHLETICS

Coaching and Character

With

The Psychology of Athletic Coaching

By

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THIS STUDY IS DEDICATED

TO THE MEMORY OF

WILLIAM HENRY GEER

FORMERLY DIRECTOR OF PHYSICAL EDUCATION AT HARVARD UNIVERSITY, WHO IN THE SHORT LIFE GIVEN HIM EXEMPLIFIED IN A FULL AND COMPLETE WAY THE IDEALS WHICH THIS STUDY ADVOCATES.

PREFACE

THE time has come when a statement of the inherent underlying psychological principles of athletics is exceedingly important. This should not be a matter of applying the details of educational psychology to athletics, important and valuable as that would be, but rather a statement of the peculiar, fundamental, basal principles relating to athletics, especially the great team fighting games. Such principles exist; and they are of special significance and value to education.

The application of these principles to the problem of athletic coaching, together with the application of the laws of educational psychology, represents the practical part of this study for teachers of physical education and athletic coaching.

The first three parts of this study were essentially a Doctorate Thesis at the Graduate School of Education at Harvard University, 1925. Part IV on the "Psychology of Coaching" has been added for the practical men on the field. Education should have some conception of the practical problems of the athletic coach, and the coaches should have an understanding of the wonderful fundamental contribution which they are privileged to make to education.

ELMER BERRY.

ACKNOWLEDGMENTS

THIS study was pursued under the immediate direction of Mr. William H. Geer, at the time Director of Physical Education of Harvard University, whose suggestions and advice were most helpful. The writer is also greatly indebted to Professor George E. Johnson of the Graduate School of Education, Harvard University, for careful and thoughtful criticism and suggestions. Much valuable advice was also given by Dean Henry W. Holmes. It is a pleasure to express my obligation to all of these men of the Graduate School of Education.

Special appreciation, however, is due Professors George E. Dawson and Hanford M. Burr of the International Young Men's Christian Association College, Springfield, Massachusetts, both of whom by their enthusiasm and interest did much to inspire and assist this production.

ELMER BERRY.

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GENERAL INTRODUCTION

PHYSICAL EDUCATION AN ESSENTIAL FACTOR IN GENERAL EDUCATION

THE supreme goal of the school in a democracy is the production of citizens. The objective of modern education is broader than ever before in the history of education.[1-5] *

Formerly the school had a restricted function and a comparatively simple task. It aided in the development of the citizen by establishing the fundamentals of his intellectual equipment. *It taught the three R's.* Its task was clean cut and precise; its methods few and definite; there were no problems of curriculum content and no "frills." The school did not profess to give all of the education required for life; much of that came in the home, the church, in daily life and work. The early school performed but a relatively small part of the task of developing a citizen.

Little by little, step by step, the complexities of modern life have forced an ever widening field of activity upon the school. The modern home is no longer a trade school, a gymnasium, a hospital, a social center, and a source of culture combined. Much of the education furnished by the early home can be given better to-day by the school; at least if it is to be gotten at all it will *have* to be given by the school. Modern life has greatly reduced the possibilities of the home as an educational institution.

In earlier times the church aimed to care for the ethics,

*All references will be found complete in the bibliography at the end. When authors are directly cited, the reference will also be found at the foot of the page.

morals, and theology of future citizens. The problem of religious education to-day is in an admittedly confused and difficult situation. Some way must be found by which the school can register effectively on ethics and morals to the production of citizens of character.

So formerly the matter of health was not a school problem. Large cities and the consequent masses of children have, however, made it so from the point of view simply of infection. Added to this is the fact that large numbers of children suffer from remediable defects; that many of these defects would not be discovered or removed if the school did not insist; that the success of the effort of the school is seriously delayed and often prevented unless these defects are corrected. The modern school is, therefore, justified, indeed forced to assume health inspection, supervision, and instruction of an extremely important type. The startling revelations of poor physique produced by the draft examinations places the problem of an adequate physique for the national defense up to the schools. Thirty-three states have responded with more or less compulsory physical education school laws. Good health and adequate physique are fundamental to citizenship. The modern school must play a major part in securing these to the nation.

Social contacts are peculiarly fundamental to citizenship in a democratic "melting pot" like America. The social life of the home is reduced; that of the neighborhood and community is greatly restricted; commercialized amusement and recreations furnish dangerous substitutes. One of the great future problems of education is to shape an adequate and workable social policy for our schools and devise activities that will secure desirable social values.

Ethical principles can be taught but people must *experience* ethical situations, make ethical choices, be led, influenced, guided into right ethical reactions if a high ethical citizenship is to result. The church cannot do this alone. If it is to be

accomplished the school must here also explore uncharted seas and capture a new world.

The right control of emotions is likewise a field demanding help from the school. Our civilization is intensely neural. "Health comes in through the muscles and flies out through the nerves." High speed, excessive use of the finer neuro-muscular coördinations, and the breaking down of inhibitions produce tense emotional states. Nervous fatigue and instability result. The increase in nervous diseases and insanity compels the attention of educators. Our people must acquire tough nervous systems adequate for our civilization—else we perish and education will be to no purpose. The school starts early in life and gets all; it has a better opportunity, therefore, in the very nature of the case than any other institution to develop a rational, sane, emotional control. It must discover methods for this purpose.

Social, ethical, and emotional characteristics determine one's character. If the school could develop these characteristics in the right way it would become the great American laboratory of character. To no other institution in American life is such an opportunity for building character offered, and on no other institution in American life does such heavy responsibility rest. The modern school must learn how to produce citizens of character!

The Contribution of Physical Education

In the history of education no subject has occupied a more changeable position than has physical education.[6] From the Greeks to the present it has had a kaleidoscopic existence. America as a frontier land with forests to remove, railroads to build, and fields to cultivate had little need to consider physical education seriously. We are still so recently removed from such conditions that it is difficult to escape the tradition that "chores" and "home duties" furnish adequate physical educa-

tion. Yet forty years have made my boyhood and that of my sons to differ more than mine differed from that of the Greeks.

For such a frontier land America has been peculiarly sensitive to the fundamental importance of physical education. It is to the credit of American educators that physical education has almost from our beginning occupied some position of importance in our scheme of education. It would be but natural, however, that its fundamental philosophy, its technique, and its objectives should have experienced rapid changes with frequent statements and restatements.[7] This has been the case. The days of Catharine Beecher, Dio Lewis and the Delsarte system glided rapidly into the battle of the Swedish and German systems, both to be profoundly influenced by the "light, safe, easy, beneficial, and pleasing" hygienic work of R. J. Roberts and the Y. M. C. A. School, all in turn to be well-nigh swallowed up by the great American athletic movement. With Luther Gulick [8] came the first serious attempts to formulate a real philosophy of American physical education, and to put the work on a scientific basis. An eclectic "grab-bag" resulted, professing to take nothing completely and the "best of everything." It is not surprising, therefore, that we should still be in the midst of heated arguments and frequent new statements of objectives and should still be searching wildly for satisfactory methods of measuring results.

The fact that we have not yet agreed upon standards of measurement, either of physical efficiency, motor ability, physiological condition, or educational relationships shows that we have not yet arrived. The same may be said of education in general. In both fields great progress has been made. Psychologists and educators have studied the problem from many angles. Points of view and important considerations have been stated. In the midst of apparent confusion we are nearer

[8] Athletic League Letters to Y. M. C. A. Physical Directors (unpublished). Editorials in the Triangle and Physical Education, 1885-1900.

to the possibility of formulating an acceptable statement of the philosophy of the "American System" of physical education than ever before. For the first time in American physical education the general practices and methods of procedure coincide nearly enough to allow such a term as "the American System" to be loosely applied to our composite mass of athletic, team game, big-muscle activity, which to so large a degree, whatever our individual theories and statements, constitutes our actual procedure.

The writer does not presume to lay down the philosophy of this modern "American System"—if such there be. There are, however, some relationships to general education to which it may not be presumptuous to call attention. The basis for these relationships will be discussed in the following chapters. Here they will simply be suggested.

The fundamental conception is the rapidly growing conviction among psychologists, general educators, and teachers of physical education alike that big-muscle activity is fundamental and that there is underlying it a psychology of basic importance to general education. This will furnish the explanation of the social values which our present team game athletics so highly develop. In these activities come many social situations, ethical choices, and emotional states that inherently affect character. Physical education of this type, properly directed and supervised, furnishes to educational leaders a powerful agency for social, ethical, emotional, and character training. No other activity in our educational program gives opportunity for such direct and powerful training of the characteristics that make for good citizenship. If it be true that the objective of modern education is good citizenship and that the school must increasingly supply laboratory training in social, ethical, emotional, and character values, then education will find in the modern "American System" of physical education its greatest agent. The writer believes

that a vague unstated belief in this "philosophy of athletics" is the reason for the present great popularity of athletics and the interest of public and educators alike in athletics and physical education.

It is the purpose of this thesis to attempt to ascertain a psychological basis for the ethical values of athletics, to investigate the facts in certain significant fields as to the ethical value of present day athletics, to suggest methods by which educators may more completely utilize their most powerful ethical agent, and to suggest psychological methods by which coaches should proceed in order that the objective of modern education—good citizenship—may be further realized.

PART I

THE EDUCATIONAL BASIS OF ATHLETICS

CHAPTER I

THE PSYCHOLOGICAL BASIS OF ATHLETICS

THE psychology of play has been carefully studied, various theories having been advanced. These have been ably discussed by Groos,[9] Gulick,[10] and others.[11-16] The surplus energy theory of Schiller, developed and extended by Herbert Spencer, the idea of play as a preparation for life, the conception of play as an imitative activity, the notion that play is largely recreation and the final conclusion of Groos that play is instinctive, all possess elements of truth. They assist greatly in our understanding of play, each emphasizing important phases or elements. None of the above theories, however, seem to furnish an adequate or satisfactory explanation of athletics, commonly regarded as an important type of play.

The term athletics as used in this study must be defined. We desire here to consider chiefly competitive team games as illustrated in football, baseball, basket ball, hockey, soccer, and lacrosse, games in which educational authorities are especially interested. We shall attempt to present the philosophy of athletics from the viewpoint of education—to state the educational basis of athletics. To a lesser, though very great degree, the same principles will hold true for the more individualistic team games, such as track, swimming, tennis, boxing, wrestling, and gymnastics where the competition while individual contributes to a team result.

Athletics of this type, exemplified particularly by our representative high school, academy and college teams, with

[9] "The Play of Animals," 1898. "The Play of Man."
[10] "A Philosophy of Play," 1920.

their carefully planned and directed schedules of training and competition *are* or *should be* great educational assets. They have come to occupy a very important place in our educational life. If they are useful we should be able to explain why and how. If they are detrimental and antagonistic to the best interests of our educational life, they should be eliminated. As conducted in our educational institutions athletics are *far more* than simple play or recreation on the one hand and very *different* from physical labor on the other, though they exhibit many of the characteristics of both. The physical education of our fathers came out of their informal play and their labor; physical education to-day consists of several groups of highly specialized activities. This is particularly true of athletics.

What is the psychological basis of athletics? The modern behavioristic psychology [17, 18] has seriously questioned much of our earlier theory of instincts. Gradually as instinct after instinct, so called, has been subjected to experimentation and analysis, it has become clear that it is after all a *learned* reaction, a stimulus-response pattern. The particular response has become conditioned often by stimuli so common, so unobtrusive and so familiar from early life, and so usual with all individuals that we fail to recognize them as stimuli at all. The baby's smile, its cry for food, and many other apparently instinctive acts are clearly coenotropes learned by imitation and as a result of satisfaction derived from the successes of trial and error efforts. Likewise many of our "instinctive" avoidances such as our "natural" antipathy for snakes are early learned.

This situation creates for educational leaders both a responsibility and an opportunity. A responsibility first, because we cannot placidly and calmly lie back and "allow nature to take its course" in the firm assurance that certain desirable traits and tendencies will come "instinctively." Desirable social responses, neuro-muscular coördinations, and ethical

choices must be conditioned—*taught* if they are to be largely acquired. The earlier and the more effectively they are stimulated the more thorough the nurture. The modern school must furnish a great part of this training. It creates an opportunity in the second place, because it provides a method by which we may theoretically secure any desired result. If we are but sufficiently acute and clever we may arrange situations, employ stimuli and determine the responses. Desirable habits can be fixed and here lies a great field of possibility for the educator. In it the contribution of the teacher of athletics and physical education may be of extreme value.

As educators we will be wiser then to assume that we must and can teach many of the social traits and tendencies that we desire in good citizens. In so far as instinct, if such there be, comes to our aid we shall be the gainers. In this study we accept the principle of the conditioned response as the foundation of all teaching,[19, 20] and shall assume but one instinct—that of self-preservation.

Even self-preservation may eventually be proven to be a learned reaction. Be that as it may, it would seem that it is about as near being a fundamental tendency as we have and apparently it stands nearly alone as the one remaining commonly accepted *instinct*. Starting with it, either learned or instinctive, we believe that a psychology of athletics may be developed that has great educational significance.

It will be very difficult for the writer and, doubtless, equally difficult for the reader to refrain entirely from the phraseology and habit of thought of the older biological psychology. It does not seem to the writer essential for this study to adopt either point of view absolutely. The behavioristic philosophy and the conditioned response seem to offer the safer basis from which to proceed. If later the instinct psychology should be proven correct we are then but the better entrenched. The expressions, old fundamental racial emotions and so forth will

frequently appear. As used in this study the writer is thinking of these as learned stimulus-response patterns, so universal and common to the experience of all individuals of the race as to make them really racial habits, tendencies, or coenotropes. The distinction between these and instincts may be an indefinite one. Nevertheless, this idea does not involve a preformed, inherited mechanism. On this basis each individual of the race starts with big-muscle activity because that is the law of growth—not because the race did so; with this big-muscle activity is associated the fundamental, social, ethical, and emotional patterns which it is essential that each individual of the race shall learn. These patterns have been so associated from the earliest life of the race, and by necessity have been experienced by each individual.

Only as we come to the inhibitions of modern life do these associations tend to break up. We have, therefore, conditioned by big-muscle activity, the great learning processes of racial importance which appear to be almost instinctive in their nature. The result is much the same as if they *were* instinctive, but the writer feels that it is better to think of them as coenotropes, as learned reactions, conditioned by big-muscle activity; and this is the point of view even when poverty of language might permit the other interpretation.

In primitive man self-preservation involved fear. Man was not the equal of the great beasts that roamed the earth. He could hope to exist only by running away. It is not surprising, therefore, that fear and particularly fear of a loud noise should appear as one of the most instinctive emotions possessed by man. Experiments by Watson [18] demonstrate this to be so. It explains the remarkable association between running and fear. Once get an army, a man, or a dog running away and note the wild orgy of fear developed. The more the running the greater the fear. Note the fear of a running

[18] "Psychology from the Standpoint of a Behaviorist," 1919.

child pursued by another. Not only running but doubtless climbing and perhaps swimming resulted.

But running away, with its accompanying paroxysm of fear, was an annoying experience. Man resented it and began to seek a way of avoiding it. He became *angry*. Anger is apparently almost as old and fundamental an emotion as fear itself. Gradually primitive man dared to oppose his enemies. He learned to throw and to use a club. This greatly increased his power. He took heart-courage and began to fight on occasion before running away. Fighting increased the emotion of anger as running had fear. Throwing and the use of a club added strategy—man began to *think*. The combative, fighting, pugnacious tendency, "instinct," with its accompanying emotion of courage was born. More fighting brought more courage. Success brought satisfaction, safety, and freedom from the old annoyance of running away with its terrific fear. Likewise it made food more easily secured and more sure. It captured mates. It preserved not only the individual but the race. It determined man as the greatest fighting organism on the earth and eventually as its ruler.

But this could not be accomplished alone. Fighting as an individual with club and stone was good but much more could be accomplished together in groups; so came the social sense. This coenotrope, "instinct," of gregariousness, of coöperation, of *team* play is almost as old as the race itself. It played a great part in the survival of the race. This, the team spirit of modern athletics, really an expression of our old fundamental social tendency, likewise goes back to the early beginnings of the race. Its greatest modern expression comes in the fighting team games, best exemplified in football.

Together as a pack men could not only fight but could conquer and give chase. With running comes to be associated now no longer fear, but joy, exultation, pride—the satisfactions of victory; the fear of the pursued, the wild elation of

the pursuer. Watch the mimic play of the big boy and his little brother playing "Injun" as the "Big Injun" swings his paper tomahawk and roars wild whoops while he chases the desperate, screaming, agonized "pale face." One can hardly doubt that such activity has a racial origin of some form.

But comes the objection "running brings me no such emotions. When I go out to run a mile I get no fear and no joy out of it; nothing but fatigue." In other words doubt is expressed whether big-muscle activities do condition social, ethical, and emotional responses. A saw horse and woodpile do not condition much joy in an adolescent boy on a baseball afternoon! Two factors must be remembered. The first is labor, because much of our big-muscle activity is labor. With labor goes its own peculiar response pattern which has been learned by each generation. It is just as important as the responses of play; what makes the difference is perhaps not essential here. Just as soon as an activity becomes set, purposeful, planned, when one deliberately goes out to run a mile for exercise it produces no more thrills; it has become labor.

The second factor to remember is that of the inhibitions of modern life. The conditions of early racial life have passed. Our running to-day is not accompanied by, nor caused by the dangers and joys of early racial existence. As we grow older, therefore, we tend to inhibit these response patterns, to sublimate them, control them, and replace them with supposedly more sensible reactions. We refuse to allow ourselves to respond "naturally." As a result civilized people are on the point of losing the social, ethical, and emotional responses which big-muscle activity should condition for us and does tend to stimulate. This is a condition which should be prevented. The *joy* of big-muscle activity must not be lost.

If we can believe that Mother Nature was not always harsh, that fighting for life and food was not ever unceasing, then

there were periods of rest and relief. With these came play and the spirit of competition.

We have, therefore, associated with the instinct of self-preservation and growing out of the activities of the old racial life, conditioned now by those activities, the fundamental emotions of fear, anger, courage, fighting spirit, team spirit and the spirit of competition. The activities that were associated with these racial emotions were running, jumping, climbing, throwing, fighting, and perhaps swimming. Of all these, fighting was the most complete and comprehensive, since it combined all the other types of activity. In it all primitive emotions found expression. It is to the fighting team games of to-day, particularly such a game as football, that we must turn for the stimulation of those fundamental emotions. These activities employ the big muscles of the body; they use the old central fundamental trunk muscles; [21] they are our big-muscle activities.[22] More than any other activities these excite the circulation and respiration with the least expenditure of nervous energy. More than any other activities these are hygienic in effect and contribute to organic vigor and vitality, and the biological survival of the individual and the race. These fundamental racial emotions are preliminary to our modern refined feelings from which rise our social, ethical, and character adjustments.

One might ask, "Why teach a man to fight in order that he may learn to control the fighting spirit?" "What need has a modern man of the old racial characteristics?" "Science, the telephone, radio and electricity have done away with labor and personal combat. Big muscles are a nuisance, not an asset to-day." To such, one answer is the "Recapitulation Theory" [23]—the individual must pass through the experiences of the race. There is much to support such a theory but there is also much to question. One may doubt the applicability of this explanation in its entirety to our problem. Rather we

would say, "We must have big-muscle activity not because the race had it but because big-muscle activity is preliminary and fundamental to the growth of finer muscles." Big neuro-muscular coördinations of the trunk, legs, and arms are preliminary to the finer neuro-muscular coördinations of the hand, fingers, and organs of speech. The central nervous system develops control of the big muscles first, then control of the smaller and peripheral muscles. This is the biologic law of growth. A child must go through big-muscle activity not because the race did so (though that may be a sufficiently good reason) but in order that he may grow and develop as a normal individual. Only through big-muscle activity can the finer, so-called higher neuro-muscular coördinations of modern life be secured. Unless there is a big-muscle foundation the modern neural superstructure is built on sand. A big-muscle experience is essential for a tough nervous system that can hope to withstand the intense neural strain of modern life. What is physiologically true of the muscles and nerves is equally true psychologically. Through these big-muscle activities we may *condition* the old fundamental racial emotions. They have been through the ages associated with these activities and are, therefore, inherent in them. The finer emotions and feelings of civilized life are refined in the individual from the cruder, more basal, and fundamental emotions. Big-muscle activity is then fundamental biologically and psychologically.

Furthermore, early racial characteristics are still needed in modern life. We do not need the big muscles of Sandow but we do still need strong, supple, efficient bodies. The assurance and self-confidence of a vigorous organism is still the foundation of personality than which (See Chapter VIII, Study III, Questions X and XI) there is no more potent influence in modern life. Courage and fighting spirit are still needed—perhaps more than ever. But says some one "Fighting spirit

in athletics does not give fighting spirit in life. There is no proof of transfer of training." This question will be discussed more fully in the succeeding chapters as we discuss the various athletic values. Here we may simply suggest that that question is still open. Considerable evidence exists supporting the idea of transfer, particularly under favorable conditions. Our problem is rather one of *how* to effect a desirable transfer. Certainly it would seem that the only way to inculcate courage and a fighting spirit into an individual until they become fixed habits and characteristics is to subject the individual repeatedly to situations of as varied types as possible where courage and fighting spirit will be needed and then to control and direct the situations so that satisfaction will result. Let the man who doubts the transfer of any big-muscle characteristics, answer truthfully this question, "Would he willingly lend money to or go into business with a man whom he had detected slyly changing his lie or reducing his score on the golf course?"

Athletics present the greatest opportunity in modern life for the exercise of these old racial activities and the teaching of fundamental traits and tendencies. Through them the teacher of athletics has a means of conditioning the modern social, ethical, and character traits of desirable citizenship. This is particularly true in modern life since physical labor has been so largely displaced. Less than half a century ago our fathers hewed the forest, built roads, and conquered the wilderness. Long, hard, big-muscle toil has been the lot of the race until very recent times. Whatever part of the race escaped this fundamental condition degenerated and died. With this toil has been associated its group of emotions as truly as with the fight, the hunt and the chase. With the toil of the pioneer went the courage, the hope, the determination, the perseverance, and the sadness and melancholy of its time. Are we to lose these qualities? If not, educational leaders must

find a substitute for physical labor. For the modern adolescent boy the rigorous training of a football season more closely combines the characteristics of early racial fighting and the labor of pioneer days than any other educational activity. It is possible that it has some advantages over both.

In big-muscle activities then we have the key to the understanding of the psychology of athletics. Here, too, we have the basis for the social, ethical, emotional, and character values of athletics. It is our purpose in the following chapters to follow in more detail the development of these values.

CHAPTER II

THE SOCIAL VALUES OF ATHLETICS

Social training is an important part of modern education. It is particularly so in a democracy like ours. Educators must work out a social policy for education that will develop a social consciousness. Dean Henry W. Holmes [24] has stated that "the business of education is to reveal and interpret the world to an individual so that he can see it in the true way and form purposes truly; then inspire him to act on them steadily, insistently and efficiently." This means the formation of a conscious purpose and the attempt to live one's life in relation to others. Modern civilization has greatly decreased our family and community life. People in our modern cities know little of their next door neighbor. Our industrial life still further specializes and segregates us and divides us into classes. Emigration has made us a "melting pot" of diverse races, nationalities, colors, creeds, vocations and of diverse abilities, habits, standards, and ideals. The problem of democracy is whether the "melting pot" will melt. If American citizens are to evolve from this heterogeneous chaotic mass, the public schools must become one of our great socializing agencies. No other institution reaches so many, touches them so powerfully and at an age when the influence counts for so much as the public school. The public school to-day is accomplishing great good in social relations, from giving everybody measles and safety-first campaigns to ideals of world brotherhood. It is to-day the bulwark of American democracy. Nevertheless its social contribution can and must be increased. Athletics present to teachers one great activity

[24] "Lectures on Social Policy of Education."

rich in social possibilities. A vague but general realization of this fact, greatly heightened by the lessons of the world war is one of the great reasons for the present popularity of athletics.

War must end: here lies the psychological basis of athletics from the social side. In the previous chapter an attempt was made to present the general psychological basis for athletics. It was found to lie essentially in big-muscle activities and the associated emotions. Here, too, are the great social associations. With the development of pack fighting and hunting came the beginning of social evolution. Coöperation, team work, group consciousness, unity, sacrifice for the group—social traits were started. As was pointed out, this goes back to the primitive days of the race. The race survived and eventually became the rulers of the earth because of these social characteristics of brotherhood and mutual coöperation. All through the ages these characteristics have been associated with the big-muscle activities of fighting. Even to-day if a group is to become socially integrated, they must do something of big-muscle type together; play, dance, or work together. "Instinctively" those big-muscle activities condition in our groups of to-day these old racial social emotions. No other forms of activity bring them so powerfully into expression. If education is to yield social results it can do so most rapidly and most effectively by using old racial big-muscle activities. The team fighting games are the modern expression of such activity. In athletics then lies the modern substitute for war. The Olympic games will go far toward solving this problem.

Dean Holmes [24] has suggested that education should have as its social policy the production of a world that is secure, productive, economical of human talent and resources, equitable, and beautiful. It would be interesting to see in what ways athletics contribute to these five great social factors.

Security from the standpoint of national defense has em-

phasized the importance of physical education and athletics for our young men in no uncertain voice. The discovery that over one-third of our men of military ages were physically unfit for service was humiliating and startling.[25] War is not yet ended. The first requisite for defense is a strong and vigorous manhood. The result has been the adoption of laws for more or less compulsory physical education in the public schools of thirty-three states. The experience and training of our soldiers in athletics during the world war has created enthusiasm and interest throughout the nation. Competitive fighting team games such as football, hockey, lacrosse, soccer, and baseball have never been so popular as now. The leadership of college athletes as officers in the army, the morale and fighting spirit of the men, their amenity to discipline and training, and the general ease with which they adapted themselves to the "war game" has been popularly attributed, rightly or wrongly, to athletics. It represents a popular acceptance of the theory of transfer that may well challenge the attention of psychologists. Army officers have repeatedly indicated their high appreciation of the value of athletics in the training of the soldier. This is further most strikingly indicated in the recently inaugurated complete curriculum of athletics at West Point, where every cadet is now given training in all phases of athletics as a part of his regular training.

But the national defense is not our only problem of security. The physique of firemen, policemen, laborers, and citizens of all kinds is a matter both of security and productivity. Athletics, recreation, physical exercise, and outdoor life are fundamental to health. Good health and good physique are a great individual and social asset. As a matter of security athletics certainly can make a great social contribution to education.

Our productivity is no longer measured by the size of our muscles. Nevertheless health, as was suggested above, has

an important relation to productivity and to our economic condition. Professor Irving Fisher [26, 27] estimates that "we suffer an aggregate calculable loss from preventable illness and death of about $2,000,000,000 per year, or over four times the total expenditures for public education." "Dr. George M. Gould estimated that sickness and death in the United States cost $3,000,000,000 annually, of which at least a third is regarded as preventable." A similar study by Sir George Newman,[28] Chief Medical Officer of the British Ministry of Health, gives equally startling figures for England.

The economic loss from ill health appears to be the greatest single economic loss sustained by the body politic.

To this should be added the incalculable loss in productivity occasioned by early and premature death of mature producing individuals—men cut off in their prime at the height of their powers and productivity. According to the American Experience Tables the life expectancy of business and professional men is sixty-nine years. According to Fisher [26] the average length of life for males in Massachusetts is less than forty-five years. Compare this with the full rich productivity of President Eliot of Harvard University at ninety years of age—an illustration so exceptional and so striking as to call forth national comment, congratulation and celebration. It should not be forgotten that President Eliot was an athlete—a Harvard oarsman—in his youth and sensibly and consistently maintained his attention to health matters. Studies of the longevity of athletes show that athletes live longer and with less sickness than average men. A very careful recent study by William H. Geer,[29] Director of

[26] Report on National Vitality, Bulletin No. 30, July, 1909, pp. 118-124, War Department.

[28] "Outline of the Practice of Preventive Medicine," August, 1919.

[29] "The Life of Expectancy of College Athletes," *Mind and Body*, March, 1924, pp. 453-459.

Physical Education at Harvard University, concludes that "from the evidence now available it is fair to say that the life expectancy among men who have competed in intercollegiate athletic competition is favorable when compared with that of medically selected men acceptable for life insurance." This is quite contrary to the old popular idea that athletes die young—an idea based upon striking exceptions which prove the rule—exceptions the explanation of which are now thoroughly understood.

The objection may be raised that athletics, particularly as defined for this study, are not necessary for the production of health and long life. There can be plenty of recreation, physical exercise, and outdoor life, plenty even of big-muscle activity without athletics. That is true for children, girls (though it will be less and less true for girls), and adults. These groups should secure most of their exercise in the less strenuous, more recreational types of activity. Many of these, however, will be found when studied to partake to a high degree of the characteristics which we have attributed to the team fighting games; tennis, golf, handball, and volley ball for instance, exhibit many of the big-muscle characteristics. But for adolescent boys and young men the great fighting team games will ever be the great compelling dominating type of exercise. This it is that has given to American physical education its characteristic feature and these activities will to a very large degree be the source of the health as well as the social contacts of the boys in our public schools, high schools, academies, colleges, and of the young men in industry and business. This means that athletics will be the chief source of health, so far as exercise is concerned for the manhood of America. It is then apparent without advancing broader and possibly more debatable claims, that athletics are very vitally related to productivity and economic well being.

If education is to concern itself with these as a matter of social policy, it should highly value athletics.

Equity is a matter of ethics. This will be discussed in the following chapter. But equity—seeing to it that merit has a fair and square opportunity, in contrast with a world of chance or favoritism and "pull"—is more highly developed in the realm of athletics than in any other phase of life. The best man makes the team. Public opinion will countenance no alternative. The pressure to win, bad as it is in many ways, does perform a service here. Every man is a welcome candidate, and if his ability justifies it, makes the team regardless of color, race, or ancestry. Jealousies and petty politics exist but eventually they go before the inexorable law of the survival of the fittest. Athletics are the greatest school of democracy and equity in modern life.

The writer will never forget his first impression after a trip abroad where he had opportunity to see some of the best statuary, as he stepped again into a college natatorium where a group of athletes were training for the college swimming team. The impression was that of a most wonderful exhibition of classical, beautiful, perfect statuary. It seemed as though a Raphael had produced *living* works of art. For a time the impression could not be dismissed. The production of strong, vigorous, harmonious physiques and beautiful personalities, of beautiful people is a great social contribution. But the thought of beauty in the world was doubtless meant to have a much wider application—a matter of interest and joy, a change, and a relief from monotony. From this point of view athletics form the great dominant interest of most adolescent boys; probably nothing makes life seem at that time quite so worth while to them. Increasingly, too, we are realizing that athletics and the less strenuous big-muscle recreations may be a great source of relief from the monotony

of modern industry. Athletics make the world a more beautiful and satisfying place in which to live.

If our psychological analysis is well founded it follows that social results are inherent in athletics. We should expect, unless the leadership is bad, a natural development of a number of desirable social traits and tendencies. The first and basic one of these is group consciousness, or group spirit,—team spirit, "group mind," the spirit of coöperation, unity, the good of the group. It is a concept difficult to describe. In its simplicity it is a realization of one's identity with and membership in a group and its interests as against pure ego. In its highest reaches it leads to the sublimest acts of self-sacrifice, patriotism, and martyrdom.

Genetic psychologists tell us that this characteristic does not develop to any great degree before twelve years of age. Before that time team games are little played and even when played are done largely individually. With the onset of adolescence comes the great team game age. One need not follow the extreme reaches of G. Stanley Hall's theories of adolescent psychology [23] to observe great social characteristics coming into prominence during early adolescence and to note the intense interest with which team games are then played. This does not prove that team games develop these social traits. They may be simply synchronous—both may come from deeper, more "instinctive" causes. Certainly, however, they are closely associated, apparently are or may be made conditioning stimuli for each other, and to the writer it seems a fair question if the fundamental basic principle may not really be big-muscle activity, itself almost an instinctive characteristic.

Nothing in our modern educational program so unifies a school as its athletics. Whether desirable or not, the fact is that the varsity college football team has become the rally-

[23] "Adolescence," passim, 2 Vols., 1905.

ing point for the expression of the institution's personality. Through our athletics more largely than through any other activity we become individually and collectively members of the institution. It is through team athletics that many a boy gains his first real conception of group consciousness and begins to submerge his individuality and egoism. This was but inadequately accomplished in the family, the Sunday school class or the public school. It is the team, the gang, and such organizations as the Boy Scouts—which incidentally illustrates our most successful modern attempt to organize applications of big-muscle activity—that makes the boy a member of the social order.

The suggestion of group spirit raises the question of a group or team mind, the question whether such a thing exists and whether experiencing such a phenomenon is a necessary part of our social education. The group mind has been a strong conception of social psychologists. LeBon,[30] Trotter,[31] McDougall,[32] Martin [33] and others have supported such an idea contending that the actions and responses of crowds, the "mob psychology" of crowds, could not be satisfactorily explained without this assumption. They believe that the spirit or mind of a group is not the sum of the minds of the individuals making up the group, nor the mind of any one individual temporarily becoming a leader of the group, nor yet a sort of fusion of the individual minds of the group in their relative intensity with a grand average struck. Rather in some occult way, a special, different, specific "group mind" is produced, unlike that of any individual in the group, even the leader. This peculiar group mind has its own special characteristics and qualities and the group or crowd therefore reacts to given situations in different ways from that in which

[30] "The Crowd," 1897.
[31] "Instincts of the Herd, in Peace and War," 1915.
[32] "Introduction to Social Psychology," 1916.
[33] "Behavior of Crowds," 1920.

any individual in the crowd would react. To understand mob, group, or team psychology, therefore, one must understand and know the laws of this "group mind"—a phase and department of social psychology quite separate and distinct from ordinary individual psychology.

It must be admitted that this conception even if nothing but an assumption and incapable of demonstration has much in practical experience to commend it. The characteristics attributed to this group mind undoubtedly apply in large measure to groups such as athletic teams and crowds of spectators and it may be easier for many to grasp the principles underlying team and crowd responses to various situations by adopting such a conception. On the other hand variations in response not infrequently occur; the social psychologist operating on a group mind, law fixed schedule may be unexpectedly confused by unaccountable responses. Any athletic coach will recall numerous such responses. Teams have suddenly "found themselves," thrown off impending defeat, and swept through to brilliant victory; or "blown up" and gone down to dismal failure after the game was apparently won.

With the growth of the behavioristic psychology and the better understanding of the conditioned response there is an increasing tendency for psychologists to doubt the existence of the group mind. Perry,[34] Alport,[35] and others have seriously questioned this assumption. As in most such cases it is far easier to be critical than to be constructively suggestive. If not a "group mind," then what? It is certainly difficult to advance any clear statement but the thought lies in the direction of a group situation—response pattern where group stimuli of diverse, conflicting, and intensifying types operate

[34] "Is There a Social Mind?" *Am. Jour. of Sociology,* 1922, pp. 561-572, 721-736.

[35] "Social Psychology," 1922.

to produce a response. The complexity of the stimuli is responsible for the "crowd" response and explains its uncertainty. Thus in a normal individual we have a usual stimulus-response ($S_1 \rightarrow R_1$) pattern. A second stimulus S_2 associated with S_1 ($\begin{matrix}(S_1 \searrow \\ (S_2 \nearrow\end{matrix}$ R_1) comes to condition R_1 so that after a time we get S_2 alone producing R_1 ($S_2 \rightarrow R_1$). In the group pattern, however, we normally have several stimuli acting to produce their own responses.

$$\begin{matrix} S_1 \rightarrow R_1 \\ S_2 \rightarrow R_2 \end{matrix} \qquad\qquad \begin{matrix} S_3 \rightarrow R_3 \\ S_4 \rightarrow R_4 \end{matrix}$$

Obviously any of these stimuli may become a conditioning stimulus to other responses than their own, as

$$\begin{matrix} S_1 \searrow \\ S_2 \nearrow \end{matrix} R_1 \qquad \begin{matrix} S_3 \rightarrow R_3 \\ S_4 \rightarrow R_4 \end{matrix} \qquad \text{or} \qquad \begin{matrix} S_1 \rightarrow R_1 \\ S_2 \searrow \\ S_3 \rightarrow R_4 \\ S_4 \nearrow \end{matrix}$$

or any combination thus giving us intensification, conflicts, etc. of stimuli resulting in variety, uncertainty and often intensity of "crowd" responses. Thus in football the movement of the ball (S_1) is the stimulus for a charge (R_1). Very soon, however, a jump signal (S_2) becomes the stimulus for the charge (R_1). As the training progresses this jump signal (S_2) means a special kind of charge (R_2). Other stimuli are added, as instruction on certain plays to charge in a certain direction (S_3) giving (R_3), and special incentive (S_4) to charge with special force (R_4). Very shortly we find the movement of the ball and the jump signal combined (S_1 and S_2) giving the regular charge (R_1), while S_3 and S_4 still operate independently. But now under some special influence as a lecture by the coach, practically all stimuli (S_2, S_3 and S_4) may be combined to give one wild overpowering charge (R_4) in which perhaps all but force

is forgotten. Thus the kind of charge, the direction and the force are all forgotten, done mechanically and thrown into one intense powerful response.

Put into a crowd illustration an incident like the following might occur. A negro is caught in some serious crime. One person (S_1) would normally arrest him (R_1). Another (S_2) would strike him (R_2); a third (S_3) would shoot him (R_3), but a fourth (S_4) yells "Lynch him!" (R_4). In an instant S_2 and S_3 are forgotten, the crowd starts a lynching party, and the law-abiding citizen (S_1) must indeed be a strong man if he too is not swept along with the intense multiplied response (R_4) of the crowd. With such a conception we are in a position to explain many of the characteristics of the group mind without imagining such an entity. The intensity of response, the excessive suggestibility, the remarkable unity, the comparatively low mental plane and high emotional plane of groups and "crowds" are made more clear. By such an understanding of the group spirit teachers are the better qualified to use it in securing desirable social reactions. Athletics and the development of the team spirit by a skillful teacher of athletics offers one of the best opportunities for such social adjustment.

Closely associated with group spirit, almost a part of it, is loyalty.[36] This, too, dates back to the primitive days of the race. Its beginnings lie in the big-muscle activities of early pack fighting and hunting. It has progressed steadily as the family, clan, tribe, nation, and race has fought its way to survival, safety, and supremacy. We cannot prove that loyalty can be said to have developed *because* of such activity but certainly it has been through the ages *associated* with such activity, and in the past it was such activity that furnished the *opportunity* for its expression. So to-day the most effective way to condition loyalty is through our great fighting team games and it is around and through these that our

greatest modern expressions of loyalty to and love for alma mater find expression. Here again we cannot claim to have definitely demonstrated "transfer" value. But certainly this is one phase of life in which loyalties, to teammates, to coach, to alma mater, and to ideals are being taught with great intensity and impressiveness and the man who experiences such training has at least had one section of his life well covered. Any one who has been a member of a smooth, well integrated team can never forget the feeling and the satisfaction it gave. Such a person longs for this condition in all phases of life. It will be difficult to convince athletes that their team experiences have not heightened their loyalties. (See Study III, Question XII.)

Very closely related to group spirit and loyalty is fighting spirit. Its psychological basis has already been indicated. Aggressiveness, initiative, perseverance and determination—real grit—are certainly needed in modern life. These qualities must have come to the race first in connection with our fighting life. Education to-day must develop individuals who are willing to stand for a weak or unpopular cause when they think it is right, who will strive earnestly for ideals and who persist until the battle is won. Nowhere is fight and fighting spirit so eulogized and urged as in athletics. It would be strange if this constant insistence and frequent application to life in general should not effect some "carry over" value. This fighting spirit typifies to a large degree the real "spirit of the game." In the same way people must learn to look upon life as a game; to live it as they would play a game; to throw themselves into it with the keenness and zest, with the abandonment and energy and self-forgetfulness with which boys throw themselves into a football game. Education will make life *beautiful* when it teaches us how to put the "Spirit of the Game" [37] into life.

"There's a breathless hush in the Close to-night—
Ten to make and the match to win—
A bumping pitch and a blinding light,
An hour to play and the last man in.
And it is not for the sake of a ribboned coat
Or the selfish hope of a season's fame,
But his Captain's hand on his shoulder smote—
'Play up! play up! and play the game!'

"The sand of the desert is sodden red,—
Red with the wreck of the square that broke;—
The Gatling's jammed and the Colonel dead,
And the regiment blind with dust and smoke.
The river of death has brimmed his banks,
And England's far and Honor a name,
But the voice of a schoolboy rallies the ranks:
'Play up! play up! and play the game!'

"This is the word that year by year,
While in her place the School is set,
Every one of her sons must hear,
And none that hears it dare forget,
This they all with a joyful mind
Bear through life like a torch in flame,
And falling fling to the host behind—
'Play up! play up! and play the game!'"

No athletic team ever reached great success without a high degree of self-sacrifice and self-forgetfulness on the part of its members. One of the great problems of a coach is to do away with stars and starring; to get men to sacrifice and advance the base runner; to pass instead of shooting for the basket; to run interference as well as to carry the ball. For several years now the home run king has dominated our national game. Yet each year the vote as to the most valuable player has crowned a less conspicuous, more all-around, sacrificing, teamable player.

Self-sacrifice means self-control. No man forgets himself

and sacrifices for the good of the team, his college, his country, or his ideals unless he has himself in hand. Self-mastery means self-confidence. Such a man knows himself and his possibilities. He is sure of himself. This is one of the greatest elements of personality. Through the development of self-sacrifice, self-control, and self-confidence athletics should build up their social traits of inestimable value.

Cheerful obedience to rules and laws is a social necessity in a successful democracy. The flaunting of law and lack of respect for authority in these days of "scofflaws" and of crime and greed since the world war presents a social problem which educators must not ignore. Discipline, obedience to rules, and respect for authority must be inculcated beginning in the public schools and continuing through high school and college. Much is now being accomplished but every agency which can make a contribution to the solution of this problem should be employed. No law is so inexorable as the law of the survival of the fittest. This is the law of athletics. No teacher commands such complete and cheerful obedience as the athletic coach. The laws of training, the rules of the game, the authority of the officials are the modern laws of the Medes and the Persians. Athletic leaders must maintain and improve these influences and be themselves creditable examples. In some phases, especially with respect to amateurism, recruiting, scholarship, etc., there is still need for great improvement. Educational authorities must see that these matters are corrected. But even with these unsatisfactory conditions existing, athletics to-day probably demand more, secure more rigid obedience, and illustrate more respect for authority than any other form of activity. Surely few boys study as all work for a team! What would be our industrial productivity and commercial returns if men in industry and business tore into their tasks as football players do into theirs! And best of all, this allegiance and subordination is

given gladly and cheerfully and with generally satisfying results. We cannot prove that it will "carry over" but we have good reason to believe that it will carry over as well, probably *better* than any other form of social training.

We have already spoken of the democracy of ability in athletics. This leads to modesty, appreciation of the other fellow, and to courtesy. Athletics are not, to be sure, without their cases of undesirable politics, but it is doubtful on the whole if there is any phase of college life more clear of politics and where merit is more justly rewarded.

(2) One of the greatest social contributions of athletics is the development of leaders. The problem of leadership in a democracy is one of the surpassing problems of education. The experiences of captains, managers, quarterbacks, and other team leaders is a rich training in leadership. The proportion and type of leadership of college athletes among the officers of our army in the world war demonstrated the value of this experience. Meylan [38] in his study of Harvard oarsmen found more oarsmen mentioned in Who's Who than Phi Beta Kappa men. Oarsmen were included to the extent of 8.3-10 per cent depending on whether all were included or only those more than fifteen years out of college. Five and nine-tenths per cent of Phi Beta Kappa students earned a place in Who's Who and 2.1 per cent of all college graduates. These figures are, of course, twenty years old. At that time only 8,000 names were included in Who's Who, while the 1923-24 edition included approximately 25,000 names. Out of a list of approximately 3,000 ex-college athletes who had been out of college ten years or more, the writer estimated approximately five per cent mentioned in Who's Who. Mention in Who's Who does not, of course, establish leadership but it is very suggestive.

[38] "Harvard University Oarsmen," *Harvard Graduate Mag.*, March and June, 1904, *Am. Phys. Ed. Review*, March and June, 1904.

Finally athletics subject the individual to the powerful pressure of public opinion. To too great a degree they focus public attention upon the athlete. This has many serious disadvantages and educational and athletic leaders must discourage and prevent notoriety and undue and undignified publicity. On the other hand, however, the powerful leverage of legitimate public opinion, college sentiment, school spirit, is a most potent force making for the production of the characteristics which have been discussed. Every athlete knows what the student body expects of him; breaking of training rules, unfair and disgraceful conduct on the field of play, failure to give one's all for the good of the team, these and many other infractions are punished speedily and definitely by student and public sentiment. Standards and traditions of sportsmanship, prestige, and loyalty are set. It is claimed that no college athlete has ever been touched by gamblers. There are no Black Sox or oil scandals in college athletics. The college athlete is sensitized to college spirit,—he feels the pressure of the public opinion of his world—he is socially minded. This fact puts a powerful instrument for good into the hands of skillful teachers of athletics and through them into the hands of general educators. *The athletic traditions of an institution can make the character of the institution.*

What we have said thus far applies chiefly to the athlete himself. Athletics also provide a means for great social training of spectators. The coming together of great masses of people to view professional athletic exhibitions are nothing more than crowds. Occasionally they rise to higher levels of interest, and from time to time sterling illustrations of sportsmanship occur. These are of great value as examples, and it is of very great importance to education that our professional athletics shall be honest and free from scandal in management, as well as clean and of high sportsmanship upon the field, and that our sporting press should be controlled by men

of high athletic ideals. It is, however, with the college or school crowd and particularly the immediate student body and its sympathizers that we get the greatest "crowd" social effects. It is difficult to understand the intense crowd interest in a college football game. It is greater than that at a college baseball game, or a gymnastic exhibition, or a track meet. The reason is that the *fighting* team game, the bodily contact game, goes back to the old primitive racial days when the spectators watched their representatives fight for the safety of the group. The result meant slavery, perhaps life itself. The significance of this from the emotional side will be discussed later. Here we desire merely to suggest its social significance. No other sports awaken in the spectators such a feeling of unity, of interdependence, of oneness with the team itslf, of desire to help the team as the fighting games, especially football. It is *their* team—their fight, their college, their victory, or their defeat. United in such a way there is no reason why, with wise leadership, this spirit should not be applied to other college and community activities. As educators we have not yet learned how to capture and capitalize this "democracy of the bleachers." Neither has it been given the leadership needed to develop high sportsmanship.

The cheer leader is the key to this situation. The day when organized cheering was designed to "rattle" the opponents has passed. It has arrived to-day at least to a point of legitimate assistance to our own team. But it must now and can be developed into a process of social and emotional education of the crowd itself. Like a master playing on the keys of a great organ is the cheer leader; he may bring forth symphonies of rare merit or discordant jarring notes of protest and enmity. Appreciation of opponents, approval of acts of sportsmanship, fair play, courtesy, support of officials, taking victory modestly, and defeat with good grace, these and many other qualities are in the hands of the cheer leader.

He should know the game and he should understand crowd psychology. He is one of the most important men on the field. To him educators hand their leadership during the game.

One of our greatest social problems is morale. This is true whether it be for war, for health, for thrift, or for ideals. The value of morale and the relation which athletics may bear to the building of morale was one of the greatest lessons that came out of the world war. The entry of America into the war, the sight of American soldiers marching through the streets of Paris, was a tonic far more potent than their mere value as soldiers. The morale of the American soldier was the explanation of his value and efficiency. Our troops were not trained soldiers. By European military standards at least a year more of training was needed. And yet they marched ahead to every objective, through "No Man's Land," into withering fire, cleaning out machine gun nests at terrible sacrifice and loss, but with no thought of turning back. We didn't know enough to retreat.

It was simply a football game. There was only one place to go; yonder was the goal line; the idea was to get there. *Our boys went there* just as they had learned to do on the football fields, and just as Wellington's boys before them had learned to do on the Rugby fields of England.

But morale is something more than a wild dash forward that will not be denied. The long wait of the trenches, the patient endurance of cold, and wet, and discomfort, the cheerful steady maintenance of discipline, of ideals, and efficiency, and the resistance of insidious moral temptations that ever in the past have sapped the glory and manhood of armies, this is what real morale means.

The ineffective venereal disease rate of the American army in France during action was less than one-half of one per cent—the lowest known recorded rate for large groups of

men either military or civil in the history of the world. It is worth while to study the methods by which this result was accomplished. The effectiveness of the medical service of our army and the value of the preventive measures employed is unquestioned. But other armies had equally skillful medical service. The better record of the American army must be explained on another basis.

For the first time in the history of armies there was a recognition of the value of morale and a definite attempt to develop and maintain it. For the first time in the history of war a government recognized its responsibility to attempt to return its soldiers to the homes from which they came, pure and undefiled. It is to the credit of the American government and the welfare agencies serving it that this was attempted and so well carried out. Almost at the beginning of the war the Commission on Training Camp Activities was established. Under its leadership the men in the training camps at home and overseas were served by the government agencies and by every welfare agency that could render service, both inside and outside the camps. As a nation we were consecrated, soldier and civilian alike, to a great purpose. We burned with an ideal as great as that of the Crusaders. Would to God the plane of that high purpose could have been maintained instead of sinking to the morass of petty partisan politics that has followed!

Early theology assumed the flesh to be of the devil. The revelation produced by the conditions established in the camps was that *given a fifty-fifty chance, men choose right rather than wrong.* Perhaps for the first time in the history of social effort, *every* man was given an opportunity to spend *all* of his leisure time in healthful, interesting, worthwhile recreation. The venereal disease record, the adaptability to military life, the discipline, and the fighting spirit of the American soldiers were due to the great purpose which they had and

to the care of their leisure time. This made morale. When athletic games were in progress waiting lines before the licensed houses were decimated. Army officers came to a welfare agency in Paris and definitely charged its leaders with being responsible for the rise in the venereal disease rate in their camp because they had failed to furnish expected and desired moving picture facilities. General Pershing and his officers deliberately put up to the soldier the ideal of the football team. A man trained to win a football game for his college. Would they train to "Win the War"? Leaders and Directors of recreational athletics were asked to talk to the officers on the training and disciplining of a college football team. The American army was saved to itself, and to its people at home, and made "fit to fight" by giving *every* man a chance for a right and good use of *all* of his leisure time. This opportunity was gladly accepted. We can accept no lesser standard for civilians in time of peace. This was the greatest factor in the morale of the soldier. It can be made a great factor in the morale of the citizen.

The leisure time "curriculum" of the soldier was rich and varied. The nation offered its best. But the biggest, most helpful single thing in that offering was athletics. This was to be expected with young men of army age. But it is also true that it is to big-muscle recreations that we must look for a large part of the leisure time development of morale in all people.

In the first place morale is almost synonymous with fighting spirit. It follows from the analysis of the preceding chapters then that athletics are an immediate and direct foundation for the building of morale. Likewise all the fundamental tendencies and emotions must underlie morale, and big-muscle activities, best furnished for the adolescent through athletics, must form a large part of such a program.

Morale is exceedingly dependent upon health. Health is

a balance of many factors but one of the most important is a liberal allowance of big-muscle activity. It is also closely related to self-confidence. This strikes back to the early, coenotropic, racial egoism. If big-muscle activity was as we believe, fundamental in developing this, then again it is peculiarly valuable for morale.

The rest of the basis of morale seems to the writer to lie chiefly in a great purpose, a great motive, something that we believe in, have faith in, desire fervently, can be loyal to, love, are willing and anxious to live, and work, and die for. It was such a motive, vague and indefinite to many, to be sure, and yet more definite and clear than any motive ever before to an army, together with the influences that we have described, that made the morale of the American army. Its morale made it a great army. Morale is fundamental to the success of any great enterprise.

Next to the love of home and country, comes the love of alma mater. It would be an interesting and perhaps very illuminating process to study the development of "college spirit." What was the college spirit of the medieval university? What of the professional and graduate schools of to-day? Is college spirit really a modern thing? Does it synchronize with the growth and development of college athletics? Are not the traditions of Eton, Harrow, Oxford and Cambridge—cultured, conservative, English institutions though they be—clustered around the football field and the river? With the keen competitive American spirit is there anything that has so unified American colleges, made college spirit, produced college morale, as athletics? We may hold athletics responsible for many undesirable features; abuses, distractions, and excesses occur. But after all is there any institution with a finer, better, more lively morale than the American college? Is this morale, this college spirit, a valuable thing to the college? If it be the direct result of college

athletics, and the writer believes it is largely so, then indeed athletics have done a great thing for the college. And if for the college such results have accrued, what of the possibilities for business, industry, and other walks of life? Are athletics one of the great agencies for the production of morale? In the hands of a skillful teacher (coach) with the right social purpose there is no influence so great.

The proper application of this agency in business offers limitless possibilities. Personnel managers and departments are already striving valiantly for morale, "esprit de corps," unity, coöperation, "college spirit," in business. Democracy in management, profit sharing, welfare service, and all these are undoubtedly valuable and have their place. But business organizations will never have a true morale, a true unity and spirit, the individuals in it know and care for each other and work together for the common good of all, until a part of their leisure time is spent together in healthful big-muscle recreative activities. No other activity will so quickly and so powerfully cement and unify a business, and bring it loyalty, satisfaction, and motivation.

The same considerations apply to industry. And here in many lines of industry a further problem is met. This is the factor of fatigue from dead, never ending, never changing monotony and routine. Quantity production has meant specialization; specialization on one small, insignificant, uninteresting, mechanical procedure. Dosage of work is often small. There is little or no organic effect. Once learned, the neural strain is really slight except for this peculiar fatiguing monotony. If with it we had great dangers as in war, we should have "shell shock." In a mild introductory way this condition is more like "shell shock" than any psychical state that we know. Why did the last war produce so much "shell shock"? Because it was not a big-muscle war. It was a war of trenches, "dug in," of gas, aëroplanes, submarines, inac-

tivity, waiting, a blow in the dark, the enemy never seen; courage, nerve, tragedy and no relief. The nervous system broke down under it.

For men in this condition, athletics, big-muscle activity was the one salvation. Major Coulon [39] tells of an English company that came back from the front line trenches. Their ranks were decimated. Men had looked on tragedy in every form. They washed the mud and grime away and huddled together in dead, silent, gloomy groups. The psychosis of tragedy was upon them. Over and over again they lived the terrible things of the days they had passed through in an ever-deepening vicious cycle until stark staring insanity would have resulted. Some change had to come, something had to break into the cycle of thought. An officer kicked out a football. It rolled against the leg of a man who drew away with an irritated movement as if to say, "What is such trivial stuff doing here." The ball rolled on to another, then to another who perhaps a bit less affected than the others, kicked it; then another kicked it and in fifteen minutes the whole group was racing wildly up and down, shouting in the excitement of an English soccer game; hardship and tragedy were forgotten and sanity saved. The men of industry may often be closer to such conditions than we realize. Athletics and big-muscle recreations are invaluable for such groups. Nothing will better relieve the monotony, contribute to health, and produce happiness, satisfaction, and contentment.

Morale means the "Spirit of the Game." [37] To tackle war, business, industry, life, either as a nation or an individual, as we play a game—this is the highest morale. In the playing of our athletic games we experience the spirit of the game and practice those responses which later on will become the adjust-

[39] McCurdy, J. H., M.D., "Lessons from France," *Am. Phys. Ed. Review*, June, 1919, p. 346.

ments by which we "play up" and play the game of life. Athletics may be a great factor in building morale.

We have attempted to show the need of social training as a part of modern education, to present the psychological basis for the possible social contribution of athletics, to show how athletics contribute to a social policy of education, to present some of the definite social characteristics developed through athletics, to suggest some of the possible social effects with the spectators, and finally to present the function of athletics in the building of morale. If these things are true, athletics furnish to education a social agent of great possibilities.

CHAPTER III

THE ETHICAL VALUES OF ATHLETICS

In discussing the ethical values of athletics we have in mind a broad interpretation of the term ethics—broad enough to include anything that is right or for the ultimate good of the individual or the race. Such a quality as courage even though it may have social or emotional significance would be included. In this sense, of course, there are very few values that may not be classed as ethical. Many now consider ill health unethical. To follow all such ramifications, however, would lead us too far afield for the purposes of this chapter. Such phases will be suggested or discussed in other chapters, the entire study being in this sense a study of the ethical content of athletics. Here we desire to discuss, after some brief general considerations, the specific and definite ethical problems presented by athletics.

The world has condemned the old ethical idea that might is right. We flounder in vague uncertainty, however, as we attempt to define in social ways such terms as good, bad, evil, just, equity, and so forth. Such men as Carver [40] hold that that which survives must in the end be good—good for the race, else it could not have survived. A survival test might be considered one of the measures of the ethical value of any characteristic. This involves a long time view. It takes great ages to detect the survival effect upon a race, or even upon a civilization. Our knowledge of history, however, and our increasing knowledge of biology, physiology, and psychology, justifies us in drawing some very definite conclusions. It is

[40] "Essays in Social Justice," 1922.

clear that the basis of man's survival has been his early and continued big-muscle activity. It is also clear that such survival is increasingly threatened by ever intensifying neural strain—building, beautifying, and expanding the superstructure without attention to an adequate foundation. Man came to his supremacy because of his fighting spirit, which arose from throwing and using "the big stick." These activities brought about finer neuro-muscular coördinations. With these (possibly *because* of them) strategy, thinking, brain power developed. To-day we are in danger of concentrating too exclusively on the very fine coördinations which represent the pinnacle of success, forgetting the survival essentials.

With this early activity, too, came the beginnings of ethical principles. Group fighting and hunting was essential for survival. What one did for the good of the group and against the enemies of the group was right and ethical; anything done against the group was unethical. Killing a member of the group was murder; killing an enemy made a man a hero. Stealing from a member of the group was wrong; from one outside the group it was commendable. Lying to a fellow member was contemptible; to an enemy it was diplomacy. Most of these things obtain even to-day. This early ethics was associated and interwoven with ~~big-muscle~~ physical activity. So to-day such ethical decisions are much more potent when concerned with our present big-muscle activity than with the finer, more intellectual, later acquired activities. Thus students have no such compunction about cribbing in an examination as cheating in a ball game; oil scandals raise no such commotion as "throwing" a world series.

Formerly big-muscle activity and the fighting spirit came through labor and war. Labor is largely gone; war must go. Athletics or team games must be the substitute, since they combine both these essential qualities and also have for their ethical basis the survival and supremacy of the race.

Considering the individual, however, many authors are now advocating a physical basis for ethics. The question is frequently raised whether good health is not essential to right ethical attitude and point of view; whether most unethical, unsocial acts have not really a physical explanation. The more this is investigated the more it seems probable. A man with indigestion can hardly be blamed for being unethical and anti-social. He should be punished for allowing himself to acquire indigestion. Only with the abounding physical, mental, and spiritual vigor of good health can we expect fair, considerate, social, ethical attitudes and actions. Only so can one be saved from warped, distorted, prejudiced opinions. Only through good health, self-mastery, self-confidence and "team spirit" can one rise to a realization of his true personality. Professor R. C. Givler,[41] of Tufts College, has recently advanced with considerable success the theory that all ethics may be explained on a mechanistic physical basis; that our ethical reactions are stimulus-response patterns and the response depends upon the stimulus and the condition of the mechanism. Granting that good health and physical well-being are essential to individual ethics, one might say that that does not prove that athletics are. It does not. But big-muscle activity is one important basis for health. This big-muscle activity is furnished best for adolescent youths in the games we have discussed for business men and many others in the less strenuous sports which exhibit many of the same characteristics.

The team fighting games compel ethical decisions; they present constant opportunities for good or bad choices. The football field, the basket ball court, the hockey rink, and all of our play fields are places of repeated decisions of ethical nature. The *principles* of ethics may be taught in a college classroom. To become effective in life they must be put into

[41] "The Ethics of Hercules," 1924.

action—practiced over and over again in all of the varying and complex situations possible until they become firmly established as habits. In none of our activity does opportunity come so frequently and so definitely for such decisions as upon the athletic field. These decisions are not always by any means right. The temptation to win, the ease of escaping detection, the unfairness or supposed unfairness of opponents, the heat and intensity of conflict, make athletics a testing ground of *reality. This is life itself!* It is no fake experiment, trumped up for the occasion to demonstrate a principle. It is *reality.* And the decisions bring with them great satisfactions and annoyances. The stage is set for making ethical character. It is, therefore, of the greatest importance to education that the leadership of athletic activities shall be in the hands of men who understand all this and who strive in every way possible to build up a habit of *right* ethical choices.

Fundamental and underlying all other ethical influences is the social consciousness, "team spirit," developed in athletic games. Ethics have to do with the individual and whether or not the decisions which he makes help or harm him personally but it is far more concerned with the individual's relation to others. The team sense, the coöperation with others to accomplish an object, the sacrifice of self for the good of the team, are all forms of social service which is a fundamental ethical principle.

Along with athletic games comes also specific training in definite ethical principles: common honesty, veracity, fair play, equality of opportunity, and many others. Will a man cut the bag if the umpire isn't looking? Will the coacher call the wrong man to take a high fly? Will the team hold if they can learn to do it without being caught or when the official is incompetent or prejudiced? Will a man deliberately seek an opportunity to put a good man out of the game? Will a man retaliate when he has been slugged?—these and many

more are common problems in athletic games. Fortunately, we have already arrived at a very high ethical standard in these matters of playing conduct. There are few institutions that will any longer employ a teacher of athletics who will encourage or willingly allow such unethical practices no matter what the pressure to win. Student bodies and public crowds condemn a player guilty of such infractions. He is a plain "mucker." The writer believes from experience as a player, coach, and official that there is no activity in modern life where the temptation is stronger and yet the plane of conduct more ethical than in college football. The "pull" for right ethical conduct in athletics is very great. The writer would be happy to stop this chapter at that point. Ethics (common honesty) forbids.

Our athletics are *played ethically;* they are *administered* unethically. The boys are ethical; the college faculties and athletic authorities are unethical. This is a serious educational indictment. The whole ethical content of athletics may be subverted and spoiled unless the administration of athletics is put on the same high ethical basis that the playing has achieved. The work of athletic conferences, some college faculties, and athletic organizations such as the National Collegiate Athletic Association has been of great value in setting standards and ideals. But much remains to be done in putting the ideals into actual practice. Such questions as amateurism, recruiting, athletic scholarships, excess expenses, scholarship regulations, summer baseball, and graft and mismanagement in the handling of athletic funds furnish plenty of illustrations.

With out-and-out, definite, open professionalism there is no quarrel. Professional baseball may be to the public at large something of what college athletics are to the student body. If baseball authorities will keep the administration of the game clean and honest, the players will set examples of high sportsmanship that will be of great benefit as object lessons. At its

best, however, the supposed high salaries (some true but many greatly overrated), the apparent lives of pleasure and ease with little popular conception of the tireless energy, perseverance and application required to produce a Ty Cobb or Christy Mathewson, tend to undermine the ethical principle of full service for value received. The idea of easy money and a soft job based on a lucky special skill places an unethical example before the professional ball player, the college athlete, and the public generally. It is an insidious and subtle temptation and tends to make all of us irritated and dissatisfied with solid, hard work.

The large gate receipts of amateur athletics tend in this same direction. The college boy who plays before fifty thousand spectators, knowing that the game represents gate receipts of nearly one hundred thousand dollars and that several hundred thousand dollars have been cleared on the season, almost unavoidably begins to wonder "where he comes in." He is almost certain to get an exaggerated idea of his importance. Undue press publicity and notoriety intensify this attitude. Such a boy might be trained to a realization of his possible service and contribution to his fellows in helping to make possible for all students the athletic benefits which in the past have too frequently been available only to the fortunate few. He could be made to understand and take deep satisfaction in such a social contribution. Instead then of unethical ideals and desires being developed his training would become highly ethical. As yet this is too infrequent. Much of our treatment of college athletes is little short of definite professionalism. There has been great improvement in this respect in recent years, but the athletic authorities of our great educational institutions particularly have a great responsibility for setting sane and conservative examples in these matters.

The problem in our secondary schools in this respect is ex-

ceedingly grave.[42] It bids fair to become a serious menace in women's athletics. Amateurism and professionalism cannot mix in college athletics;[43] the student must belong to one group or the other. Educational and athletic authorities must agree upon reasonable, practicable, clear-cut definitions of these terms and practices and then enforce them. Varying standards, different interpretations, subterfuges, and actual deceit tend to defeat all possible ethical values. Of what value is it to teach a boy not to cut second if at the same moment he is allowed, or possibly encouraged, to pretend to be an amateur while his way through college is paid because of his athletic ability? Much progress has been made, but more is needed. It *can* be made just as soon as college and school authorities have the back-bone to demonstrate that winning games is not the essential measure of athletic success. When the teacher of athletics is evaluated and the tenure of his position determined by his personality and his ideals and when his ability as a teacher is measured by the way his pupils play the game rather than by their percentage of wins or by whether a particular rival was defeated, then ethical values will be made possible and will be realized.

Making athletic coaches members of the faculty, responsible to educational authorities instead of student or alumni control with greater certainty of position has been helpful. The athletic coaches as a class are men of high ideals. They understand the ethical significance of their teaching. (See Study II.) Most of them if freed from the terrific pressure for winning teams would gladly throw their influence against the evils of professionalism, proselyting, evasion of rules, and deceits. Most of them do now, some at the risk of loss of position, stand four square for right. Too often their power and influence for ethical standards is crippled or defeated by compromising faculties, athletic committees, or alumni boards. When educational institutions have the courage to take charge

of their athletics, definitely insist that they shall be taught by men of high ethical standards, back these men up in ethical procedures and retain them in office regardless of winning or losing, athletics will become the greatest practical ethical laboratory available to education. The challenge is to educational authorities.

CHAPTER IV

THE EMOTIONAL VALUES OF ATHLETICS

A SATISFACTORY definition of emotion is very difficult. The determination of the cause of emotion is perhaps still more of a problem. We know that emotions accompany or are accompanied by extensive visceral changes. Cannon [44] has carefully reported and discussed these phenomena. Kempf [45] practically concludes that the visceral change *is* the emotion. Almost invariably visceral changes and emotions are associated with big-muscle activity. Big-muscle activity always causes profound visceral changes—circulatory, respiratory, digestive, and neural. Does a man then run, cause visceral changes, and become afraid or does he become afraid, run, and cause visceral changes? There is considerable evidence supporting the former view.

Psychologists differ greatly as to "instinctive emotions." Fear at least appears to be instinctive; anger, love, and pugnacity seem very nearly so. These emotions were related to the preservation of the individual and the race. With self-preservation, as we have previously indicated, was associated the old racial fundamental big-muscle activity, running, fighting, throwing, and so forth. It is hardly necessary for this study to determine which is cause and which effect—these activities and these emotions through the medium of visceral changes have been associated, and have conditioned each other, since the childhood of the race. Each individual has been subjected to the conditions that have taught him these racial ex-

[44] "Bodily Changes in Fear, Pain," etc.
[45] "Psychopathology," 1920.

periences. Even after generations of comparative safety and modern training, running can hardly be divorced from its accompanying emotions, either of fright or elation of pursuit. It carries us back emotionally to the days when we ran for our lives or joyously and excitedly chased our game or enemy. There is apparently an intimate, age-long association between big-muscle activities and the most basal fundamental emotions. For our study it is only necessary to note this intimate association and to accept the suggestion that through big-muscle activity then we may *condition* to a greater or less degree the fundamental emotions.

After the old, fundamental, racial, so-called "instinctive" emotions, fear, anger, love, and pugnacity, comes the development of the modern refined "feelings" of civilization. Ability to control and direct these fundamental emotions has been regarded as a measure of culture and education. It is not necessary to prove even that the finer, higher emotions are developed by or from the more fundamental emotions or by learning to control them. This obviously was the biological order and to the writer it seems perfectly plausible that there may be a causal relationship. But it is not necessary to assume such. Big neuro-muscular coördination does not necessarily develop fine neuro-muscular coöordination. If it did elephants would perhaps be the best fancy dancers. But as we have previously pointed out, big-muscle coördinations were essential to the growth and development of the individual up to a point where the finer muscular coördinations could be added. So in our emotional realm. It may be that the finer civilized "feelings" do not grow out of the coarser, more basal emotions. But these are the emotions with which the individual begins his emotional growth and it is through the activity of these emotions that the individual eventually arrives at a point where the finer, higher emotions may be added; and it is only as control, "inhibition," of these more fundamental

emotions is learned that we get a balanced adjusted emotional life.

Study of abnormal emotional cases, psychoses, neurotics, insanity, and so forth usually show failure in control of these fundamental emotions. Here lies the basis of modern mental hygiene. Almost invariably these cases show serious big-muscle defects: lack of coördination, poor balance, lack of muscular control. Such cases force a conviction that there is a relationship of some kind between the big muscle and the fundamental emotions.

Control of the big muscles is closely related to psychological inhibition, that great characterizing feature of man as contrasted with the brute. Physiologically, inhibition represents the latest, most difficult, most complicated development of the nervous system, the last to come, the first to go when the nervous system breaks down. Modern life puts a high tension on this delicate adjustment. The physiologic and psychical power of emotional inhibition can be built up and retained only upon a foundation of normal well established basic emotions over which control has been established. These fundamental emotions are related to and conditioned by big-muscle activity. It is in athletics then that we find an agent for the development of this emotional control necessary as a preliminary for the finer emotional developments. Adolescence is the great age for final establishment of this power, so sadly lacking in many of the students in high school and college. Unless corrected, society can hope for nothing but warped, unbalanced, perverted results. Education must, more largely than in the past, find methods of developing emotional control and balance.

Possibly the greatest function of modern physical education is to produce a tough and enduring nervous system. Our modern life is filled with situations demanding fine neuro-muscular coördinations with ever increasing neural strain.

Constantly our activities drift in this direction. Children must learn to play the piano, and violin, and operate the typewriter. Even in the Boy Scouts and Girls Junior Achievement Leagues they tie knots and learn to sew. Heavy muscles are no longer needed to do the world's work. Physical labor has largely gone. Yet it was through the daily round of physical labor that our present muscular system and our balanced neural and emotional control came. To-day children come to adolescence with intense attention to small muscle activities—writing, typing, playing musical instruments, speaking, and so forth—with but little opportunity for big-muscle activity either in physical labor or general exercise. The concentration on these finer neuro-muscular coördinations both in school and in industry, accompanied in the latter with the dulling neural fatigue of monotony, is rapidly breaking down our neural and emotional stability. In no class is this quite so evident as in the high school girl. But it is true in all classes; children in general, adolescent youths, and the tired business man, as well as the great masses of industrial workers are all affected. For all of these the emotional safety valve is big-muscle activity.

The fighting team games furnish the greatest opportunity for the development of emotional balance in boys and young men. Such activities attract intensely; they bring general satisfactions. These games develop (see Study III, Question XIII) self-control as one of their chief effects; this is inhibition. Fear was noted as the most certainly "instinctive" emotion. Numerous writers regard it in its multitudinous forms as our most harassing modern obsession.[46] The self-confidence and self-mastery that enables one to control the fear emotion is an exceedingly valuable acquisition. The fighting games present an element of pain and possible danger; this is particularly true of football, boxing and wrestling. Every man who enters a football game knows that he will be bumped,

bruised, possibly injured, or even killed. The intense quietness of a team locker-room as the men dress before an important college football game is eloquent proof of the seriousness of the situation. No player would *admit* that he is afraid. Neverthless, every old football player knows that suddenly he had a very different kind of a feeling as soon as he had made his first charge or his first tackle. Some people advocate eliminating danger from football. It would be a great mistake! Certainly the game should be so governed as to make actual serious injury as infrequent as possible. But football is par excellence the great fighting team game. The possibility of injury and the practical certainty of considerable pain must remain in it if it is to develop physical courage. The ability to overcome fear, to stand pain and fatigue, and to persist to the ultimate end is a fundamental characteristic of a real man. Without it the foundation of manhood is lacking.

It is true that men of physical courage have sometimes been moral cowards. The courage of the football field has not been definitely proven to "carry over" into other fields. Nevertheless, the idea that it does so persists. The man of physical courage has at least mastered fear in one department of his life; the fear emotion may be very similar in other phases of life; the chances are in favor of the conquering man. After all physical courage is a psychic and emotional affair, not a muscle affair. "Nerve" is very similar in all phases of life. The man who can conquer fear, the man of courage, commands the confidence of his fellows. He has gone far toward emotional stability.

The fighting team games furnish the occasion around which are developed many other emotions. Loyalty to and love for his alma mater is one of a college man's strongest emotions—next probably to love of his family and his country. Fighting for an ideal, an institution, or an individual is the surest

way of building up an emotion of affection. The loyalty of college men to their alma mater is at least a significant example to men in all other walks of life.

The emotional development of athletics applies not only to the athletes, but to the spectators as well. In Chapter II, the social crowd effects were discussed. A part of this is tied up with the emotional effect upon the crowd. As was suggested this is rooted in the emotions of the primitive days when the men of the tribe went forth to fight for the safety and life of the women and children. Fear, anger, hatred, pride, the exaltation of victory, the depression and subjection of defeat, are all stimulated by the situation and intensified by mob-psychology. The association of emotional and social effects upon the crowd and the possibility of emotional training going hand in hand with group social training presents a great opportunity. Here, too, is a phase of the cheer leader's service. Crowds must be led to feel the right emotions, to express them in proper forms, and to control them adequately. Here is opportunity for wholesale training in emotional control.

Athletics then provides for educational institutions an occasion which with wise leadership may be used to great effect in developing one of the greatest needs of modern life—emotional control.

CHAPTER V

THE CHARACTER BUILDING VALUES OF ATHLETICS AND CONSEQUENT RESPONSIBILITY OF EDUCATIONAL AND ATHLETIC AUTHORITIES

THE underlying conception of this study has been that the greatest task of education in a democracy is to develop citizens of high character. Intellectual ability, knowledge of common facts, and the power of thinking is recognized as a very important part of this task. It was formerly regarded as practically the entire objective of the school. The changing conditions which have broadened the work of the school have been suggested. Not only has the objective broadened but the methods for its accomplishment have greatly increased. Character values may be taught in principle in the classroom, but character is essentially a habit of living. Character can only be fixed by practicing, living the characteristics. It is a process of doing, of conduct—the laboratory method. Furthermore, it is not a process that can be carried on in the school alone. Rather the school must inspire its pupils to live all of the time its precepts. Education is not a preparation for life. *It is living a life.* The hope is that this habit of life may become so fixed during school days that it will continue throughout life.

What kind of a character should education strive to produce? What qualities make up character?[47] What is the relation of character and personality?[48] Obviously it is not desirable that all people should be alike. There are, however, fundamental traits entering into the formation of character habits which should be the common property of all people, with-

out which we cannot understand each other or rely upon each other. Obviously too these common traits will be associated with and conditioned by, the old racial experiences. Only so can they be the heritage of the race. Big-muscle activity is preëminently the common racial experience. We must expect then that the fundamental character traits will in some way be associated with the old racial big-muscle activities and that such activities will offer to education the best opportunity for conditioning, developing, training, and fixing these traits. Athletics then become a great aid to education in the production of high character. In the preceding chapters the social, ethical, and emotional values of athletics were discussed because these are particularly the traits or characteristics that are needed for the building of high character. The man who is socially minded, ethically just, and emotionally balanced, is an individual of character. One knows what such an individual will do. He can be trusted. His stimulus-response patterns have become fixed in *right* responses. The effects of athletics on these characteristics have been presented. Based on these facts we must conclude that athletics may become of very great assistance in the program of education for the formation of high character. In fact, they would appear to offer the most "natural," direct and pleasurable and, therefore the most *powerful* agency available for this purpose.

In spite of this it is well known that athletics do not *always* develop the social, ethical, emotional, and character values that have been presented. They *should* do so and they tend to do so. Anything, however, which has such powerful possibilities for good has equally powerful possibilities for harm if improperly directed, mismanaged, or unsupervised. Educational authorities have in the past given too little attention to direction and supervision of extra-curricular activities. There has been but little recognition until recently that education must be *lived* into character; that it cannot be *learned* so. Ath-

letics developed without direction or supervision and with but little help from, often in spite of, educational authorities. What should have been seized upon and used by educational leaders as a powerful ally has been on the contrary disregarded, frowned upon, and discouraged. Left to immature student and warped alumni control, the wonder is that far worse results have not been the rule.

The first step in the realization of educational athletic possibilities is the assumption of full control of athletics and physical education by the educational institution. The most important character building activity and the one potentially capable of doing most harm in the whole educational life has been largely disregarded (until lately) by educators. Such an attitude is a travesty. It is not sufficient to appoint vetoing committees. What would the educational world think of a chemistry department run by a student and alumni board of control, with a faculty committee on chemistry, perhaps to conduct investigations when the students blew themselves up or put strychnine instead of quinine into their capsules; of student chemistry teams like stock-judging teams, financial responsibilities, and so forth conducted by teachers and coaches employed by a chemistry association? Would such a system produce big educational results? Educational authorities cannot expect the full educational possibilities until they take over athletics, make them a regular part of the college curriculum and operate the activities with the same definite direction and authority (whatever the particular methods may be) and assume the same responsibility for them as for any other department of educational work. To be sure, great strides have been made in this direction and great improvement has resulted. Much more needs to be accomplished by educational authorities. Here rests the first responsibility. The administration of athletics is the present educational problem. How it is solved will go far in determining what the educational

results of athletics will be. If educational authorities, as previously pointed out, will demand educational results instead of winning teams, and support men who produce such results the "athletic problem" will be solved.

For it is only thus that teachers of athletics can be free to work for true educational results. Otherwise they are attempting to lift themselves by their own bootstraps. Unless their position is secured and their work measured by its effect on the students by some superior authority which can and will be independent of the glamor of winning they can retain their opportunity for work only so long as they are "reasonably successful." That is our present situation. It is an unfair handicap to give to a group of teachers whose ideals, understanding, and purposes are high; and who hold in their hands the activity which possesses the greatest possibility for the building of character available to modern education. Educational authorities must see to it that those teachers who wish to realize the true possibilities of athletics have an opportunity to register their full weight in this direction and that only such teachers are employed. This is not a change that can be accomplished in a minute. Much improvement has already come. But much more can and will be speedily accomplished whenever educational authorities awaken to their responsibility.

The immediate responsibility for the building of high character through athletics is with the teacher of athletics. His is the immediate personal contact. His personality (see Study III), example, and precept is paramount to all other influences. In addition to his own personal influence on the athlete he should mold, educate, and direct student and public sentiment and bring its powerful influence to aid his own personal attempts. This is the work of a big man—big in ideals and purpose, big in executive ability, in promoting and organizing public opinion as well as his own work, big as a

teacher, and big in the technique of his subject. Such a man wields unlimited influence and power with a student body—for good if he is right, for bad if he has low ideals. That such men should have high educational motives is apparent.

In the chapter on "ethical values" we pointed out some of the undesirable practices now existing. Athletics as taught by some men are anti-social, unethical, give free rein to the wildest emotions, and destroy rather than build character. Those who hold that there is no transfer of value in these activities may perhaps comfort themselves that these undesirable characteristics, however, will not appear in other activities. It is strange, nevertheless, how unwilling such people are to have their sons participate in athletics when taught by a man of questionable ideals. Why should it matter if there is no transfer?

The facts are that the scientific studies of transfer values are inconclusive. Common everyday life, clinical experience, strongly supports a high degree of transfer. The actual meaning of just what transfer is may well be questioned. Certainly many of the apparently scientific attempts to study transfer values have missed the matter entirely and are valueless because of this uncertainty in definition. If athletics increase a man's length of life, give him more initiative and energy, more "pep" in short, is this a transfer value? If the strong healthy man lives a fuller, richer, more energetic life, is it simply because he is strong and healthy and if so, and he secured his health through participation in athletics, is that to be considered as a legitimate transfer value? Such definitions are not clear. Until such definitions are laid down and careful studies are conducted relating definitely to athletics, the question of the transfer values of athletics cannot be definitely answered. Meanwhile popular and clinical observation leans strongly toward a practical acceptance of very high transfer value. The cheat in athletics will not be trusted any-

where; the man who has demonstrated self-mastery in athletics receives the confidence of his fellows.

A further transfer problem arises. Even if athletes show "athletic characteristics" in other phases of life, did they gain them in athletics or did they choose athletics because they had these characteristics? There is no positive proof available on this point. Probably the truth lies somewhere between. Energetic men choose athletics and become more energetic; less energetic men, if they can be induced to participate, also we hope become more energetic. If so, and lacking evidence to the contrary, we have strong reason to think so, the practical value remains. The question has theoretical importance but practically it is academic. It may determine our degree of success and perhaps the degree of transfer value, but it does not change the general tendency of athletics. What we need to guard against is such a syllogism as the following: honest men enter athletics and become more honest; dishonest men enter athletics and become more dishonest. Conditions in the past have made this too possible. Educators must see to it that teachers of athletics have full opportunity to make athletics contribute to high character with all classes of students whether or not they be predisposed to athletics.

PART II

PRESENT ETHICAL CONDITIONS IN ATHLETICS

INTRODUCTION

In Part I an attempt has been made to present a theory for the educational basis of athletics. It has been admitted that conditions are not yet ideal and that the full ethical possibilities of athletics have not yet been realized. This is because there are too few teachers of athletics of high ideals, because their training has often been inadequate, and particularly because there is lack of athletic administration from an educational point of view in our present system.

In spite of failure to reach high ideals, however, athletics even as now conducted, are furnishing great ethical values to our educational program. Without minimizing in the least the present evils in our athletic program, it is desired here to study some of the present ethical conditions in athletics selecting certain significant fields, in the belief that the values secured under an inadequate system may inspire us to demand a fuller realization of educational possibilities.

The subjects chosen for study, as will be indicated in each chapter, are not primarily studies of athletic details. There is need for such work because much popular speculation and misconception exists. It is exceedingly difficult, perhaps impossible, however, to collect reliable data on such problems as recruiting, proselyting, and professionalism. This study has attempted rather to come at the problem from the top, from the point of view of the purposes and ideals of those directly in charge of athletics. If these are right and the methods of administration are made efficient, existing abuses will be corrected. Certain possible studies were selected because it was thought they would throw light on this general problem. The questionnaire method was used as almost the only available

method of getting the necessary information. Considerable criticism has been directed to the questionnaire as a method of scientific research, and it has been largely overdone. Its value, however, depends upon the care with which the questionnaire is prepared and its applicability to the problem in hand. The high percentage of returns (see figures for each study) and the evident care with which the replies were filled out, indicate a high degree of interest and coöperation by those addressed in these studies.

CHAPTER VI

CAN HIGH IDEALS OF SPORTSMANSHIP BE MAINTAINED BY ATHLETIC LEADERS?

Study I. Y. M. C. A. College Alumni

THE International Young Men's Christian Association College of Springfield, Massachusetts (organized in 1885) has for nearly forty years been training teachers of physical education and athletics. Approximately 1,000 men have graduated from this department of this institution besides many others who have taken partial courses, short courses, summer terms, or war work courses. This college has stood persistently from the beginning for the Christian physical directorship—the idea that the leadership of the physical activities of boys and young men should be in the hands of trained Christian men, who realize the personal power and leadership which athletic and gymnastic prowess and prestige give them, who understand the ethical value of athletics, and who desire to devote their lives to the building of character in boys and young men through their athletic leadership. The ideals of the men from this college have been high—certainly the institution has attempted to make them so—their technical training has been good and many of them, as a study of the records would show, have occupied important and strategic positions in physical education and athletics. Have these men been able to maintain these high ideals as they worked in their position, on the firing line, or have they found it necessary to compromise, and make concessions in order to retain their positions?

It seemed that a fair and honest answer to this question

would be illuminating. The writer, because of personal contacts for twenty-three years, was possibly in a peculiarly favorable position to receive the confidence of these men and to interest them in the problem. They were advised that it was not necessary to sign the reply and they knew that their identity would not be known. There is every reason to believe that their replies are truthful. A personal letter accompanied the questionnaire explaining the purpose of the study and urging their coöperation. It was carefully arranged to make reply possible by checking and a self-addressed stamped envelope was enclosed. A copy of the letter and questionnaire follows:

"September 8, 1924.

"Dear Fellow Alumnus:

"Greetings from Old Springfield! I need your help and want to commandeer fifteen minutes of your time,—Now! I am working up a Doctorate thesis in the Graduate School of Education at Harvard University on the Ethical Content of Athletics.

"As one phase of the study I greatly desire answers from all Springfield Alumni to the enclosed questionnaire. You may sign the questionnaire or not as you like. The replies will be opened by a stenographer and filed so if they are unsigned the identity of the person answering will be unknown to me or to any of the authorities at the College. You may feel perfectly free to tell the absolute truth and it is just that which I must have if the study is to be of any value.

"I believe the time has come when such a study as I desire to carry through can be made of inestimable value to physical education and athletics. Will you not answer the questions fully and carefully and return to me by the next mail if possible? Do It Now! I shall greatly appreciate your assistance.

"Sincerely,

(Signed) "Elmer Berry."

THE ETHICAL CONTENT OF ATHLETICS *

STUDY I. Y. M. C. A. COLLEGE ALUMNI

I. Age? Class? How long in the work?
In what section now located? New England East
Middle West South Pacific Coast Foreign

II. Is your position chiefly? Coaching Administrative
Teaching gymnastics All round combination

III. The College taught and stood for high ideals in sport.
(a) Did the College make its ideals clear to you? Yes No
If not can you state why?
(b) Did you believe in those ideals when you graduated?
Fully Partially Not at all
(c) Do you believe in those ideals now?
Fully Partially Not at all

IV. Can a man maintain high ideals in sport and keep his job?
Yes No Depends on the man

V. Have you personally maintained the College ideals or have you been forced to compromise?
Maintained the ideals Compromised

VI. If you have had to compromise what was the chief reason for doing so? Necessity of turning out winning teams.
Lack of sportsmanship ideals in your people—couldn't get too far ahead of your crowd.
State briefly any other reason.

VII. Have you had raises in salary? Yes No
If so to what do you chiefly attribute them?
Technical ability Standing for ideals
Equally to ability and ideals Simply to tenure of office
State briefly any other reason.

VIII. Have you personally experienced difficulty with

Betting among students?	Yes	No
Gamblers and "sporting" public?	Yes	No
Over-enthusiastic alumni?	Yes	No

IX. On the whole does standing for high ideals in sport increase or decrease a man's popularity?

With students	Increases	Decreases
With authorities	Increases	Decreases
With alumni	Increases	Decreases
In general	Increases	Decreases

X. Have you personally had definite illustrations of approval because of standing for high ideals in sport? Yes No
Can you briefly relate the most significant incident?

* Place a check mark AFTER the word indicating your answer.

XI. Have you personally had definite illustrations of disapproval because you stood for high ideals in sport? Yes No
Can you briefly relate the most significant incident?

This questionnaire was sent to 560 men. This was the mailing list of the physical education graduates of the college now in the work excluding the classes since 1922. It contains some men who were not graduates, but who had been at the college two or more years—long enough to be thoroughly familiar with the ideals of the institution. A few men of this kind of the class of 1923 were included. Graduates not now in the work, short course, summer school, and war work men were not addressed for they are not now in contact with the problem or may not have been long enough at the College to absorb its ideals. Otherwise the list represented a complete and unselected group.

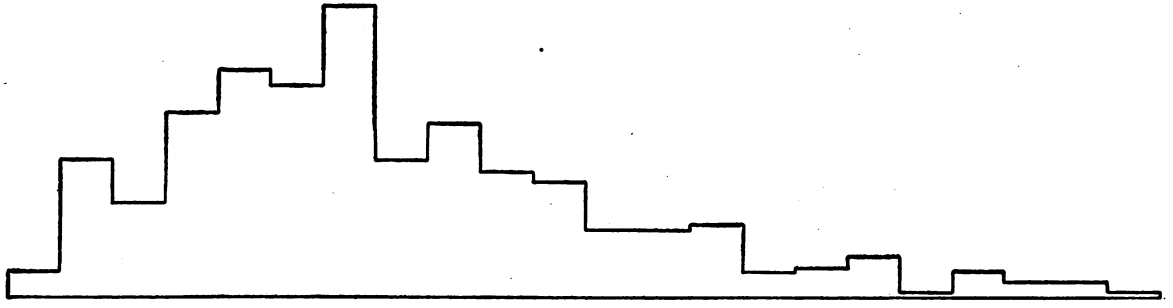
Four hundred and twenty replies were received—75 per cent.

Question I

Age, Class, Length of Service, Location

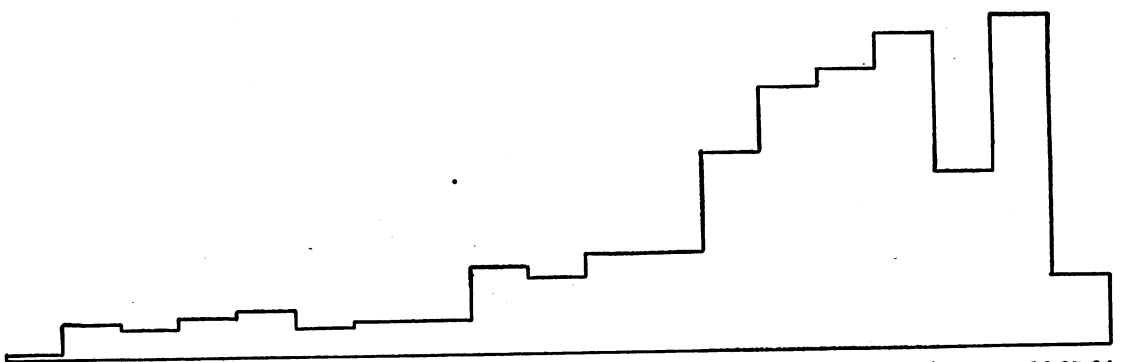
Question I was designed to allocate the men as to age, class of graduation, length of service, and geographical location. The following combined table and graph show the age distribution of 399 men; 4 men did not reply; 17 did not state their age. The largest number, 55, fell in the age group 34-35 years; the median age was 35.2 years. Graph 1 throws no light on the question of the athletic directorship as a life work because the distribution of this group is determined rather by the age of the institution, the smaller size of the early classes and factors of that sort. This also affects and explains the class distribution shown in combined table and Graph 2.

GRAPH 1
AGE DISTRIBUTION,
Y.M.C.A. COLLEGE ALUMNI.



AGE,	22-23	24-25	26-27	28-29	30-31	32-33	34-35	36-37	38-39	40-41	42-43	44-45	46-47	48-49	50-51	52-53	54-55	56-57	58-59	60-61	62-63	64-65
NO.,	5	26	18	35	43	40	55	26	33	24	22	13	13	14	5	6	8	1	5	3	3	1

GRAPH 2
CLASS DISTRIBUTION
YM C.A. COLLEGE ALUMNI



CLASS,	87-88	89-90	91-92	93-94	95-96	97-98	99-00	01-02	03-04	05-06	07-08	09-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24
NO.,	1	6	5	7	8	5	6	6	15	13	17	17	34	45	48	54	30	57	12

Years of Service

The years of service is likewise affected by the same factors. It would be obviously impossible to have any large number of men who had given more than 20 years of service. The number, however, who have given ten years or more of service is large enough (including the 9 and 10-year group, 61 per cent of the whole group), to give a matured and experienced judgment to the replies received.

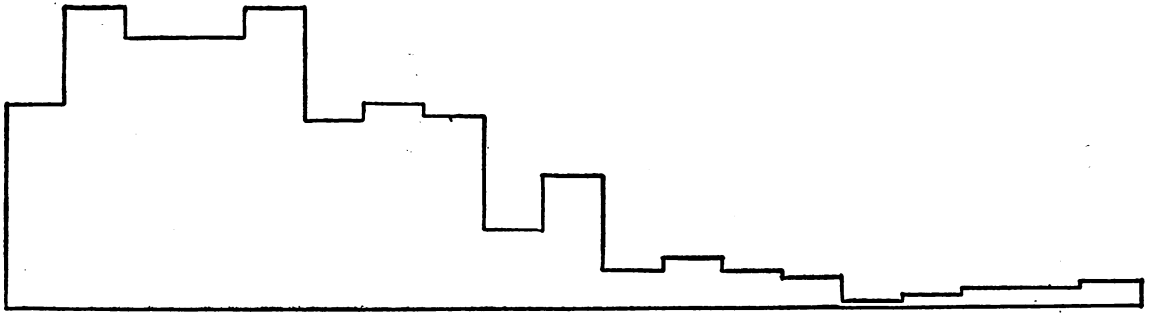
The geographical distribution is also wide enough to prevent any coloring of the results by local conditions.

Question II

Type of Position

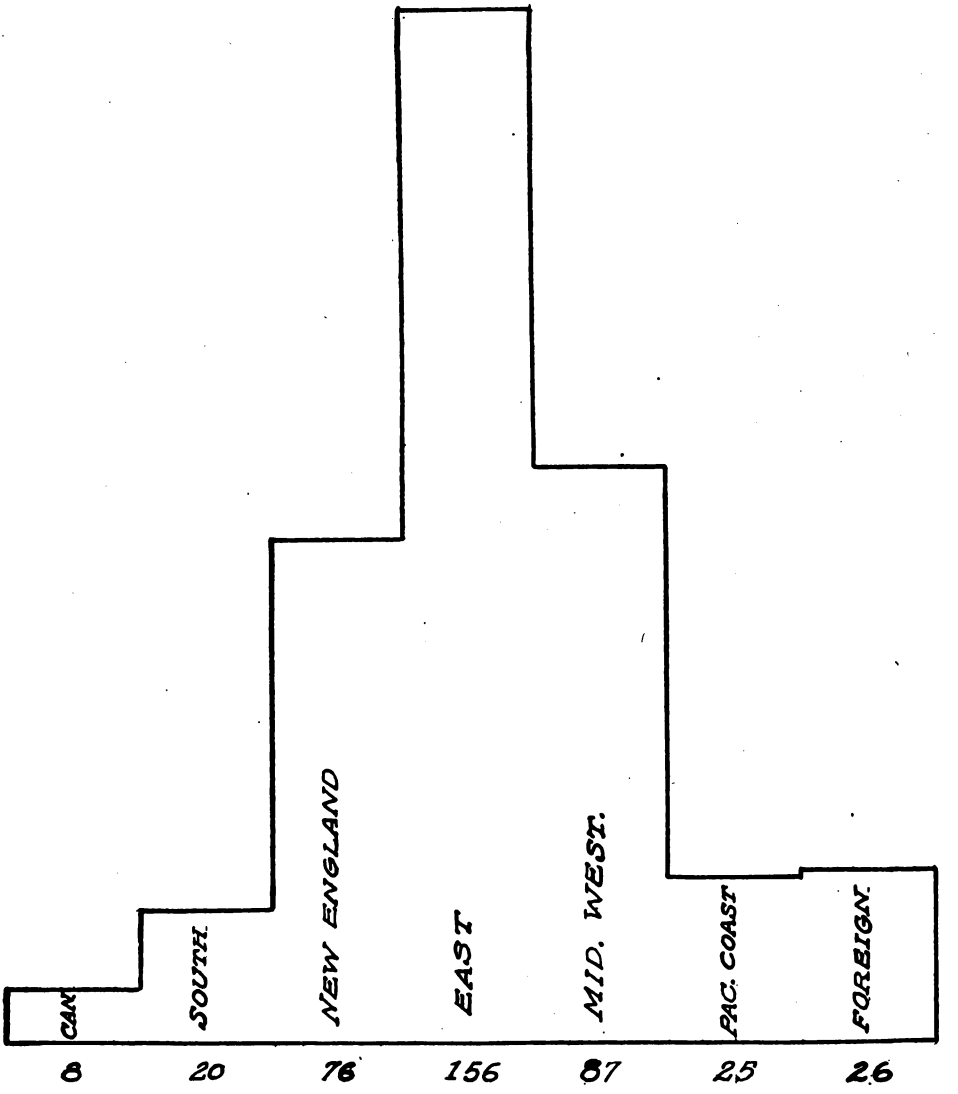
The type of position held by the men has an important bearing upon this problem. The men were primarily trained for supervisory and administrative positions in physical education, though some by elective work qualified themselves particularly for specialized coaching positions. The largest number of these men, however, are located in high school positions, a fact not shown in this study, but known from the college records. In practically all of these positions some coaching is done though it does not form the major responsibility. Unquestionably the men in the definite coaching positions feel the heaviest pressure with respect to sportsmanship ideals. The high school men, however, also feel this pressure very keenly—sometimes quite as much as the coaching positions because the control and ideals of sportsmanship in high school crowds in general have not been raised to the college level. Practically all of the men doing "All Round Combination" work do a considerable amount of coaching and this is true to some

GRAPH 3
YEARS IN SERVICE,
Y. M. C. A. COLLEGE ALUMNI.



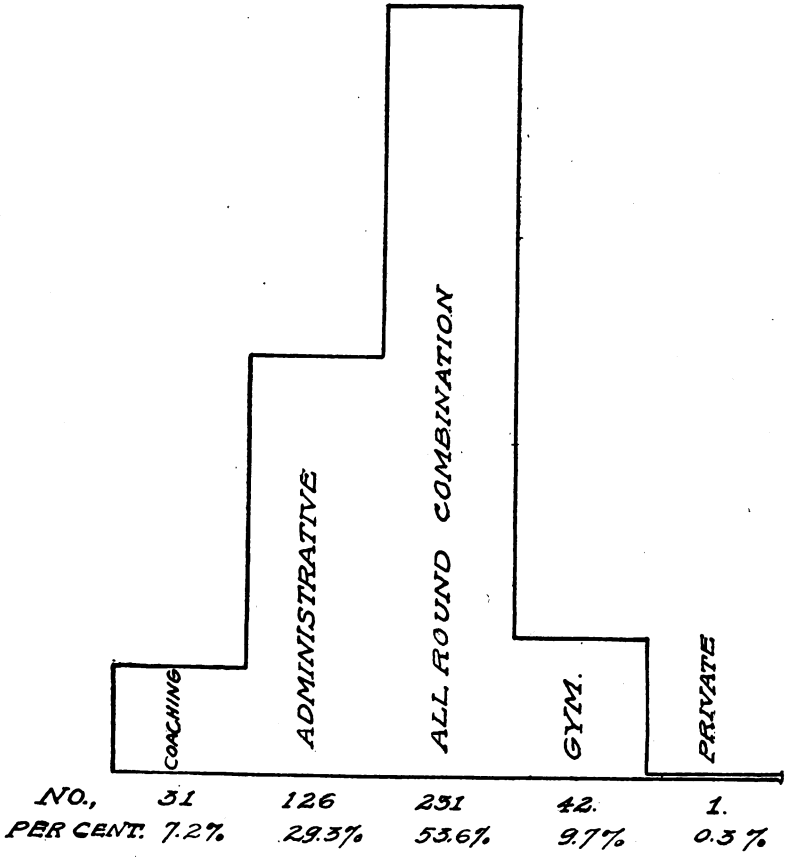
YEARS,	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	31-32	33-34	35-36	37-38
NO.,	34	50	45	45	50	31	34	32	13	22	6	8	6	5	1	2	3	3	4

GRAPH 4
GEOGRAPHICAL DISTRIBUTION,
Y.M.C.A. COLLEGE ALUMNI.



extent even in the administrative group. For this reason the study may be considered to furnish a fair indication of the

GRAPH 5
TYPE OF POSITION,
Y.M.C.A. COLLEGE ALUMNI.



situation in the field of coaching even though the number reporting for that specific group is small. It certainly is

representative for the general field of physical education. Comparison of this group will also be made with the football coaches. (Study II.)

Twenty-five men either were out of the work or did not reply to this question. In some cases the men could not properly describe their position with one check, the work being both coaching and administration and yet not classifying in the man's mind as an "all round combination" position. Still more frequently a man might coach and also teach gymnastics. This led to some double checking so that 395 men checked 431 types of position. Of these 31 (7.2%) were coaching; 42 (9.7%) teaching gymnastics; 126 (29.3%) administrative; 231 (53.6%) all round combination positions; and 1 (0.3%) private work. This distribution is indicated in Graph 5.

Question III

Ideals of the College

The ideals for which the College stood in sport were purposely left unstated in this questionnaire. Attempted definition was likely to lead to quibbling over words and interpretations. As a matter of fact no single authorized statement of these ideals exists. Different coaches at the College would undoubtedly interpret specific cases of questionable sportsmanship differently, depending upon the actual circumstances of the incident. The ideals of the College are not a precise and specific athletic "creed," but rather a general College tradition involving courtesy and fair treatment of opponents, observance of the spirit of the rules regardless of the action of opponents or officials, acceptance of officials' decisions without objection or bickering, playing the game as hard as possible but absolutely clean and according to the

rules, refraining from profanity either in coaching or playing, refusal to seek or accept any unfair advantage in any way, in general the treatment of opponents as guests, and other matters of this type. The students are Christian men; they desire to compete in athletics as Christian men should and at the same time show that a Christian may be a vigorous, virile, red-blooded man. There is no intention that there shall be anything soft or "molly-coddle" in the athletics of the institution.

What was wanted in the questionnaire was to know whether the man *thought* he got a clear conception of the institution's ideals, whether when he graduated be believed in them as he understood them, and whether after experience on the field he still believes in them. The answer was arranged to indicate complete, partial, or entirely negative belief. (a) "Did the College make its ideals clear to you?" Replies to this question were received from 399 men; 392 (98.2%) answered "Yes," 7 (1.8%) said "No." The reason given for not making its ideals clear were: "Too much concerned about a winning football team," one man; "failed to uphold scholastic standards," one man; "college officials themselves not sure," one man; "failed to make clear difference in correct and questionable methods," one man.

Question (b), "Did you believe in those ideals when you graduated?" was answered by 402 men; 380 (94.5%) stated that they believed in them fully; 21 men (5.2%) believed in them partially and 1 man (0.3%) did not believe in them at all.

Question (c), "Do you believe in those ideals now?" was answered by 403 men; 382 men (94.8%) believe in them fully now; 20 men (5%) believe in them partially and 1 man (0.2%)—the same one who disbelieved at graduation—continues to disbelieve in them. Nine men out of the twenty-one who stated that they believed in the ideals only partially

when they graduated, stated that they now believe fully. On the other hand, seven men who stated that they believed in the ideals fully upon graduation now believe only partially. Seven other men state that they believed fully when they graduated and that they now believe more strongly. The unanimity of opinion is remarkable. The College taught high ideals of sportsmanship and made them clear to its men; they believed in those ideals when they graduated and believe more strongly in them to-day. High ideals of sportsmanship as taught by this institution have proven practicable, at least so far as belief is concerned.

Question IV

Maintenance of Ideals

The man's impersonal opinion as to the possibility of maintaining high ideals and keeping his position was desired. The great majority answered definitely "Yes" or "No," but a considerable number qualified their "Yes" by indicating that it depended upon the man, or upon the position. For this reason 473 checks were received. Of these, 304 (64.3%) were "Yes"; 14 (3%) were "No"; 105 (22.2%) indicated that it depended on the man; 50 (10.5%) suggested that it depended on the position. Of 320 replies, then, nearly half, 155 or 48.4% indicated the opinion that retention of position and maintenance of high ideals depended either upon the man or upon the position. Evidently there must be diplomacy and tact in the handling of ideals and there may be positions in which high ideals are at least temporarily impossible.

Question V

Personal Maintenance of Ideals

When asked for their own experience—whether they *personally* have maintained high ideals or been forced to compromise—their statements were clear cut and decided. To this question 404 replies were received; 364 men (90.1%) claimed that they had maintained the ideals; 40 men (4.9%) admitted the necessity of some compromise. (Compare with Study II, Question XIII.)

Question VI

Reasons for Compromise

The admission of compromise may have been regarded by these men as at least a partial admission of defeat. If so, they would not check it unless their conscience forced them to do so. This attitude is indicated by the fact that most men who admitted compromising had several reasons; also that a few men who had not admitted compromising checked some reason for a compromise—possibly a slightly guilty conscience. Thus 40 men admitted compromising but 44 stated that lack of sportsmanship ideals in the group with which they were working was the chief reason why they had been compelled to compromise. This may have been due to failure to note that the question applied strictly to their own experience. Unquestionably the lack of ideals in the crowd, indicated by its demand for winning teams—sometimes also demanded by educational authorities—a reason checked by 33 men, shows the great need of strong backing and support by educational authorities. The lack of high ideals in sport generally and the necessity of producing winning teams furnish almost the entire excuse for compromise by these men. The other reasons are varied; professionalism was mentioned

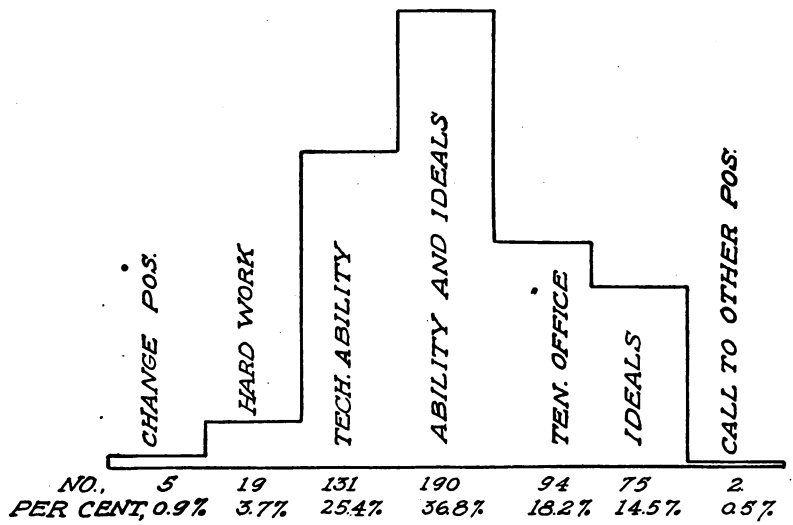
by 2, opponents' standards by 2, bad previous conditions by 2, politics by 3, "semi-pro" baseball by 1.

Question VII

Raises in Salary

As a partial means of checking up on these men the question as to raises in salary was asked. If the men have retained their positions, maintained their ideals and received

GRAPH 6
CAUSE OF SALARY INCREASE.
Y.M.C.A. COLLEGE ALUMNI.



raises in salary, it indicates pretty definite approval of their type of teacher. If, however, salary raises have been withheld, one would almost inevitably conclude that they retained their positions with difficulty and that high ideals do not enhance their desirability. The question was answered by 391 men; 376 (96.2%) report raises in salary, 15 (3.8%) report

no raise. The reasons for the raises are not very definite in the minds of the men, many of them checking two or more, giving a total of 516 reasons. Standing for ideals was checked 75 times (14.5%), equally to ability and ideals 190 times (36.8%), technical ability 131 times (25.4%), simple tenure of office 94 times (18.2%), hard work 19 times (3.7%), change of position 5 times (0.9%) and calls to other positions 2 times (0.5%). Graph 6 shows this distribution. It is apparent that success as indicated by raises in salary is not due to any one factor alone. Technical ability by itself is not sufficient; on the other hand neither are ideals alone. However, the part that ideals play in the matter in the judgment of these men is significant. It is a strong indication that physical education, though a technical matter, is recognized as having character values and teachers who demonstrate high ideals of sportsmanship are advanced in salary.

Question VIII

Sources of Difficulty

It was felt that an expression from the men as to the things which had given them difficulty with respect to high ideals in sportsmanship would be suggestive. The experience with betting among students was reported by 345 men: 128 (37.1%) had experienced difficulty with this problem, 217 (62.9%) had not. Apparently the other 65 men who answered this questionnaire, but did not check this item, had not had this difficulty but in all probability their positions were such as to give them no actual experience on this point. Three hundred and fifty-six men stated their experience with gamblers and the "sporting" public: 164 (46.1%) had had difficulty, 192 (53.9%) had not. Over-enthusiastic alumni had made difficulty in 128 cases (39.4%), 197 (60.6%) reported no such difficulty.

The fact that the larger number of the men had experienced no difficulty at all with these problems is encouraging. On the other hand, the large number who have, shows the seriousness of the problem and the need of earnest action by educators if ethical values are to be realized from athletics. These results should be compared with the results from the football coaches. (Study II, Question XII.)

Question IX

Effect of Ideals on Popularity

As a summing up question the men were asked to express their opinion as to the effect of standing for ideals on a man's popularity with students, authorities, alumni, and in general. A few objected to the use of the word "popularity," as not being the thing that teachers of athletics should properly work for. They preferred some such expression as prestige, dignity, or leadership. The word "popularity" was consciously chosen, however, because it commonly means almost the same as the other expressions and generally it is the basis for successful leadership. Unless a man is popular he is not likely to succeed in a campaign for high sportsmanship. Does standing for high ideals in sportsmanship tend to increase or decrease his popularity? An opinion as to its effect with students was expressed by 334 men: 308 (92.2%) said that it increased a man's popularity with students, 26 (7.8%) said it decreased it. The attitude of authorities was indicated by 348 men: 334 (96%) said it increased, 14 (4%) said it decreased the teacher's popularity. The effect upon alumni was checked by 291 men: 252 (86.6%) said it increased, 38 (13.1%) said it decreased the coach's popularity. These results are shown in the following table:

POPULARITY OF COACH AS AFFECTED BY HIGH IDEALS IN SPORT

	Total Answers	*Increases*		*Decreases*	
With Students.....	334	308	92.2%	26	7.8%
With Authorities.....	348	334	96.0	14	4.0
With Alumni.....	291 *	252	86.6	38	13.1
In General.....	335	313	93.4	22	6.6

* One out.

Evidently the experience of these men made them feel that high ideals in sport were a great asset to a teacher of athletics.

QUESTIONS X AND XI

Personal Illustrations of Approval or Disapproval

To check up still further on this matter and to see whether these men were basing their opinions upon definite experiences or vague generalities, they were asked whether they had personally experienced definite illustrations of approval or disapproval because of standing for high ideals in sport and to cite briefly the most significant incident. Question X, as to definite illustrations of approval, was answered by 330 men: 274 (83%) had had such definite approval while 56 (17%) had not. Question XI, as to definite illustrations of disapproval, was answered by 311 men: 110 (35.4%) men had experienced illustrations of definite disapproval, 201 (64.6%) had not.

Two hundred and twenty-four illustrations of approval were cited. These varied greatly in nature. The chief illustrations were as follows: expressions of general confidence, 56 men; definite commendation of superiors, 55 men; favorable press comments, 22 men; selected to officiate at important games, 16 men; calls to better positions, supposedly because of

their sportsmanship, 15 men; definite commendation from opponents, 14 men.

Ninety-one illustrations of disapproval were given, the most frequent reason being—24 in number—because of insisting on high sportsmanship when opponents did not practice it. Objection to standing too strongly for strict amateurism was met by 21 men; criticism for insisting on strict officiating was received by 12 men; criticism for interfering with betting came to 9 men.

Conclusions from Study I

The teachers investigated in this study were not primarily athletic coaches. Nevertheless, many of them have considerable coaching as a part of their duty. It is clear that these men as a group believe in high ideals of sportsmanship as taught by their Alma Mater; that they believe it possible to maintain high ideals and keep one's position (in fact, many stated that was the *only* way to keep a position); that they have not been forced to compromise with regard to their ideals; and that they believe that standing for high ideals in sport has increased their popularity and leadership. This is a tribute to the general ethical situation in physical education and athletics and indicates a general desire for a high ethical standard. Few of these men occupy the highest positions of athletic competition, but the majority do occupy the average positions of Y. M. C. A., high schools, academy, and college type. In these positions their experience indicates overwhelmingly that high athletic ideals are desired and appreciated and can be maintained. In spite of the known difficulties and the well-known undesirable features connected with our athletics the opinion of this group of teachers and the report of their experience is reassuring and exceedingly encouraging. If such a group can honestly make such a report as this the ethical content of athletics can be high.

CHAPTER VII

THE ATTITUDE OF FOOTBALL COACHES

Study II. College Football Coaches *

Football has been called the "King of American Games." It is certainly our greatest college game. Our psychological study has shown it to be the great team fighting game. Football is, therefore, the greatest "laboratory of character" available to modern education. The attitude of the teachers of football, what they believe, what their ideals are, what their practices are, and what they stand for, is then of supreme importance to educators.

Study II was designed to discover as far as possible these facts. A questionnaire arranged to be answered by checking was sent together with a personal letter of explanation and a self-addressed stamped envelope for reply, to each college football coach in the country. The list of these, with addresses, was taken from the Official Intercollegiate Football Guide for 1924.[49] Three hundred and ninety-six questionnaires were sent out; 166 replies (42%) were returned.

The coaches were told that it was not necessary to sign the reply and that absolute honesty was essential if the study was to have any value. Certain questions were included which would make possible some checking up in this respect. Return post cards were also sent to 100 coaches to be sent

* This study was presented before the National Football Coaches Association meeting in New York City, December 28, 1925, and is here reprinted with their permission.

[49] Spalding's Athletic Library, published by American Sports Publishing Company, pp. 56-263.

in separate from their questionnaire by which they could indicate that they had replied; 35 of these cards were returned. These with the signed blanks gave considerable definite knowledge as to what coaches had responded. Enough blanks were thus known, the general proportion returned large enough, the distribution wide enough, and the veracity evident enough to justify the belief that the study represents an honest statement from a typical cross section of the college football coaches of the United States. Large and small colleges and football coaches of all kinds and from every section are included. A copy of the personal letter and post card sent and a typical questionnaire follows:

"August 30, '24.

"DEAR MR.

"The ethical influence of football is a question of increasing educational concern. On the one hand are enthusiastic statements placing football as the greatest 'laboratory of character' in modern civilization. On the other hand is found a group of people who regard football and the great football games as brutal exhibitions comparable only with the old Roman gladiatorial combats and modern prize fights.

"The writer is working on a Doctorate thesis in the Graduate School of Education at Harvard University on the 'Ethical Content of Athletics.' As you may know, I have been connected with athletics for more than twenty years and have coached football for fifteen years. As one phase of this study I very much wish to get an honest frank statement regarding certain ideals in sport from the leading football coaches of the country.

"It may be that much that we hear about 'ideals' in sport, courtesy, treating opponents as guests and gentlemen, etc., is 'bunk'; that the real value of athletics, particularly such a game as football, is to teach men pure, unadulterated fight-

ing spirit: to take out the molly-coddle, the lounge lizard and the softness of life and put 'guts' into men. If so, we as football coaches should say so honestly and frankly and not attempt to sail under any assumed banner of 'character building' or any other subterfuge.

"I know of no way to get at this except for some one to make a careful scientific study of the question and THAT CAN ONLY BE DONE WITH YOUR HELP. Will you not, therefore, fill out the enclosed questionnaire at once before you are overwhelmed with the season's burden and send to me by return mail? You need not sign the blank. The replies will be opened and filed by a stenographer. May I ask, therefore, for an absolutely honest and frank statement of what you believe. Only so can the study be of any value.

"I shall appreciate your assistance in this way, as a personal favor, and I shall honestly attempt to work up from the answers received an unbiased and unprejudiced report. Thanking you, I am, with best wishes for a successful season,

"Sincerely,

(Signed) "ELMER BERRY."

"RETURN POST CARD

"DEAR MR. BERRY:

"Received your questionnaire to football coaches and have mailed my reply. Would be glad to have any reports on the study that may become available.

(Signed) "_____ _____."

THE ETHICAL CONTENT OF ATHLETICS

Place a check mark AFTER the word indicating your answer. Add additional information on a separate sheet, if necessary, numbering according to the question here.

LEADING FOOTBALL COACHES

I. Age? College Degrees? Have coached years.
In what section of the country now located? New England
East Middle West Pacific Coast South

II. Are you employed by the College? Yes No

As a faculty member? Yes No
As a seasonal coach? Yes No

III. Why do you coach football? (Check the chief reason.)
Pays well Build character Love the game
Like to work with young men Business and social prestige
State briefly any other reason.

IV. What do you regard as the chief disadvantage to coaching football?
Small salary Wears a man out
Uncertain tenure of office Necessity of winning
State briefly any other reason.

V. What do you regard as the greatest value of football to the players?
Check three in order, 1, 2, 3, Association with the coach
Physical health "Guts" Team spirit Fight
Sportsmanship ideals College spirit and loyalty
Self-control
State briefly any other value.

VI. Can a coach stand absolutely and unequivocally for high ideals in sportsmanship and win football games? Yes No

VII. Is the football code practicable or really only a piece of "bunk"?
Practicable "Bunk"

VIII. Is it really possible to put fight in a team and at the same time maintain high ideals of sportsmanship? Yes No

IX. Do you think self-control is really possible in a bodily contact game?
Yes No

X. As a matter of practice do you? (Check in.)
Follow the spirit or the letter of the law?
Do as the rest do or as you believe right?
Coach from the side lines Yes No
Send in instructions by substitutes? Yes No
Offer athletic scholarships Yes No
Assist in upholding scholarship regulations? Yes No
Encourage players to "get even" with dirty opponents? Yes No

XI. What do you emphasize most in your final talk to your squad before a game? Fight Sportsmanship
Appeal of Alma Mater Technique of the game
Is an appeal for high sportsmanship included?
Always Never Usually

XII. From what group have you personally had the greatest interference in maintaining sportsmanship ideals? Rate them 1, 2, 3
The faculty The alumni The team The press
The public generally. The sporting public The gamblers
State any other group.

XIII. Have you personally ever had to compromise on your ideals of sportsmanship to hold your job? Yes No
Recently? Formerly?

XIV. Have you personally seen inspiring incidents of sportsmanship on the football field? Yes No
If possible state briefly the most notable incident you have seen.

XV. Would you briefly offer any constructive suggestions for improving present conditions?

Question I

Age, Training, Service, and Location of Football Coaches

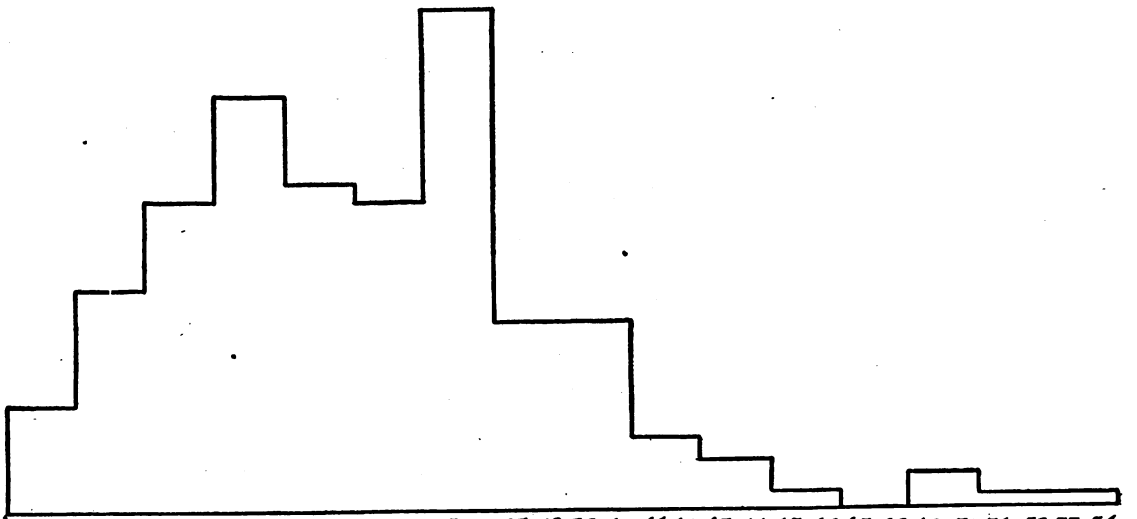
Question I was designed to allocate the coaches as to age, college training, length of service, and location in the country.

Age of Football Coaches

Graph 7 shows the age distribution of 161 coaches; 5 replies were returned without statement of age. One is struck by the large proportion of coaches between the ages of 29-36 and the small number above this age. The median age was 33¼ years. Evidently football coaching is a young man's task; it is a 30-35 year age position, at best possibly 30 to 40 years. The mean length of service (6 1/6 years, see below) further bears out this suggestion. It is significant that the extreme limit of service in the entire country is 33 years (now 35), and that reached by only one man, Amos Alonzo Stagg of Chicago University. It is also worthy of comment in passing that his team won the championship of the "Big Ten" conference in 1924,—Mr. Stagg's thirty-third year of football coaching. Mr. Stagg's well-known high standards in sport do not seem to have shortened his coaching career or prevented his winning. Unquestionably, however, the strain of football coaching demands youth. On the other hand, if football is to mean all that it should in character development, must not its leadership be a longer and more permanent proposition and one in which older, more experienced men are still desired? Can men of ability and power and leadership be

AMOS ALONZO STAGG
Chicago University, Dean of American College Football Coaches

GRAPH 7
AGE DISTRIBUTION,
COLLEGE FOOTBALL COACHES.



expected to invest themselves in a position which is on the average good for only five years?

Length of Service of Football Coaches

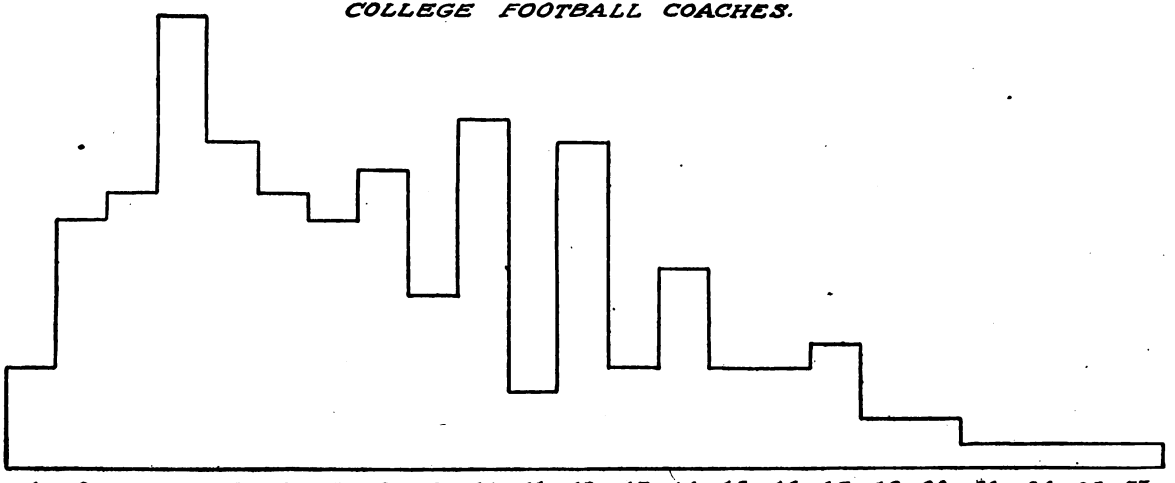
The number of years of football coaching was indicated by 160 men (6 blanks). This distribution is shown in Graph 8. The largest group appears at 4 years, the distribution being pretty well scattered from 2 to 12 years. The groups after 12 years are small and the total number who have coached longer than 10 years very small. *Only 6 men in the whole group of 160 men have coached 20 years or longer.* The remarkable case of Mr. Stagg has already been cited. The pity is that it should be so striking and remarkable.

Educational Training of the Football Coaches

Their collegiate degrees were given by 163 coaches. All but 15 (9.2%) had some collegiate degree; this speaks well for the intellectual caliber of our football leaders. The A.B. degree was held by 65 men (40%); the B.S. degree by 54 men (33.1%); three additional men stated that they held degrees without stating what these were. Higher degrees, A.M., or M.D., were held by 16 men (10%); and technical degrees of bachelor's grade were held by 25 men (15%). In some cases two degrees appear and with higher degrees the bachelor's degree is not always stated. This distribution is shown in Graph 9.

This is undoubtedly a much better showing than would have been made ten years ago. Popular imagination has usually characterized the football coach as a "roughneck." The new game of football has largely displaced the brute and man of "beef" only, both as a player and a coach. The game to-day is one of speed, intelligence, and strategy. The day of the profane, smashing, driving coach is largely gone. College students will no longer respect or submit to that kind

GRAPH 8
LENGTH OF SERVICE,
COLLEGE FOOTBALL COACHES.

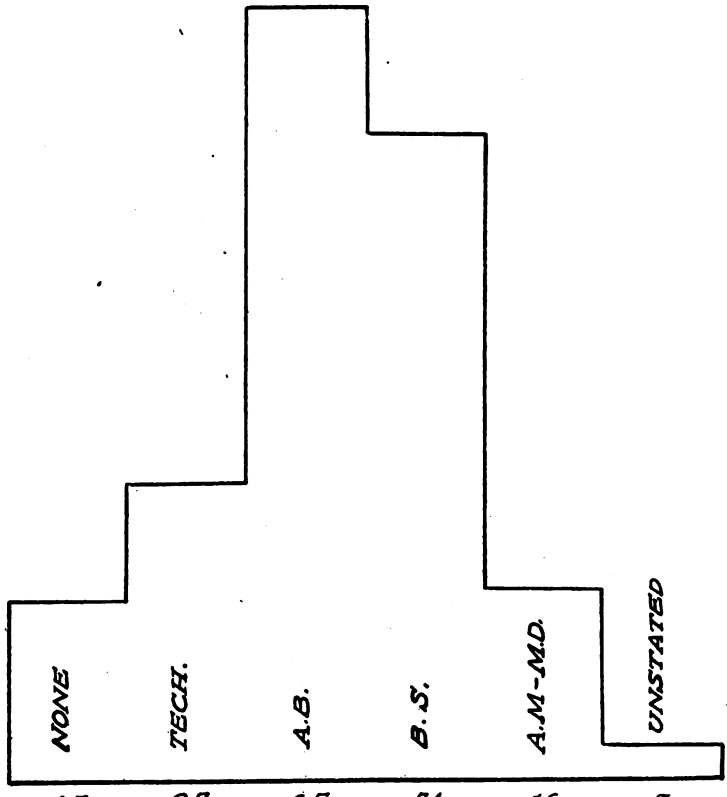


*YEARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	21	24	25	33
NO.,	4	10	11	18	13	12	10	12	7	14	3	13	4	6	4	4	5	2	2	1	1	1	1

* NONE FOR BLANK YEARS, 25-33.

of coaching and college authorities will not permit it. Coaches are demanded, who are gentlemen, who have intelligence, and

GRAPH 9.
COLLEGIATE DEGREES,
COLLEGE FOOTBALL COACHES.



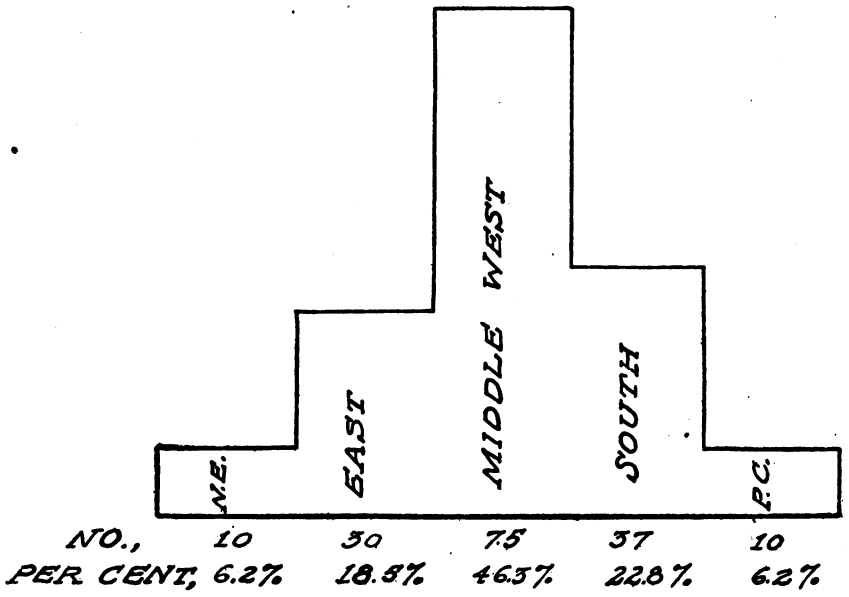
	NONE	TECH.	A.B.	B.S.	A.M.-M.D.	UNSTATED
NO.,	15	25	65	54	16	3
PER CENT,	9.2%	15%	40%	33.1%	10%	1.8%

who have teaching ability. Football is a college man's game and a college man is needed to teach it. It should be a source of satisfaction that the leadership of the game is now in the hands of men who are college graduates.

Location of the Football Coaches

Their present location as to section of the country was indicated by 162 men (4 blanks). Ten men (6.2%) replied from New England; 30 men (18.5%) from the East; 75 men (46.3%) from the Middle West; 37 men (22.8%) from the South, and 10 men (6.2%) from the Pacific Coast. This represents a reasonably fair distribution according to territory and college population. It is shown in Graph 10.

GRAPH 10
LOCATION,
COLLEGE FOOTBALL COACHES.



Question II

Employer

The question as to whether the football coach is employed by the college or by some other organization such as an athletic association, and if employed by the college whether as a member of the faculty or as a seasonal coach is important. One hundred and sixty-four men indicated their employer. Of these 160 (97.5%) were employed by the colleges. Faculty relationship was answered by 159 men; 146 (91.8%) were members of the faculty and 13 (8.2%) were not. Thirty-one men (18.9%) reported themselves as seasonal coaches and 8 men as yearly coaches. Evidently some of these are rated as faculty men while at the institution. This indicates some general indefiniteness and uncertainty as to faculty status of football coaches in some colleges. It is, however, evident that at least 80% of the college football coaches are full time faculty members. This, together with the training of the football coaches, is a most gratifying situation and indicates that great strides have been made toward acceptance of the ideals advanced by the National Collegiate Athletic Association and the various Athletic Conferences along this line. It indicates that the colleges are realizing the importance of faculty supervision and control of athletics, that they are giving faculty recognition to athletics and accepting responsibility for the administration of athletics. It is rather difficult to believe that this situation is really as favorable over the country as a whole as the results of this questionnaire indicate. It is possible that the football coaches who occupy faculty positions are of a higher type generally and are more interested in the problems that this questionnaire presented and so replied in larger numbers than those not so connected. Even granting this possibility the results are encouraging.

Question III

Motive

It was desired to put the coaches bluntly up against the question of their motive and purpose in coaching football. They were asked to check or state their *chief* reason. It is, of course, often very difficult for a man to select one chief reason. This is shown by the fact that 166 men gave 314 reasons for coaching football—almost two for each man. The salary was admitted as at least one motive by 29 men (17.5%); 59 men (35.5%) gave as one of their reasons the building of character; 122 men (73.5%) gave love of the game as one reason; 101 men (60.8%) said they liked to work with young men and 3 men (1.2%) admitted that business and social prestige had a bearing. The frequent appearance of such statements as the following is very suggestive: "Best opportunity to get next to real makers of men"; "I have a conviction that I am doing my part in the world and civilization by helping fellows get a hold on themselves"; "I can see that I can do great good in giving the boys the right attitude toward life"; "I coach because I think it is the best way to get a grip on boys and impress upon them high ideals"; "In order to contribute my bit to my college." The fact stands out that these men who replied say that they coach football because *they love the game, because they like to work with young men and because the game builds character.* They are not insensible to the needs of an adequate salary nor to the disadvantages of football coaching (as will appear from the next question). Nevertheless, these men who unquestionably have talent and ability to make more money in business or other lines if they so desired are constrained to devote themselves to this work. It seems pretty clear that our football coaches as a class are motivated by a high purpose.

Question IV

Disadvantages

The disadvantages of coaching football were more clear cut, though again a number of men felt the necessity of indicating more than one; 254 disadvantages were checked by 166 men. Of these 15 men (9.1%) objected to the salary as small; 43 men (25.3%) stated that coaching wears a man out; 76 men (45.8%) complained of the uncertain tenure of office and 89 men (53.6%) checked the necessity of winning. One man said it is a "young man's job." If the uncertain tenure of office and necessity of winning are combined we have 165 men, practically 100%, which indicates the present difficulty with football coaching as a profession. The men feel that they must win in order to hold their positions. This in turn is largely the explanation of the neural strain which wears men out. If the leadership of football is to be in the hands of big men with high motives, who use football as a means of character building and devote their lives to this objective, then educational authorities must see to it that the position is made secure and that a coach's efficiency and success is not measured by the winning of games. Regular faculty positions with the same certainty of permanency that any faculty position offers, reënforced in many cases by special five- and ten-year contracts, would help to set standards in this respect.

Question V

Value of Football to the Player

The coaches were asked to state what in their judgment was the greatest value coming from football to the players. If these men coach football because they love the game, like young men,

and believe that football builds character it should be very significant to see what characteristics they—the men who know it best and have most to do with it—believe, or at least say, football produces. It was recognized that a man could hardly select one characteristic alone so the coaches were asked to select three chief values and to rate them 1, 2, 3, in the order of their judgment of their value. The following table shows the coaches' arrangement of these values:

VALUES OF FOOTBALL TO PLAYERS AS RATED IN THE JUDGMENT OF 166 FOOTBALL COACHES

	First	*Second*	*Third*	*Total*
Sportsmanship Ideals	57	41	24	122
Self-control	50	29	29	108
Physical Health	27	14	14	55
College Spirit and Loyalty	18	14	22	54
Team Spirit	16	16	17	49
"Guts"	19	10	12	41
Fight	11	14	14	39
Association with Coach	13	5	9	27
Self-confidence	2	..	3	5
Moral and Social Qualities	1	..	1	2
Discipline	..	1	..	1
Obedience	..	..	1	1

It will be noted that 166 men gave 214 first choices. This was because a number of men did not rate their choices. In these cases all were checked in the first column. Evidently these coaches rate *sportsmanship and self-control* as the two great things secured from football. If "guts" and fight are classed together as fighting spirit, which is doubtless fair, for with most people fighting spirit includes both, it ranks next; sportsmanship, self-control, fighting spirit. These are closely followed by physical health, college spirit and loyalty, and team spirit. The order of these and the fact that few

other values were added is significant. These coaches believe that they teach sportsmanship, self-control, fighting spirit, physical health, college spirit and loyalty, and team spirit. These in the judgment of the football coaches are the values of football to the players.

Questions VI, VII, VIII and IX

Sportsmanship

The football coaches were next asked a series of questions designed to get their opinion on certain difficult or debatable problems of sportsmanship. Thus Question VI asked if a coach can stand absolutely and unequivocally for high ideals in sportsmanship and win football games. Unquestionably a great many of the general public do not think it possible. It was thought that many of the coaches might not think so—that some compromise in some cases might seem necessary to them. The conviction of the coaches is most surprising and gratifying on this point; 164 men answered the question and 162, almost 100%, without qualification of any kind checked "*Yes.*" A number stated that in the long run it is the only way that a coach can win games.

These coaches believe that sportsmanship pays.

Question VII asked their opinion of the football code—a statement of high ideals of sportsmanship for football by the rules committee.* It was thought that possibly many of the coaches considered this code simply a subterfuge, a bit of softness, not really meant by the rules committee—in short, "bunk." The question was answered by 162 men: 157 men (97%) checked practicable, 5 men (3%) checked "bunk."

* Football Guide 1924, Spalding Athletic Library. Rules Section, Part IV, page 4.

Question VIII had to do with fighting spirit—as to whether it is really possible to inspire fighting spirit in a team and at the same time stand for high ideals of sportsmanship. Football is preëminently a fighting game. Fight is absolutely essential to winning. In this sense this question correlates with Question VI. If the coaches are consistent they should answer them the same. It is, therefore, especially significant that 165 men (100%) answer "Yes" without qualification and not a single man checked "No."

Question IX is also closely related to the previous questions. Football is the most extreme bodily contact game that we have. It is the most difficult in which to maintain self-control. Unless, however, self-control can be maintained in such a game sportsmanship is **not** possible and the answers given by the coaches to the previous questions are impossible. Again, however, the coaches ring true and are unanimous: 164 men—every man that answered the question—(100%) say that it *is* possible to maintain self-control in a bodily contact game.

The opinions of the coaches on these supposedly debatable problems of sportsmanship show that they are not problems, that there is no debate on them, and their opinions are in thorough accord with their motives in coaching football and with the values which they believe football gives to the players.

Question X

Practices

It was desired to see whether the opinions and ideals of the football coaches and their practices would correspond. Question X covered several items of practice upon which there is popularly believed to be varying action. The coaches were asked whether they personally followed the *spirit* or the *letter* of the

law. This question was answered by 145 men (no answer from 21 men): 118 (81.4%) follow the spirit of the law; 27 (18.6%) say that they follow the letter of the law. Several of the latter said that they consider these to be the same.

The question whether they do as the rest do (that is, as they think the rest do) or as they believe right, was answered by 143 men (no answer from 23 men). Of these 138 (96.5%) say that they do as they believe right; 5 men (3.5%) say they do as the rest do.

They were asked whether they coach from the side lines. This is specifically prohibited by the rules, a severe penalty is provided for it, and the football code definitely condemns the practice. One hundred and sixty-three men answered the question: 150 (92%) stated that they did not, 13 (8%) admitted that they did coach from the side lines. Most of these latter, however, qualified their answer as "occasionally" or "sometimes" or attempted some explanation or excuse. The fact that they admitted the practice, however, indicates the reliability of the study.

They were next asked whether they sent in instructions during the game by substitutes. The rules committee specifically "deprecates the putting in of substitutes for the purpose of conveying information," * and has attempted to make this as ineffective as possible by penalizing a substitute who speaks to his team mates until after at least one play has occurred. Nevertheless, any one who has ever coached football knows that it is almost a human impossibility for a football coach to refrain from giving an ingoing substitute some instruction and frequently some direction to the team as to how he desires the game played. Although it is perfectly legal to send in such instructions there is considerable sentiment against it and the coaches would have been strongly tempted to deny the practice if they had had any desire to make the game

* See note, page 9, "Football Rules 1924."

appear better than it really is. Here again the coaches ring true and further establish the general reliability of the study.

The question was answered by 162 men: 143 men (88.3%) say that they do send in instructions, 19 (11.7%) checked "No." In several cases these qualified, however, by such statements as "only rarely," "except once in a great while," "unless I have to." This situation might well raise the question with the rules committee as to whether the implied illegality of sending in instructions should not be removed or else the time of silence for the substitute extended, perhaps to three or four downs.

The question of offering athletic scholarships was asked in the hope of getting definite and valuable information. The practice is generally condemned by such organizations as the National Collegiate Athletic Association, Head Masters Associations, and by educational authorities. It is little short of definite professionalism though this, of course, depends somewhat upon the nature of the scholarship and what it involves. It is difficult to prevent over-enthusiastic alumni, friends, athletic associations, and sometimes the institution itself from arranging such scholarships. In some cases the scholarships involve real service and may be reasonably defended. Largely because of this uncertainty in definition the question was purposely left undefined in this questionnaire. Undoubtedly, some who have indicated that they offer athletic scholarships mean thereby that they furnish athletes an opportunity to secure a position in which they render service (or are supposed to do so) for tuition or money received. They regard this as legitimate. It does mean, however, that an inducement of some kind is presented to the athlete to get him to attend that particular institution. At the best the practice is questionable; in many cases it is straight professionalism. The question was answered by 159 men; 26 (16.4%) state that they offer athletic scholarship, 133

(83.6%) do not. The fact that the percentage, even if interpreted in its worst form, is so small is cause for great encouragement.

The men were asked if they assisted in upholding scholarship regulations. Replies came from 161 men: all but 2, almost 100%, stated that they did. It is probably not too much to say that modern athletics do much to improve scholarship. It is not uncommon now to find the athletes among the best students in the institution. Faculties have been wise in insisting upon scholarship requirements for those who are to represent the institution. The best coaches are not opposing such standards, but instead are insisting upon their men meeting them, and are assisting them to do so. Even from a selfish point of view this is desirable, for stupid athletes are no longer useful in the modern game of football.

Finally the coaches were asked if they encouraged their players to "get even" with dirty opponents. All but 2 out of the 161 men, nearly 100%, said "No."

Most people do not succeed in bringing their practice entirely up to their ideals. Football coaches are no exception to this rule. Nevertheless, it would seem that these men have, on the whole, reached a high degree of achievement.

Question XI

"Pep" Talk

The last words of the coach to the squad before it takes the field for a game, are of great importance. The time is most intense; the men are at white heat and the impression made upon them is deep and lasting. Here is where the coach shows his real self, where all subterfuge and pretense is swept aside and the real man stands forth. This is the mystic period when

some coaches are reputed to be veritable dynamos, geniuses of inspiration, and fighting demons. There are few spectators who have not wondered what happened—what was said, in the brief space before the game or the short interval between the halves or in that moment on the basket ball floor when the group crowded into a compact circle, grasped hands and seemed to be charged with some strange emotion. It was felt that if the curtain could be lifted a bit and the things most emphasized in this "pep" talk indicated it might go very far toward showing the ideals for which the coaches really stand. It is apparent from the replies that the emphasis varies much depending upon conditions so that no one thing is always emphasized and it is probably seldom that only one thing is discussed. Thus, 93 men checked more than one item; 160 men checked altogether 284 things which they emphasized "most." The largest number, 128 (80%) mention fight as one of the things which they emphasize. Sportsmanship is the next chief thing emphasized, being mentioned by 75 men (46.9%). Some final instruction or reminder regarding some phase of the technique of the game is next in importance, being mentioned by 72 men (45%). The appeal of alma mater is included by 47 men (29.4%). Very few other things are included.

Asked if an appeal for high sportsmanship is included 98 (61.3%) said that such an appeal is *always* included, 60 (37.5%) said that it is *usually* included and 3 stated that they *never* included it. From this it appears that fighting spirit and sportsmanship make up a large part of the properly dubbed "pep" talk. The coaches are here again thoroughly consistent with their statement of what they believe the values of football to be.

Question XII

Interference with Sportsmanship

The coaches were asked to state the group from which they had personally received the greatest interference in maintaining sportsmanship ideals and to rate them 1, 2, 3, in their order of importance. It was felt that such a statement might be useful to educational authorities. This distribution is shown in the table below:

Groups Interfering With Sportsmanship Ideals as Rated by Football Coaches

	First	*Second*	*Third*	*Total*
Sporting Public	35	35	19	89
Gamblers	60	20	6	86
Public Generally	17	23	18	58
Alumni	22	12	18	52
Press	9	4	11	24
The Team	5	4	4	13
Faculty	6	1	3	10
No Interference	25	..	..	..

The question was answered by 160 men; 25 (15.6%) had experienced no difficulty; 135 men, therefore, expressed 154 first ratings, which is due to a small number of men not grading their difficulties. Although the sporting public gives the largest total, including the three ratings, it is clear that the trouble arising from gamblers is most pronounced and definite, 60 men (37.5%) placing it first. It is clear that educational authorities should take definite and decisive measures against this evil, both within and outside the college. Next in importance comes the sporting public which with the gamblers makes up a very large proportion of the difficulties experienced by the football coaches. Unquestionably these

two groups working through the public generally, through the alumni, and to a considerable degree through the press, are the source of most of the football coach's difficulty. These are the people that educational authorities are allowing to dictate how their athletics shall be run. These are the people that demand winning teams to protect their money. It is time that college authorities had the backbone to say that their football coach's position shall not depend upon the satisfaction of such groups. It will be noted that this corresponds very closely with the experience of the Y. M. C. A. College Alumni. (Study I, Question VIII.)

Question XIII

Necessity of Compromise

The coaches were then asked whether they personally had ever been compelled to compromise on their ideals of sportsmanship in order to hold their position. The question was answered by 163 men: 154 (94.5%) said "No"; 9 (5.5%) said "Yes." Seven of the 9 said it occurred some time ago, 2 said recently. This was a surprising showing. These coaches stand in the very vortex and maelstrom of athletic competition. Upon them all the pressure of the "desire to win" spirit is exerted. If 95% of the football coaches of the country can honestly and truthfully say that they have never been compelled to compromise on their ideals of sportsmanship in order to hold their position, our athletics are in a much better position than many have thought. It will be recalled that 90% of the Y. M. C. A. College Alumni reported that they had been able to maintain their ideals since graduation. (Study I, Question V.) The experience of these two groups on this point is most reassuring.

Question XIV

Inspiring Incidents of Sportsmanship

The coaches were asked whether they had personally seen inspiring incidents of sportsmanship on the football field, and if so to relate briefly, if possible, the most notable incident that they had seen. This question was asked first to get the coaches' general reaction on this point, second to check up in a measure on what they regarded as "notable" and "inspiring" incidents, and third to collect a group of striking illustrations. The question was answered by 149 men of whom 148, practically 100% (98.2% of the whole group) stated that they had seen such inspiring incidents. Of these, 71 (48%, 43% of the whole group) relate definite illustrations. It is impossible and unnecessary to repeat them here. It must fairly be said that many of them, though doubtless inspiring at the time under the stress of the occasion, seem tame and common enough in cold print; on the other hand, many of them are evidently striking examples of real sportsmanship that must, indeed, have thrilled the spectators.

Question XV

Constructive Suggestions

Few coaches would be satisfied if they did not have a chance to tell how the game should be improved. This is a bit of human psychology that probably brought several replies. More important, however, it brought valuable suggestions from 99 men (59%). A very large proportion of these suggestions have to do with ethical matters. The following are illustrations: "Build higher ideals among alumni and through them encourage a decided stand against gambling on intercollegiate contests as an evidence of loyalty to one's school";

"First I would suggest a committee to try to find ways and means of eliminating dishonest and incompetent officials"; "Secure officials who will work because of the game instead of the pay check"; "Promote propaganda that will enable the sporting public and the alumni to understand that we are trying to train men and not brutes"; "Conference teams should refuse to play non-conference teams and 'outlaw' colleges"; "Place control of athletics in hands of the President and faculty of the University."

Conclusions from Study II

The football coaches of this country are employed by the college as faculty members. They coach football because they love the game, because they like to work with young men, and because they believe that football builds character. Their greatest problem is the uncertainty of their position because of the necessity of winning. They believe that football brings to the players ideals of sportsmanship, fighting spirit, physical health, college spirit and loyalty, and team spirit. They emphasize these qualities in their talks to the men. They believe that sportsmanship ideals are practicable and possible in spite of bodily contact and that high ideals bring success, without necessity of compromise. They practice to a high degree what they believe and preach.

Our football coaches need the backing and support of educational authorities. As a group they are men of high ideals and purposes. They must be given support which will make them free to secure to education the social, ethical, emotional, and character values which football can so richly develop. The challenge is to the educational authorities. In their hands lie the opportunity and the responsibility for making it possible for the football coach to achieve educational values from football.

CHAPTER VIII

WHAT DO COLLEGE STUDENTS RECEIVE FROM ATHLETICS?

Study III. Y. M. C. A. College Students

THE students in the department of physical education at the International Young Men's Christian Association College, Springfield, Massachusetts, are particularly interested in athletics. Practically all of them have been leaders in athletics or gymnastics before entering the college where they are pursuing a technical course of training to become teachers of physical education and athletic coaches. They are, therefore, by experience, by point of view, and by future objective, peculiarly sensitized to athletics. If any group of students should have been influenced by their athletic training it would seem to be this group—admitted to the College because of demonstrated athletic and physical leadership and interest. This is probably no more true of them than of the chief athletic group of any other college, but it is seldom that an entire college is so nearly made up of athletes as is the case of this institution. This is true—to a considerable degree—even of the students in the Secretarial Department, so it was felt legitimate to include in the study a small number of these men who happened to be in the classes with the Physical group. It was felt that their replies would not materially change the results of the study. The student body of this institution thus presented an easily accessible and available group upon which to conduct a study of the ethical effects of athletics upon students. They represent a selected group from which we should expect to get a very high indication of ath-

letic values. If this group has not been strongly influenced ethically by their athletic training then we can hardly believe that athletics contribute such values. If they *have* been strongly influenced it would not prove that all students in colleges would be so affected, but it would be fair to believe that the athletic group in educational institutions where athletics are under good leadership also receive these benefits to a high degree.

With this thought in mind the following questionnaire was worked out and presented to the students for checking. The writer personally explained the purpose of the study, pointed out the importance of careful and honest replies, and urged the students not to give any credit to athletics unless they felt it to be thoroughly deserved in each individual case. The following questionnaire was answered by 323 students.

THE ETHICAL CONTENT OF ATHLETICS *

Y. M. C. A. College Students

I. Age? Class?

II. State the Y. M. C. A. (or club) High School and College (other than Springfield) teams on which you have played and indicate number of years on each.

III. State the Springfield College teams on which you have played and indicate number of years on each.

IV. What chiefly influenced you to prepare yourself to become a teacher of physical education?
Love of athletics Love of gymnastics Good salary
Desire to serve young men State any other reason

V. What person chiefly influenced you in the above decision?
Physical director Athletic coach Some teacher
Your pastor Your parents A boy friend
State any other person.

VI. What person all things considered has most affected your life to date? Father Mother Pastor Teacher
Sweetheart Athletic coach Physical director
Friend

VII. On the whole has the influence of your athletic coaches (or physical director) morally been:
Helpful and uplifting Indifferent Harmful

* Place a check mark AFTER your answer.

VIII. Did they stand for high ideals in sport, or coach you to win even if you had to sacrifice ideals?
Stood for ideals Coached to win

IX. State briefly any differences in this respect in your Y. M. C. A., High, School, College and Springfield coaches.

X. Of your coaches which one (of which sport) most influenced you?
Do you think this was due to his personality
Or the nature of the game?

XI. What characteristics of your coach most appealed to you?
His personality His fighting spirit His sportsmanship
His physique State any other characteristic.

Did he have any "bad" characteristics?
Dishonest Tricky Poor loser Profane
Anything else?

XII. Do you really feel that the lessons you have learned on the athletic field have "carried over," i.e., been applicable to the rest of your life? Yes No

If so can you briefly cite an illustration?

XIII. State if you can briefly what has been to you personally the greatest thing that you have learned from your athletic coaches.

XIV. If at any time in your experience you received definite harm from any of your coaches, state briefly if possible what it was.

Question I

Age, Class

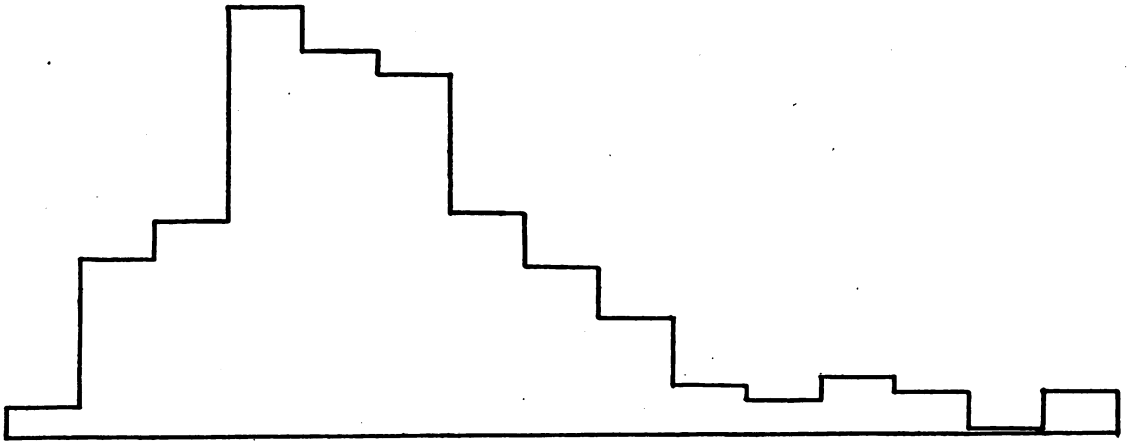
The age of the students is shown in Graph 11 as given by 318 men. The mean age was 21.7 years.

The classification in department and college class is shown in the following table:

College Classification

	Physical Department	*Secretarial Department*	*Total*
Freshmen	94	24	118
Sophomore	70	8	78
Junior	51	..	51
Senior	51	15	66
Graduate	3	..	3
Unclassified	7	..	7
			323

GRAPH 11
AGE DISTRIBUTION,
Y.M.C.A. COLLEGE STUDENTS.



YEARS	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31+
NO.	4	24	29	58	52	49	30	23	16	7	5	8	6	1	6

Question II

Athletic History

It was desired to get first some kind of a record of their athletic history before coming to Springfield. For this purpose they were asked to write in the name of the high school, college, or athletic team of which they had been an actual member—made their letter, so to speak, and to indicate the number of years. Each time that a boy "made" a team was counted as an athletic participation. The following table shows the athletic participations of this group:

Athletic Participations—Y. M. C. A. College Students

	Y. M. C. A.	*Club*	*College*	*High School*	*Total*
Basket Ball	148	129	12	391	690
Baseball	43	101	4	369	517
Football	8	68	22	329	427
Track	43	10	6	170	229
Wrestling	3	..	1	4	8
Soccer	4	14	2	26	46
Hockey	..	5	..	8	13
Swimming	24	..	..	30	54
Tennis	3	..	..	16	19
Gymnastics	15	..	2	3	20
Volley Ball	2	..	..	..	2
Total	293	337	49	1346	2025

This represents an average participation for each man of over six teams before entering Springfield. This is certainly more than the average college student would show. This table is also interesting in suggesting the types of activity promoted by the different organizations and perhaps the extent to which the different sports prevail outside of colleges.

Question III

Y. M. C. A. College Teams

The students were also asked to indicate in the same way the athletic teams in which they had played at Springfield Y. M. C. A. College. This, of course, was limited by the fact that the students were still undergraduates. The questionnaire was filled out in November so that even the seniors had not completed their Springfield athletic history. Only Varsity teams and Freshmen Varsity teams were included; other class and intra-mural teams were not considered. The following table shows this participation:

Athletic Participation in College by Y. M. C. A. College Students

	Football	*Basket Ball*	*Baseball*	*Track*	*Gym. Team*	*Soccer*	*Swimming*	*Wrestling*	*Boxing*	*Hockey*	*Tennis*	*Total*
Freshman	67	16	16	47	18	27	11	11	..	6	8	227
Varsity	49	15	12	50	22	17	19	10	2	2	2	200
Total	116	31	28	97	40	44	30	21	2	8	10	427

This gives an average participation of 1.3 teams for each man at Springfield Y. M. C. A. College. An estimate would indicate that this figure is about what the possibilities would permit.

Question IV

Motive

The students were asked to indicate the motive which influenced them to prepare themselves to become teachers of physical education. Very few of them could confine themselves to one reason; 319 checked 570 reasons. Love of athletics was mentioned more often than any other reason, being stated

as one reason by 240 students (75.2%). Desire to serve young men was the next most frequent reason checked, 197 times (61.4%). Love of gymnastics was checked by 74 men (23.2%). A good salary was one reason with 56 men (17.5%) and 3 mentioned an interest in health.

Evidently a love of athletics and a desire to serve young men through athletics were the great influences that led these men to prepare themselves as teachers of physical education and directors of athletics.

Question V

Person Influencing Professional Decision

It was also desired to see what person had been most influential in the above decision. In some cases the students were doubtless attracted purely by their love of athletics or gymnastics and were influenced but little by any person. Many would very likely be influenced by the personality and example of some teacher of physical education or director of athletics. Still others would have discussed the matter of their life work carefully with parents, teachers, pastor, or other friends, as would be true of students generally. These men, however, have chosen a definite technical profession—physical education. Who influenced them in this decision?

Very naturally many were influenced by more than one person so that 323 students (including those deciding for themselves) checked 448 persons as assisting them in this decision. Thirty-four students (10.5%), stated that they made the decision for themselves influenced by no one. The physical director was one person instrumental in influencing 148 students (45.8%) and the athletic coach was mentioned by 79 (24.4%). This probably is not a reliable indication of the relative influence of these two groups of physical teachers since in many high schools the teacher of physical education

is also the coach of the athletic teams. His title in such cases, however, is likely to be "Director of Physical Education" rather than something relating to athletics. Thus even though the chief contacts with the student were through an athletic team he may be checked as "physical director." It was noticeable that physical director and athletic coach were seldom both checked. Really then these two groups should be combined to indicate the real influence of the leaders of physical activity in this matter. This would mean that 227 students (70.3%) had been influenced in this decision by their physical education leaders. Parents had a part in influencing 47 students (14.6%). Boy friends influenced 42 (13%). These in most cases were already students at the College. It is interesting to note that Y. M. C. A. Secretaries (in many cases meaning the Boys' Work Secretary) are mentioned by 31 students (9.6%)—the same number that mentioned teachers (aside from physical education teachers). Sixteen other scattered people were mentioned, six of whom were brothers, probably already teachers of physical education or students at the College, and four were scout masters. The predominating influence of the physical education leaders coupled with the love of physical activity and the relatively small influence of other groups stands out in the making of this specific and definite decision. This was expected, but not to the extent here demonstrated.

Question VI

Person Influencing Life

The two previous questions were designed to determine the influence that had decided the professional career of the students. The next question was directed toward the general influence on their life. They were asked to state "What person all things considered has most affected your life to date."

It was desired to determine whether not only in their definite professional decision (in which it was expected that the physical education leaders would have considerable influence) but also in life in general the influence of the physical education leaders had been large. It was stated to the students that, naturally, the fact was recognized that in many ways no one would influence a man as much as his father and mother; but that the years of childhood were not to be so much considered; rather that their opinion was desired considering the time since they had begun to come into contact with the world in general, had begun to be influenced by other people, had gone to school—in short perhaps the person who had most influenced their life since they were seven years old. Again it was often impossible for the students to confine themselves to one person; 323 men checked 567 persons.

In spite of the statement made the outstanding person is mother; 211 of the students (65.3%) checked mother as the person, or at least one of the persons, who had most affected their lives. Sixty-four men (19.8%) checked their sweethearts and nine their wives. The feminine influence—over 85%—is most striking. It is a fact which may well challenge the attention and thought of teachers. It should impress mothers with their opportunity and responsibility. Here was a student body of strong, vigorous, red-blooded, athletic men, 85% of whom profess that the feminine influence in their life has been its greatest influence. They are also a selected group of Christian men training to devote their physical and athletic leadership to the building of character in boys and young men. The influence of mothers and the kind of girls with whom young men associate goes far to determine the kind of men they will be.

Another point that deserves attention from educators is the small showing made by teachers in this report. Only 25 students (7.7%) checked a teacher as one of the persons who

had most affected their lives. Of course, this does not mean that teachers may not have had great influence. The word *most* doubtless accounts for the small showing; and the type of group may have a bearing. Nevertheless, it is surprising to find them so seldom included.

On the male side father makes the best showing. He is checked by 108 students (33.4%). Frequently father and mother are both checked and one is led to wonder if this is not something of a "courtesy" check. Students hesitate to choose between father and mother and it does not seem quite right to include one without the other; so, as in going to church, mother carries father along. Naturally, too, it is very difficult to make a choice; perhaps the expression parents should have been used. It is reassuring to find father as influential as he appears to be, and yet, here is a group of men of a type that would naturally be considered peculiarly susceptible to masculine influence. It raises a fair question whether American fatherhood is not failing or shirking its opportunity when in such a group, twice as many men (practically) are influenced by their mothers as by their fathers.

Next to the influence of father and mother comes the influence of the physical education leaders. The physical director is named by 46 men and the athletic coach by 39. Combining the two, for the reasons suggested above, it makes 85 of these students (26.3%) naming their leader of physical education as one of the persons who has most affected their lives. No one, apparently, outside of their parents, compared with this individual in *general* influence even with these men.

A very small group, only 15 men (4.6%) mentioned their pastor. This is also a matter which might well command the attention of the church. It would seem that the church has not had a very powerful influence on these students. Yet they are all Christian men, members of churches, and training for

Christian service—a group that theoretically might have been particularly influenced by pastors.

Practically no other groups were mentioned.

Question VII

Nature of Influence of Coaches

The students were now asked whether on the whole the moral influence of their athletic coaches had been helpful and uplifting, indifferent, or harmful. A very few men checked more than one reply so that 326 responses were received, distributed as follows: helpful 271 (83.1%), indifferent 48 (14.7%), and harmful 7 (2.2%). The conviction of this group of students regarding their athletic coaches was clear cut and definite.

Question VIII

Ideals vs. Winning

They were then asked to state more specifically what their athletic coaches stood for; whether they stood for high ideals in sport, or coached to win even at the sacrifice of ideals. This was answered by 318 students: 254 (80%) stated that they stood for high ideals, 43 (13.5%) stated that their coach coached to win, 16 (5%) stated that their coach did both, evidently feeling that this involved no necessary contradiction, and 5 (1.5%) stated that their coach was a mixture, probably meaning that the coach sometimes stood for high ideals, sometimes for winning. Comparing this with the previous question it is discovered that in 40 cases where the coach coached to win, his influence is nevertheless checked as helpful and uplifting, and that in 29 cases where the coach stood for high ideals, his influence was nevertheless checked as indifferent. In every case where the influence of the coach was

harmful and in a number of cases where it was indifferent, in 21 cases altogether, the coach had coached to win. This indicates several things. One is that a number of these students did not feel that a coach should be a willing or easy loser. They distinguish between a "good" loser and an "easy" loser. They feel that a coach *should* coach to win and that he can do so and still be a sportsman. They also feel that a man may stand for the highest ideals that exist and still be "no good." In the final analysis the influence of the man depends on his personality. Nevertheless, it is very difficult to be too much of a driver and put too much emphasis upon winning and still have an influence that is strongly helpful and uplifting.

Question IX

Differences in Coaches

It was thought that it might be possible to gauge somewhat how discriminating the students were and to tell whether any real differences existed by asking the men to indicate briefly any differences in ideals in their Y. M. C. A., High School, College, and Springfield coaches. Many of these men, of course, had really actually experienced only one set, mostly high school coaches. Consequently we find 151 men (46.8%) who made no statement. Either there was no difference in their coaches or more probably the students were not in a position to form a judgment. The rest of the men, 172, expressed 179 differences. Of these 71 stated that the Springfield coaches were of the highest type, 52 stated they were all the same, 32 complained of low ideals in high school coaches, 4 did the same for college coaches, 5 spoke of high ideals and one of low ideal in Y. M. C. A. coaches, and 5 spoke of the greater technical ability of their Springfield coaches. It is doubtful if any conclusion should be drawn from the results of the question.

Question X

Coach Most Influential

Here the men were asked which coach, *i.e.*, of which sport, had most influenced them and then to indicate whether they thought it was his personality or the nature of the game that influenced them. The coach of the game was indicated by 275 men as follows: football coach 102 (37.1%); basket ball coach 57 (20.7%); track coach 35 (12.7%); baseball coach 26 (9.4%); gymnastic coach 23 (8.3%); soccer coach 15 (5.8%); Y. M. C. A. physical director 8 (2.9%); swimming coach 5 (1.8%); wrestling coach 4 (1.4%). From this, football appears very decidedly to be the game that furnishes a coach the greatest opportunity for influence. This is shown in Graph 12. Not too much emphasis, however, should be placed on this point for in many cases several sports were coached by the same man, but the students did not make all of the teams which he coached.

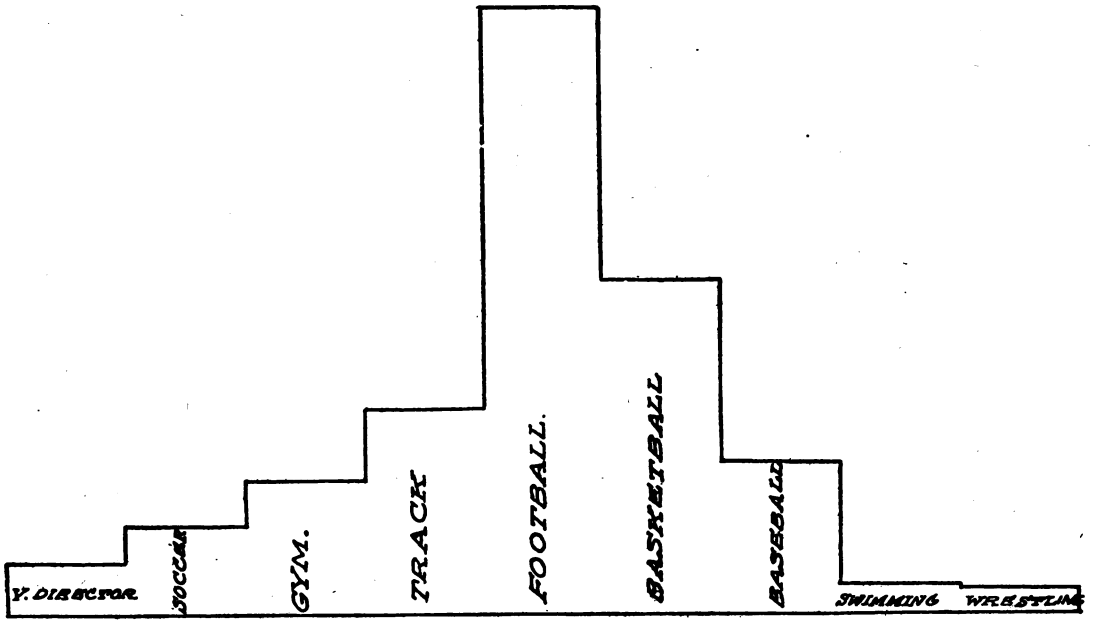
That it is the man and not so much the games appears more clearly in the checking as to personality and nature of the game. This was checked by 291 men; 205 (70.5%) said it was the personality of the coach that influenced them; 51 (17.5%) said it was the nature of the game and 35 (12%) said it was both. It is clear that the personality of the man is the thing. It is likely that football offers him the *best* opportunity, but not the only one since a man of strong personality will influence boys through any sport that he coaches.

Question XI

Characteristics of the Coach

In this question the students were asked to indicate the characteristics of the coach that most appealed to them. His

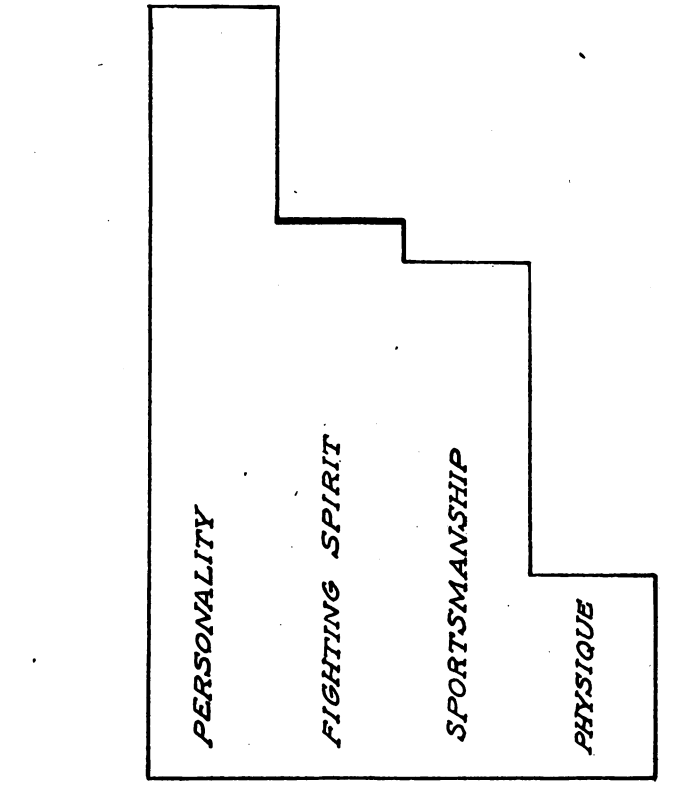
GRAPH 12
COACH MOST INFLUENTIAL,
Y.M.C.A. COLLEGE STUDENTS.



NO.,	8	15	23	35	102	57	26	5	4
PER CENT,	2.9%	5.8%	8.5%	12.7%	37.1%	20.7%	9.4%	1.8%	1.4%

personality, fighting spirit, sportsmanship, and physique were mentioned and they were asked to state any other character-

GRAPH 13
APPEALING CHARACTERISTIC OF COACHES, Y.M.C.A COLLEGE STUDENTS.



istics. It is interesting that but very few others were stated and that several characteristics were mentioned by nearly every man; 316 students (7 blanks) checked 656 character-

istics. Either this group found it difficult to select the outstanding characteristic or, more likely, athletic coaches as a class are men of strong and varied characteristics. They appeal from more than one angle. Again the personality of the coach is significant. This was mentioned by 245 men (77.8%) and it forms 37% of all the characteristics mentioned. Fighting spirit is next, being mentioned by 175 men (55.4%). This is closely followed by sportsmanship which is mentioned by 164 men (51.9%). The coaches' physique is much less important; being mentioned by only 65 men (20.6%). Seven other scattered items are mentioned. This is shown in Graph 13.

The students were also asked if their coaches had any bad characteristics. This item was left blank by 135 men which, doubtless, means that they had none such; 96 men definitely stated that they had no bad characteristics. This would make a total of 231 (73.1%) of the coaches. The remaining 85 students checked 96 bad characteristics. Profanity was mentioned by 32 men; the coach was described as a poor loser by 24 men. These two characteristics constitute the bulk of the coaches' indiscretion. The other things mentioned were widely scattered: 15 spoke of trickery, 7 of dishonesty, 4 objected to smoking, and 4 to coach's relations with women. This is a remarkably good showing for the athletic coaches. It is doubtful if any other class of male teachers would make as good a showing if known as intimately as students know their athletic coaches.

Question XII

"Carry Over" Value

The question of the possible transfer or "carry over" value of athletics has constantly arisen in this study and is a very important matter. It was thought that the opinion of this

group would be valuable on this point. To be sure they could give nothing but their personal opinion, in some cases backed up by a more or less definite illustration. They are only young men who have not yet experienced much of life's vexing problems. They may also be regarded as a prejudiced group inasmuch as they are particularly interested in athletics and training to teach them. On the other hand they have thought more about this matter for this reason and are qualified to give a more intelligent answer than most students. Furthermore, these objections were stated to them and they were urged not to indicate a transfer value unless they personally felt very sure of it in their own experience. In view of these facts their opinion deserves unusual consideration. The question was answered by 302 men: 283 (93.7%) *stated that the lessons learned on the athletic field had carried over to the rest of their life;* 19 men (6.3%) stated they had not. Illustrations were given 218 times. Of these, playing the game square referring to life in general was given 60 times, perseverance in overcoming obstacles was mentioned 48 times, control of self was stated 33 times, appreciation of the other fellow's point of view 17 times. The other illustrations were widely scattered, such as coolness in a crisis by 4 men, obedience to rules by 4 men, general honesty by 5 men, courtesy 2, self-sacrifice one, and so forth.

These men may be mistaken as they may not understand the problem involved, but it is clear that they *believe* that they have been benefited in their general life by their athletic experiences. In this connection, the results of studies by Professor George E. Dawson [50] on students in this college are significant. He says: "My investigation of these three hundred and fifty Y. M. C. A. College men has yielded the following results: (1) in tactile sensitiveness, as determined by

[50] "The Educational Content of Physical Education," *Am. Phys. Ed. Review,* Oct., 1923.

experimental analysis of touch-discrimination in the index finger, the average is 1.5 millimeters which is 25 per cent more sensitive than the average of college men in general. Moreover, the physical group of men are more sensitive in touch-discrimination than are the secretarial group, in the proportion of 1.4 millimeters to 1.7 millimeters. (2) In kinæsthetic sensitiveness, as determined by space and weight discrimination, the average for space is 3.4′, or 15 per cent superior to the general average for male adults; and for weight, is 2.2 grms., or 45 per cent superior to the general average. Here again the physical students are more sensitive than the secretarial, in the proportion of 3.3′ to 4.7′ for space and 2.1 grms. to 2.3 grms. for weight; (3) in visual sensitiveness, as determined by color discrimination, not one case of color blindness has been found, as compared with somewhat more than 4 per cent of color-blind men among the general population; (4) in auditory sensitiveness, as determined by discrimination of the upper limits of tone perception and of pitch, the average for the former is 20,270 vibrations per second and for the latter is two vibrations per second. While we have no generally established standards of tone perception and pitch discrimination, my own tests of a considerable number of men and women lead me to believe that these students are considerably more sensitive to tone and pitch stimuli than the average man." [50]

"Applying now, once more, the results of my study of Y. M. C. A. College students, what is the correlation between intellect and the motor qualities of such students? Here we must think of intellect, not in terms of information, or of acquired culture of any kind, but rather in terms of those primary qualities of intellect that are revealed in the ability to integrate sensation, mental association, and action. Such ability can be analyzed experimentally by means of tests in reaction time. By these tests, which involve the use of visual,

auditory, and tactile stimuli, it is found that Y. M. C. A. College students average .154′, for sight; .162′, for hearing; and .151′, for touch. This is a better record than is made by average men for sight and touch, by 22 per cent and 12 per cent, respectively; and a better record for hearing by 8 per cent. In these tests, the physical students again make the better record by a clear margin." [50]

Discussing the relation between ideas and action, Professor Dawson reports as follows: "Regarding the human hand as the most all-round organ of self-expression through physical action, the speed and accuracy of hand-control of each student were tested. It was found that the average rate of speed was 379 movements per minute, as compared with 352, which is the norm for men of corresponding age. This is an advantage of 8 per cent for Y. M. C. A. College students. Here again, the physical students had greater speed of hand-control than the secretarial students, by six movements. In accuracy of hand-control, the results were even more significant. The Y. M. C. A. College students made but 6.2 errors, on the average, in executing 379 movements, while the average men of their age make 18 errors in executing 352 movements. That is to say, the hand-control of the Y. M. C. A. College students is nearly three times as accurate as is the hand-control of men in general. The physical students made, on the average, 1.5 fewer errors than did the secretarial students."

"In general therefore, this series of experiments on a rather specialized group of young men, indicate that physical activities of the athletic type are correlated with unusually acute sense-perceptions; with fundamental powers of association and integration of the factors of consciousness that are above the average; and with ability in conscious physical self-control superior to the average man." [50]

It is highly suggestive that the psychologist's tests show

this group of students to be a highly sensitive type. This does not prove that athletics have made them sensitive. They may have chosen athletics and been successful in them largely because they were such a group; nevertheless, it is significant to find the two characteristics coinciding.

Question XIII

Athletic Lessons

The students were asked to state what had been to them personally the greatest thing they had learned from athletics. This was in some respects a repetition of the previous question but it was thought that it might also provide something of a check on it. A total of 342 items were stated. The greatest single thing was good sportsmanship, which was mentioned in one way or another 116 times, by 36% of all the men. "Sticking to it" was stated by 40 men, how to lose by 33 men, fighting spirit by 31 men, the value of a clean life by 30 men; other things mentioned were widely scattered, such as self-confidence 9 men, playing the game of life 19 men, value of team work 12 men, and so forth. It is significant that the students so largely summed up their lessons in the expression "good sportsmanship."

Question XIV

Moral and Physical Injury

It was thought desirable to get if possible any reverse side of the picture that might exist. The students were, therefore, asked in the final question if at any time in their experience they had received definite harm from any of their coaches and to state briefly if possible what it was. This question was left

blank by 218 men, evidently indicating that they had received no harm, and 57 men definitely stated that they had *not* received harm. This made a total of 275 men (85%). Definite statements of harm were made by 43 men. These cases were widely scattered and sometimes trivial in nature, such as double crossed by the coach 1, made to dislike the game 1, copied a self-opinionated attitude from the coach 1, poor example 1, favoritism 3. The largest number, 9 men, stated overwork as their injury; 4 men mentioned definite physical injury. Profanity by the coach was stated to be harmful by 8 men and the coaching of "dirty work" was harmful to 5 men. It is a satisfaction that this side of the picture is not darker.

Conclusions from Study III

These students represented a selected group from whom it might be expected that a report very favorable to athletics would be secured. It is not likely, however, that this would be any more so than from the athletic group of any college. It is reasonable to assume, therefore, that the experiences of this group may apply to all students in so far as educational authorities can make athletics available to all students.

It is clear that the leaders of physical activity—teachers of physical education and athletic coaches—have exerted very great influence on these students. This is true in the selection of a profession and in their general life. No one outside of their parents has exerted so powerful an influence. These students have found the influence of their athletic coaches helpful and uplifting. The coaches have uniformly stood for high ideals; they have influenced the students because of their personality. The students feel very definitely that the lessons they learned on the athletic field have "carried over" into everyday life and that good sportsmanship, perseverance,

fighting spirit, and self-control are among the great lessons that they have learned from athletics. Very few of them have received any harm from athletics. The problem of educational authorities is to make it possible for all students to secure these values.

PART III

METHODS OF SECURING ETHICAL VALUES FROM ATHLETICS

CHAPTER IX

ATHLETIC ADMINISTRATION, SPORTSMANSHIP CAMPAIGNS, AND EDUCATIONAL EFFORTS

THIS part of the study is intended to be merely suggestive. No attempt will be made to present a detailed study of present methods of athletic administration or ethical procedures. Such studies have been presented. It is purposed here simply to offer some suggestions which seem to grow out of this study. The athletic problem for educators to-day is to find ways and means of realizing and utilizing the values of athletics. The technique of sportsmanship, the technique of athletic ethics, both for players and spectators is one of the immediate problems in education. The methods cannot be fully set forth here. Some obvious applications, however, appear from this study. The study also fortunately indicates that great progress has already been made in this matter and that we may hope for much more by proceeding in general along the lines already in operation.

ATHLETIC ADMINISTRATION

Perhaps the first fundamental thing that stands out as needed to secure better and more general ethical results from athletics is improvement in athletic administration. The administration of athletics in colleges must be taken over completely by educational authorities. This does not mean that students may not participate in athletic management and derive therefrom valuable experience. It does mean, however, that educational authorities must accept responsibility for ath-

letics, must supervise and direct them, must put them in charge of faculty administrators and regard them not as an extra-curricular activity, but as an integral part of the educational system. This fortunately has been done to a considerable degree in many of our colleges and is coming in others.

The administration of athletics in our public high school is, however, still far from ideal in many places. The students are at a particularly impressionable age at this time and the importance of the formation of right habits can hardly be overestimated. The Board of Education should take the same responsibility for the supervision and administration of athletics that they take for any other subject taught in the public schools. The finances particularly, should not be left to an athletic association but should be controlled by a representative of the Board. Equipment for teams, gate receipts, and all other financial matters should center in the educational authorities. Funds secured from games and contests should be used by the Board of Education to increase the equipment and facilities making possible exercise and recreation for all, instead of being handled by a small committee of an athletic association and often used to the ethical and physical injury of the athletes themselves.

Many people advocate the elimination of gate receipts from public school contests believing that thereby much of the graft, abuse, and mismanagement of athletics would be eliminated. The idea has much to commend it but it is doubtless Utopian and impractical. There is no inherent wrong in money; what is needed is supervision and direction. Rather should the public be allowed and encouraged to attend games and pay. The receipts should then be received, checked, strictly accounted for, and spent by the Board of Education in ways that will improve and promote the good of all the pupils of the city. The time when athletics can be run by a small coterie of students and alumni, commercialized and exploited, and the

revenue wasted and spent recklessly to the advantage (more often disadvantage) of a small group of interested students should be past. Educational authorities that allow such conditions—and unfortunately they do still exist—are insensible to their duty as determined by the modern conception of education.

The exact method of organization to secure educational supervision may vary; the essential thing is a determination that necessary attention shall be given. Jesse F. Williams [7] has outlined several of the systems of organization now in use. It is not the purpose of this study to go into a detailed discussion of this problem—but as most of the plans now in use are more or less incomplete or ineffective in their correlation of the health, physical education, and the athletic activities of the school system, a suggested plan of organization may be useful. The appended scheme (see page 211) aims to combine and properly correlate the work of the school system of an average sized city (100,000-200,000 population) with regard to health, physical education, play during and after school as well as during the summer, and athletics. It places athletics in their proper relation to the other activities of the department of physical education.

Athletic Conferences and Athletic Supervisors

A second suggestion involves a combination of educational and administrative measures. This is that there should be national athletic bodies with regional group conferences which should employ executive officers, supervisors, or commissioners of athletics, to carry into effect the policies of these bodies. Such national organizations are now represented by the National Collegiate Athletic Association, the National Amateur Athletic Federation, the Amateur Athletic Union, the Y. M. C. A. Athletic League, the Playground Association, the Army, and the Navy. The business of these national bodies is to

set athletic ideals and standards and to promote educational and ethical values through athletics. In some cases and to some extent they have also been executive in nature. The great work that has been done by these organizations cannot be over-emphasized. There is, however, at present a great uncertainty in relationships involving conflicts over priority, interpretations, methods of procedure, and even ideals. This leads to politics and friction and results in unethical examples. We cannot expect the realization of the highest ethical values from our athletics until America agrees upon a national system of athletic administration and supervision.

Sectional and group athletic conferences have been established in many parts of the country. Such conferences as the Western Intercollegiate Conference (The Big Ten), the Southern Intercollegiate Conference, the Missouri Valley Conference, and the Pacific Coast Conference, are setting high standards in athletic ethics, are carrying into effect the ideals of the national groups, and are acting to a large degree as executive bodies. These organizations function, however, only among the colleges. The state and district organizations of the Amateur Athletic Union have functioned in much the same way among the athletic clubs. To a large degree the rest of the athletic world is unorganized. The great high school and secondary school field, the Y. M. C. A., the industrial and the recreational fields, are either unorganized or, with a few exceptions, supplied with conferences which are as yet inadequate and ineffective.

These groups will never be efficiently organized and become powerful educational and executive bodies until they see fit to employ Supervisors or "Commissioners" of Athletics as the Western Intercollegiate Conference has done. It is well to get together and talk. But what is everybody's business is nobody's business. Unless there is some agency to carry into execution the resolutions adopted and ideas presented

little real progress is made. This cannot be done by committees made up of men already overloaded and widely separated. There must be an executive officer whose business it is and who devotes his time to promoting the educational propaganda and carrying into execution the definite decisions reached by the conference. Results cannot be secured without the expenditure of time, effort, and money. The failure of educational institutions to realize this and to provide for such officers before is one of the reasons why more has not been accomplished. The "Commissioner of Athletics" represents a forward step in athletic education and administration. Every athletic conference should provide such a supervising individual who by earnest conscientious service may advance the work of the organization and more rapidly assist in securing ethical values from athletics.

Sportsmanship Campaigns

A third suggestion lies in the value of definitely organized campaigns of sportsmanship. Such campaigns should begin in the junior high schools and should extend through our high schools, academies, and colleges, and into all other fields of organized athletics. It should be a particular function of Supervisors of Athletics working through their conferences, assisted by the Directors of Athletics and the educational authorities in all of their institutions to promote such campaigns. Every educational method available should be used to instil knowledge of high ideals of sportsmanship and to insure observance of such practices by student bodies and the public generally. Such ideas may be promoted at athletic rallies and cheering practices, at special mass meetings, by special speakers, by distribution of printed matter,[51] by team celebrations and in numerous other ways. We cannot expect sportsmanship to be absorbed by osmosis. It must be

taught. Too little has yet been done in organized teaching of ethical ideals in sports. The trail, however, has been blazed.

The appointment of state supervisors of physical education for our public schools has made possible the organization of concerted state-wide movements of this kind. Directors of physical education have promoted such campaigns in large cities. We are beginning to develop a technique for such education. New York State, under the leadership of Daniel Chase,[52] has promoted a state-wide athletic organization which has had as one of its great objectives the promotion of good sportsmanship. Their "Fourteen Points in Good Sportsmanship" has been scattered broadcast and posted everywhere. Maryland, under the leadership of Dr. William Burdick, working first through the Baltimore Public Athletic League and later through a state-wide movement, has done much the same thing. Other states are promoting similar campaigns. Individual cities have organized campaigns of their own as has been done in Detroit, Pittsburgh, and other places. In other places existing organizations have carried on such work effectively as a part of their normal program, as has been done by the Public School Athletic League of New York City and by the Sunday School Athletic Leagues of Brooklyn, New York, and Springfield, Massachusetts. The recent organization of the Sportsmanship League represents an attempt to establish a definite institution to promote this work on a national and world-wide basis.

Much good has been accomplished by these efforts. But each educational institution, each athletic unit, should accept the responsibility for such definite efforts of their own, and thus coöperate in speedily raising the tone of our athletics everywhere and definitely securing their ethical values. The

[52] "Athletic Administration in Public Schools," *Am. Phys. Ed. Review*, April, 1923.

time has arrived when a careful study of such efforts might reveal a great deal in methods of technique and proper procedures. It is certain, however, that such movements are much needed, that they are of great value, and that the important thing is to proceed. It is likely that details of methods are relatively unimportant. The essential thing is for educational authorities to recognize the need of furnishing education in good sportsmanship and see to it that some definite effort is made to promote such instruction.

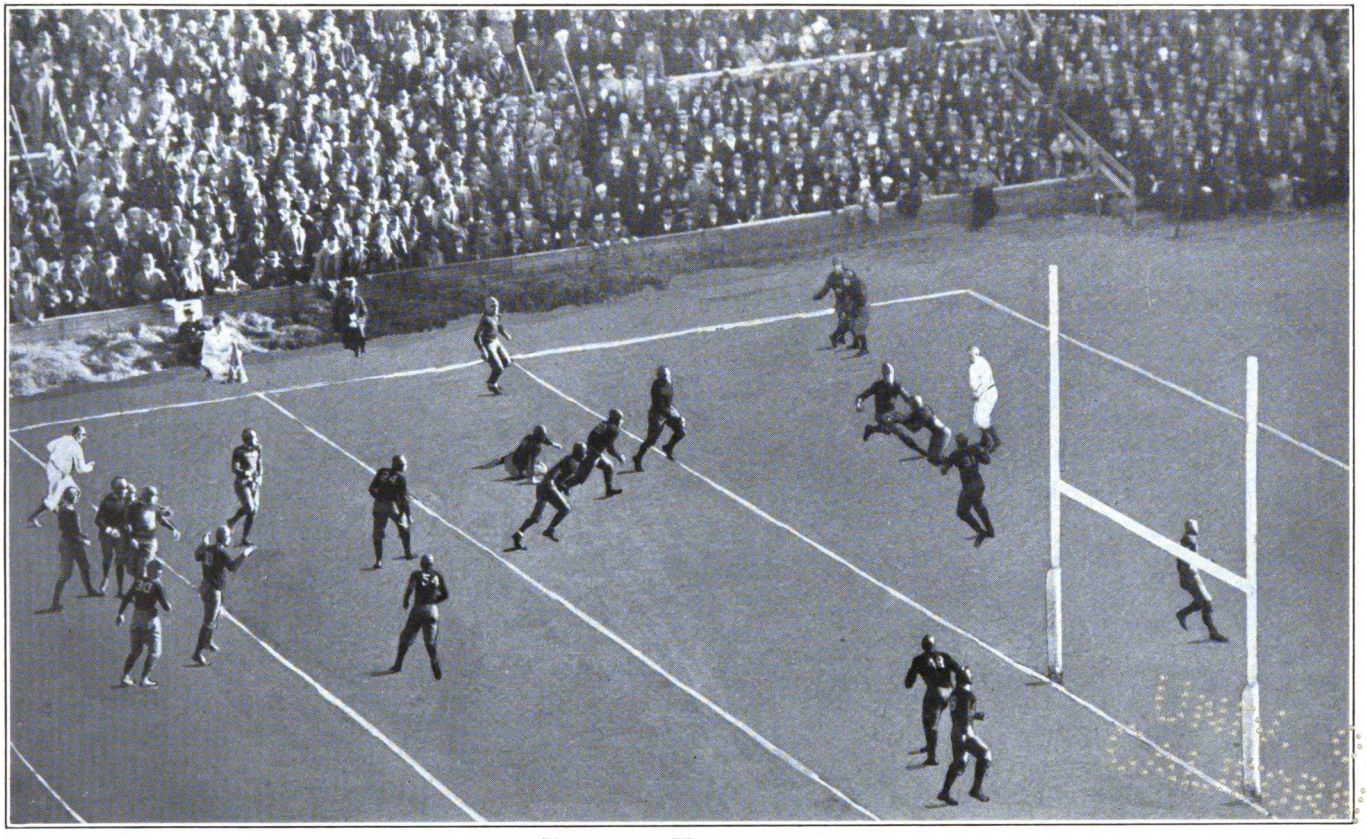
Training of Athletic Leaders

The fourth educational suggestion from this study may well be related to the training of the teachers of physical education and athletic coaches. It is obvious that these teachers have remarkable influence and opportunity and that their personality largely determines their influence. It should be the duty of every normal school of physical education and athletic coaches to see to it that its students are thoroughly instructed in the psychology of physical education and athletics, that they realize the social, ethical, emotional, and character building values of athletics, and that they realize their own powers of influence and leadership. Educational authorities should demand that these teachers not only know and understand this, but that they should have as their motive and purpose in this work, the securing and realizing of the possible high ethical content of athletics to all students. This is far more imperative with these teachers than with any other group of teachers. The motive, purpose, and character of every athletic coach is a matter of vital public concern. The athletic coach has a greater possibility for ethical leadership than most teachers. It must become a duty of physical education normal schools to insure an understanding of these possibilities and then to inspire their pupils to strive for a realization of them, and to protect the educational world from those teachers who do not have such a high motive.

General Conclusion

This thesis has presented an educational basis for athletics. It has found this in the psychology underlying big-muscle activity. This furnishes the foundation for the social, ethical, emotional, and character building values of athletics which are inherent in the big-muscle, team, fighting games, and which develop from these games. The importance of right leadership and the responsibility of educational authorities for improved athletic administration is obvious. The present ethical situation in athletics while bad in many of its details and in need of urgent attention on the part of education authorities, is surprisingly good. Leaders of physical activity believe in high standards of sportsmanship, are working for them and, generally speaking, are supported in their efforts. The football coaches of the country around whom the stress and strain of intense athletic competition centers are men of high ideals, who believe in football as a character building activity, and are devoting themselves to it for that purpose. There is great need of support from educational authorities which will make their efforts for good sportsmanship more effective. Nevertheless, they are standing for high ideals and are securing gratifying results. Students are greatly influenced by the leaders of their physical activity. This leadership is based on the personality of the leaders and is "carrying over" into life.

Athletics to-day have a high ethical content and are making a high ethical contribution to modern education. Educational authorities have the power of increasing this contribution.



YALE *vs.* HARVARD

Part IV

THE PSYCHOLOGY OF COACHING

CHAPTER X

GENERAL DISCUSSION

THE "Psychology of Coaching" is a new, popular, much abused, and much overworked expression. It has been used meaning anything and everything from outguessing or outwitting an opponent to a scientific application of the laws of educational psychology to athletic training and competition. It ranges from the minutest detail of the experimental psychological laboratory to the broad stretches and wild emotions of crowds and mobs. It has often been applied unconsciously and empirically by the great coaches; most of these men are master psychologists; frequently their success has been largely due to their ability in this field. As a result many have assumed that knowledge of technique and correct teaching methods are relatively unimportant; that fight, drive, pep, "psychology," is all that is necessary, forgetting that all true "psychology" must be built upon a solid foundation of knowledge and conscious power.

Psychology is not a piece of hocus pocus, patent medicine, get rich quick scheme, for winning games. It has its place but it must be applied according to perfectly well-known laws and upon solid fundamental foundations. An attempt has been made in Part I of this study to present some of the general fundamental principles which underlie athletics—to state the educational philosophy of athletics. These principles form the basis upon which the psychology of the coaching of individual sports should be worked out. The psychology of coaching is not simply the application of a mass of known detail facts in educational psychology to athletic coaching,

important and valuable as that might be. The tendency among psychologists to-day has been strongly in that direction. There is much of value in the details of educational psychology for athletic coaching; but after all much of it is a *detail.* The real psychology of athletic coaching must go deeper. Competitive athletics involve old, deep, fundamental, racial psychological principles as has been shown in Part I, and these must be recognized and kept constantly in mind as we attempt to apply psychological facts and theories to athletics.

Coaching Is Teaching

The good coach must in the very nature of the case be a good teacher. The first essential of coaching is teaching. Material must be presented clearly, attention focused, confusion prevented, important points emphasized—in short the proper concept secured—an intelligent understanding developed and then the right emotion—the will to action—stimulated. In this latter phase particularly athletic coaching goes beyond most teaching. This it is that gives athletic coaching its great power for building social, ethical, and emotional habits—character. Too often this stirring to action has been regarded as all of coaching. It is very important. It gives an opportunity for the coach seldom found in other kinds of teaching, but it is not all of coaching. Preceding it, and leading up to it, should come the quiet, logical, well arranged presentation of material and thorough assimilation of it by the student. In this respect coaching follows all the laws of ordinary teaching. All the laws of educational psychology apply. Most of the great coaches have been great teachers, often not only of athletics but of other subjects as well. The fact that Coach Rockne was a successful professor of chemistry may have had not a little to do with his great success as a football coach.

While it is true that coaching is fundamentally teaching, it should not be forgotten that it is something more. Not all good teachers would make good coaches. There is an emotional side that brings in the nerve racking, exhausting effect of coaching. Students must be energized, stimulated, forced to action, a "will to win" implanted, that is seldom involved in ordinary teaching. Educational authorities often fail to realize this element in coaching either in selecting their coaches or in appreciating their work. A lady once comparing the strain and importance of athletic coaching with other teaching, remarked, "Oh! but it is so different, don't you know," inferring that done outdoors in the open, combined with exercise it should really be a delightful recreation, something that should refresh and relieve the coach making him able to teach as much as other members of the faculty and then carry his coaching in lieu of golf or tennis or other personal recreation. Yes! *Coaching is different!* The lady had little conception of how *intensely* different it is or how much *plus* the coach must put into his teaching. This plus effort is what gives coaching its power, enables coaches to influence students, makes athletics the great laboratory of character that they may be. *This is the personality of the coach.*

Physical Fatigue

The teaching problem of the athletic coach is still further complicated by the effect of physical fatigue. Here enters a physiological and psychological effect the significance of which is yet but little known.[53] Strenuous athletics often involve considerable fatigue. Endurance is one of the valuable qualities secured. But as fatigue begins to set in neuromuscular units are affected, responses differ, and unquestionably effects upon central nerve cells differ in intensity if not in quality. What are these effects? How do they differ from the effects under normal conditions? How shall the

coach modify and adapt his teaching so that psychical results may still be secured even though a certain amount of physical fatigue has begun? Naturally athletic work should cease before great fatigue has resulted. One is constrained to fear, however, that with many people this would result in very little work. Clearly a greater intensity of effort is required on the part of the teacher and a greater neural strain results with the pupil when the situation is complicated by fatigue. The usual laws of educational psychology apply with less certainty and more difficulty.

General Psychological Principles

A psychology of athletic coaching might be written as has been suggested applying the usual laws of educational psychology to athletics. The writer believes, however, that in athletics there are principles that go deeper and are more fundamental—that in comparison these laws are relatively details. Nevertheless it should not be forgotten that these laws modified in some cases, do apply and that the work of athletic coaches should be in harmony with the best known pedagogical principles. In the discussion of the various sports these principles will be discussed and applied to that particular activity but here a general mention of some of the more important psychological principles should be made. For fuller discussion of these laws the best standard authorities on educational psychology should be read.

Laws of Learning [54]

In general the laws of learning as worked out in our psychological laboratories apply quite as completely to athletics as to typewriting, memorizing nonsense syllables, or quoting poetry. Concentration of attention, repetition, proper spacing of work and rest periods, associations, forgetting—all

apply and should be carefully observed for best results. The tone of voice of a quarterback, the type of numerals used in signals, sudden or unusual moves by offense or defense, are illustrations of factors having to do with attention. The span of attention with respect to numbers in a signal code or the number of opposing players under observation suggests another line. The interference of pain from injuries, excitement preceding a game, self-consciousness induced by press notoriety or "the girl" in the bleachers, must be recognized.

Reaction Time [55]

Studies of reaction time when excited and stimulated as compared with quiet, over-confident states, when fresh and warmed up as compared with fatigued and cold conditions show clearly the possibility and danger of defeat or injury from this cause alone in these latter conditions. The coach who recognizes the first stumble, the first signs of poor action, reduced speed, lack of hitting power, mistake in signals, etc., as slowed response due to oncoming fatigue and then has the sense and determination to release that player, has taken the first and biggest step toward avoiding injury, staleness, and overwork of his squad. Slowly coaches are realizing that condition of a squad is more important than knowledge of the game or perfected technique. The coach who can resist the temptation to prolong his practice and overwork his squad will keep a squad in the "pink of condition." Reaction time, empirically indicated by slowed, inaccurate, and inefficient response is the coach's ever present indicator as to the squad's and individual's dosage of work. It takes a deal of experience to quickly and almost unconsciously detect such signs.

Somatic Perceptions

We are just beginning to realize the extent and influence of somatic perceptions. These have great practical, every

day, life values. Our common safety and ordinary movement depends upon them. Many individuals either by heredity or lack of early training are woefully deficient in this respect. Deaf and dumb, feeble-minded, mentally backward, and psychically perverted are likely deficient in some of these fundamental perceptions. They are robbed of some part of one of the great avenues of sense perception. Their contact with the world outside is warped and distorted. It fails to register in its fullness and completeness. How much psychological distortion may result from such an apparently insignificant and often unrecognized deficiency! No wonder that the response of many people is one-sided and peculiar.

Motor psychologists are making us realize the importance of the great perceptor fields—the open avenues for stimuli—the rich interconnecting associations and the exact and definite responses of correct and graceful movements in education and in character building. Increasingly we realize that an individual cut off from part of his natural stimuli or denied the experience of proper response cannot but be incompletely and improperly developed. Our physical education should present a wide, all-round, varied type of activity. Only so can the fullness of somatic perception be cultivated and registered and the fullest values secured.

This presents a problem of athletic coaching little realized and seldom noted by coaches. The big, overgrown, awkward adolescent and the clumsy, strong, slow ox from the farm or lumber camp as well as the fat, pudgy, beefy "mamma's darling" are cases of deficient somatic perception. They should not be blamed and censured for their inability to respond as desired. Instead they must be slowly, carefully, and patiently trained and developed. The amount and type of work which such individuals can do, the position which they can play and even the games which they should select depend upon recognition of this problem by teachers.

Instinct

The question of instincts has been considered earlier in this discussion. It has seemed best to accept instincts with caution and to attempt to explain most of our phenomena as learned reactions dependent upon conditioned responses. Unquestionably the conditioned response enters into most of our athletic and gymnastic teaching, and a thorough understanding of the methods and possibilities of conditioning is fundamental to successful coaching. While this is true it must also be recognized that many responses become so habitual, that many patterns become so fixed, so nearly coenotropes, that they become practically instinctive. Our common expression that, "I did it instinctively," is a tacit recognition of this fact. On the one hand our task is to so train responses that they become so established; on the other hand a large part of our training is to overcome and prevent, inhibit, these very instinctive responses. Almost every batter has an "instinctive" tendency to pull away from the pitched ball; the young boxer "instinctively" guards a blow. These "instinctive" responses must often be transferred into quite different patterns. The problem of building up and establishing these new and better patterns, of having a certain opportunity or opening become a conditioning stimulus for the correct patterns and the making of such response patterns reflex and automatic so that they "carry on" even unconsciously and in spite of excitement, opposition, and confusion is a problem for intense and skillful teaching. Such teaching fortunately often has the assistance of old, fundamental, racial habits that are nearly if not actually instinctive; but in other cases we must overcome and set aside habits that have become equally deep rooted.

In this connection it seems difficult to give too much importance to the phenomenon of inhibition. The lower type

of organism responds directly to stimulation. The higher the type of animal the less certain the response and the more varied it becomes until in man we find with the highest developed nervous system the greatest possibility of choice in response, adaptation to conditions, and even complete inhibition. This characteristic seems the last to develop in the scale of animals and the first to go as the nervous system breaks down. Temporary lapses as drunkenness, excitement, fevers, and unconsciousness often illustrate the man with this control lost. This it is that distinguishes the man from the brute: almost one is led to wonder if this is not in itself that subtle psychological quality *reason*. Certainly this and the conditioned response—control and the power of choice—are at any rate very closely related to the power of reasoning. The coach who trains and develops these characteristics is doing much more than building muscle or securing health; he is laying the very foundations of thinking and of character.

In Part I we have seen that many of our activities are fundamental racial reactions—so much so that they are almost instinctive, especially the fighting, team games. Because of this they are often in certain ways easy to teach, are especially attractive to students and it is possible for the coach who desires to do so to secure results impossible in most other types of teaching. They are almost always accompanied, however, by certain "instinctive" difficulties. The first and chief of these is fear. Apparently fear is instinctive, being definitely instrumental in self-preservation. The inability of many men to endure pain, the excessive neural fatigue that accompanies activity requiring courage, and the difficulty of maintaining fine coördinations under these conditions are facts requiring the careful attention of coaches who teach the bodily contact games, especially such games as football and boxing.

Excessive irritability, compensating braggadocio, inefficient

responses, and staleness are often the signs and results of this condition. At such a time habits that have seemed thoroughly established and memory that has never failed may forsake the individual entirely. It is doubtful whether an individual who has not established at least some control over this instinctive reaction can be regarded as educated.

Emotion

The fundamental relation between emotion and big-muscle activity was pointed out in Chapter IV. Here we need only remind the coach that the intense and peculiar emotional content of athletics brings with it a great opportunity and at the same time a great problem. Unquestionably it permits the coach to get results, impress principles, stimulate action—to strike while the iron is hot—as we seldom have opportunity to do in other teaching. The proper use and control of the emotions of a squad by a coach who is a skillful psychologist is an art.

As yet no one has learned the technique of this phase of coaching. The building up of an attitude, a "mind set" on the part of the team and the student body with respect to a particular game, the season as a whole, and sportsmanship in general is involved. Unquestionably suggestion plays a large part. This involves control of the coach himself, the captain and leading players, student leaders, the press, and many other influences.

Many methods seem to be effective. Doubtless there are many combinations that may bring desired results. For a coach, however, to leave this phase of his work to chance and make no attempt to influence and shape it is to neglect a large opportunity and responsibility. One prominent coach of the country is noted for his gloomy, pessimistic attitude. His team is always abominable; it can never hope to win more than a few games; the next game will be a terrible battle and the

chance of victory is most desperate; tolling bells, white lilies, and a funeral hearse is all that is lacking to complete the picture. The players elated over last week's great victory gradually lose their cockiness, begin to doubt and wonder and then settle down to a grim fight to avert impending catastrophe. By the next Saturday they are again a bunch of fighting dervishes going out, not to pluck an easy victory, but demons fighting for their very lives.

On the contrary other coaches are the impersonation of confidence and optimism. Their personality radiates power. There is no big-headedness, no over-confidence, but quiet determination and calm assurance. They build up an attitude of expectation of winning, of possibility of winning, of determination to win, and willingness to train and pay the price necessary to win. Such a coach is often quite as effective in preventing over-confidence and in instilling fighting spirit as the gloomy pessimist described above.

The growing use of placards, captions, and pithy and catchy signs is an illustration of a simple and effective way of constantly reminding players and the student body of a duty. Such captions on the locker room walls, in the training quarters, along the college walks and other strategic places bring a unified determination to achieve. The value of such work in safety first, thrift campaigns, community chest, and other drives points to one method of getting desired athletic emotions.

The "pep" talk before the game is one of the coach's greatest opportunities. Interesting indeed would be the psychological study if the curtain could be lifted and the "pep" talks of the college coaches of the country analyzed. How often spectators have wondered what happened, what was said in those few moments before the game, closeted with coach and captain, from which men broke forth to do or die; or what happened in the brief interval between halves when

a tired defeated eleven tore back to the field to stage an entire reversal of form, tear their opponents to shreds, and wrest victory from defeat. Few there are but have wondered, as a basket ball team circled together before the game, grasped hands, and seemed charged with some great emotion, just what was said. This is the time when men are at white heat; here is where the coach stands out for what he really is; there is no mask, no subterfuge now; the real man speaks and his impression is deep and lasting.

According to the questionnaire regarding the "pep" talk answered by 42% of the college football coaches of the country, the first important item emphasized by the coaches is fight, and fighting spirit, though no one thing is always mentioned and conditions vary the appeal. Eighty per cent of the coaches mention fight. The next big thing emphasized is sportsmanship, 47%, and 29% included the appeal of alma mater. Asked if an appeal for high sportsmanship was included, 61% say that it is *always* included, 38% say that it is *usually* included, and less than 2% say that it is *never* included. Apparently fighting spirit and good sportsmanship are the burden of the "pep" talk.

The fact that athletics possess such a high emotional content is one of the greatest problems in coaching. This as was pointed out in the discussion of fear is one of the big reasons for fatigue and brings the necessity for careful adjustment of dosage of work both for the squad and the individual. A team swinging along on the crest of enthusiasm of victory can stand almost unlimited punishment, but a team in the throes of defeat and the discouragement of injuries can easily be overworked and driven stale. The scrimmage under such conditions should be against much weaker opponents and the plays used should be those that are successful until a feeling of confidence and success is reëstablished. Nothing succeeds like success. Fight is important, but the mechanical perfec-

tion, and the fundamental correctness that really makes the play or the exercise possible must not be overlooked. It is folly to talk fight to a team and to censure them for failure if they do not know *how* to do their work correctly. This is a point often overlooked by coaches in their enthusiasm for fight and in their driving delirium. Here is where the fundamental teaching must be done. Let men understand their work, master their fundamentals, and then succeed with a play or in an event because it is right and there comes a confidence and an enthusiasm that needs little driving. The coach who teaches correctly so that his work is a success often has little driving to do. The enthusiasm of success produces its own fighting spirit. The correction of a batting slump or the recovery from the dejection of defeat requires a new history of success against weaker but gradually strengthening opposition until a new confidence is established. This emotional state is one of the most difficult that the coach faces.

Crowd Psychology

The consideration of the emotional phases of athletics leads almost directly to the further influence of crowd or mob psychology. In team games and even in individual contests where spectators are present this element must always be remembered. The teams and the situations in the game react upon the spectators and they in turn either in organized or unorganized ways exert magnetic influence over the players. This influence, both with respect to the team and the spectators, is fraught with great educational possibilities and with dangers.

So far as the spectator is concerned, educational authorities and athletic coaches must look to our leaders in social psychology. This is a field in which they should furnish leadership and much more can be done than has yet been suggested to capitalize the cheer leader, the cheering section, the mass

meeting, the songs, the brass band, the snake dance, and all that goes with a typical college football game. Leaders of athletics, however, must also realize that a great part of this responsibility may belong to them. Their understanding and intelligent coöperation with the leaders of college sentiment, and thought, and ideals is necessary if this great "crowd effect" is to be used for beneficial educational influence. Every coach should be a keen student of "crowd" psychology.

From the standpoint of the athlete, and the team, and the question of winning games this is a great factor. Teams often "find" themselves and sweep through to spendid and speedy victory. Again they "blow up," go to pieces, become disorganized, quit, and bow meekly to defeat. What are the subtle influences that determine these reactions? Can they be controlled, directed, applied, averted; and if so, how? These are problems no one will answer now. An understanding of the group mind and its laws will furnish many valuable suggestions. The leadership of a great quarterback or a magnetic captain, the high emotional tone of a team, the easy suggestibility of a group, the relatively low mental plane, and the remarkable tendency to imitation are factors that shed much light upon these group phenomena and suggest valuable ideas as to training and preparation for games as well as procedure and strategy in the game.

Personality

The characteristics that make up personality are varied and difficult to define. That subtle something that means will, determination, power, aggressiveness, persistence, all goes into its production. Nowhere does personality stand out and proclaim itself as in athletics. Nowhere is it more rapidly developed. To a very large degree it determines the issue. Very often the subtle influences previously mentioned come from this indefinite but very real source. The quarterback

of the opposing team, the captain, and even the mass personality of the team as a whole give an impression that often wins or loses the game before the starting whistle blows. As the game goes on this impression, this subtle feeling asserts itself. It brings a sense of hopelessness, impending defeat, impossibility to avert disaster on the one hand and unbounded confidence, enthusiasm, and reckless energy on the other. Against such a quarterback, such a captain, such a team the cause is hopeless! With such a leader, "such a gang," nothing is impossible!

Confidence and self-assurance, rather than big-headedness, obstinacy, or conceit, is one of the great fundamental foundations of a compelling and dominant personality. The value of this in life in general cannot be overestimated. It is built up by a long series of satisfying, overcoming, winning experiences. The experiences of athletics are, as pointed out in Part I, peculiarly, fundamentally, racially satisfying. They can be graded, and planned, and directed so as to be sufficiently successful. There is always the possibility of improvement, of correction, of better work than the day before, of real and true victory. The individual may quit the game in defeat, but leave the field with a glow of satisfaction and true victory in the realization that he played better than he ever did before—that time and time again he accomplished the thing he tried to do—and though his game was inferior to that of his opponent there is no sting and no disgrace attached. Or he may leave the field on the shoulders of his victorious mates with a keen realization that his game was miserable, that often he failed to do the thing he tried, and that in truth even though his game happened to be superior to that of his opponent and luck brought him victory, there really should be great improvement. These are the considerations that the skillful and thoughtful coach can direct. With care he can build up in the self-conscious, and timid,

and diffident the victorious overcoming spirit; in the conceited and over-confident he can manipulate necessary defeats, or bring realization of defects, and set still higher ideals of success. For every individual and for every team there is thus unlimited possibilities, and to every coach there comes, therefore, the great opportunity of truly building personality, that greatest ingredient of real character.

No one can hope or be expected to mold and influence personality who does not himself possess it. The study of the 323 athletic students brought out the fact that the chief great characteristics of their athletic coaches which influenced them was their personalities. A man may know the game, he may have been a great player, but unless he has a personality that gives leadership, that inspires confidence, that compels respect, and that attracts so that players like him, he cannot be a successful coach.

The Will to Win

The foundations of our land were laid by those who had the courage to dare the unknown; the power to overcome trials, hardships, discomforts, and fatigue; the patience and determination to succeed in the face of discouragements, disappointments, and defeats from the elements, the soil, and from enemies. They had the *will to win.* How different from our modern life of comfort, ease, and softness with speed, impatience, and lack of control.

Will power—the will to win—has not been very accurately defined by our psychologists; our knowledge of how to develop it is rather meager; here of all places modern education falls short. Will power is often connected with inaction, with control, with *inhibition;* to refrain from doing something may often be more difficult and require more real will power than to act. On the other hand it is significant that will power is more often connected with action and that it is *usually devel-*

oped through action. Our great motor responses are the chief highways through which we drive to build up the emotion that means definite response.

The greatest problem in education is to activate our impulses. Too much of our past teaching has been philosophical and reflective. Certainly men must be taught to think; but they must also be taught to do. A thought that does not lead to action, to some accomplishment, dies. It may be better not to have had the thought than to thus thwart its material expression. Yet to bring out this natural expression, to act, demands will. Constantly responding under difficult conditions develops the will. No activity connected with our educational process gives such rich opportunity for such development as do athletics. In this respect the coach by the very nature of his work becomes a powerful educator. The possibility of building up this *will to win* first in athletics and then, if possible, through directed transfer in other life activities challenges the conscientious coach. It requires a knowledge of something more than mere game technique. It demands an understanding and appreciation of the most subtle problem in psychology.

The power to implant such a spirit in an individual and into a team seems a gift. Coaches cannot be told how to do it. Personality is a big part of it. Undoubtedly, it is infectious. The team must "catch" it from the coach; exposure should mean infection.

Reservoirs of Power

In physiology there is a theory known as the "All or None" theory. When the heart contracts, its contraction is maximal or not at all. Apparently this law does not apply to skeletal muscles for we are familiar with the nicely graded responses accurately adapted to the task set. On close examination, however, the theory is found to hold true: each muscle cell

gives its maximal contraction. We get stronger contractions by stimulating a larger number of cells. Ordinarily only a small portion of the cells in a given skeletal muscle are really brought into action. Even when we make our most powerful voluntary contractions many of the cells are still unused. Either the nervous impulse was not strong enough to reach through to all the cells, or necessary connections between the muscle cells and nerve ending did not exist, or the muscle cells were not sufficiently irritable to respond. That this is so is shown by the remarkable feats of strength occasionally exhibited in hypnotic states, and by individuals under the influence of stimulating drugs, or under intense excitement, or strong emotion such as anger or fear. Under such conditions men have forgotten themselves and performed marvelous feats —stunts which they have never done or dared to attempt under normal conditions. In some inexplicable way *reservoirs of power* have been tapped.

We think of such exhibitions as abnormal and beyond any possible control. Consideration of the phenomenon, however, may well suggest that it is a matter of intensity only. Is it not probable that what we are doing in training is simply opening up avenues of approach to additional muscle cells? May it not be that by training we enable ourselves to stimulate a larger proportion of our cells, so reaching a higher percentage of our maximum possibility? Is this not the explanation of many of our every-day experiences, when we feel "like a fighting cock," when a player or team plays "over his head," when for a few minutes we become "fighting demons" and veritable dynamos of energy?

What a difference in our plane of life if we were able always neurally and physically to live at this higher level of possibility! Is it possible that this is at least the partial explanation of the contribution of some of our great leaders. One thinks of the patience and steady constancy of Lincoln,

of the calm dignity and reserve of Washington, of the restless energy and fire of Napoleon, the working power of Edison, and of countless illustrations by humbler people who when put to the test and the occasion arose, demonstrated superhuman achievement. Did these people live in a higher plane than ordinary individuals? Did they realize a higher proportion of their possibilities? Did they tap reservoirs of power?

Apparently they did; and not only they, but we, too, could and often do tap such hidden sources. Our problem is to learn how and to do it oftener. Most of us do not have the incentive, and are not willing to pay the price—in plain English, are too lazy. Such effort does require a great incentive, a great purpose, a great motive. To rise to the heights of possibility there must be real emotion. In this age when there is little loyalty to anything, and little incentive or necessity to really extend oneself, is it not perhaps one of the great contributions to modern life that our athletics, even if sometimes overstressed, and occasionally too intense, do give a boy something for which he will work and train, sacrifice and live right, brave danger, fight and even die for? Fighting for Alma Mater and "holding her standards high" is more than merely a football game. The boy who has learned how to throw himself unconsciously and whole-heartedly into such a battle is on the road to a realization of his full power and countless illustrations show that such a man later facing occasions demanding his best, gives "all he has."

To the coach comes the opportunity of tapping such reservoirs of power in his charges. It is a thing which he should know how to do and a thing which he should do with discretion and caution. Practically it spells success or defeat. No rules can be laid down; a word of encouragement to one, a cutting remark to another, the right appeal to the squad, the establishment of confidence, the expectation of friends and student body, the opportunity for fame, the sting of defeat; these

and a hundred other devices have sent teams out to win glory and prestige.

We all have great reservoirs of power. Athletics should help us realize our possibilities.

CHAPTER XI

THE PSYCHOLOGY OF FOOTBALL COACHING

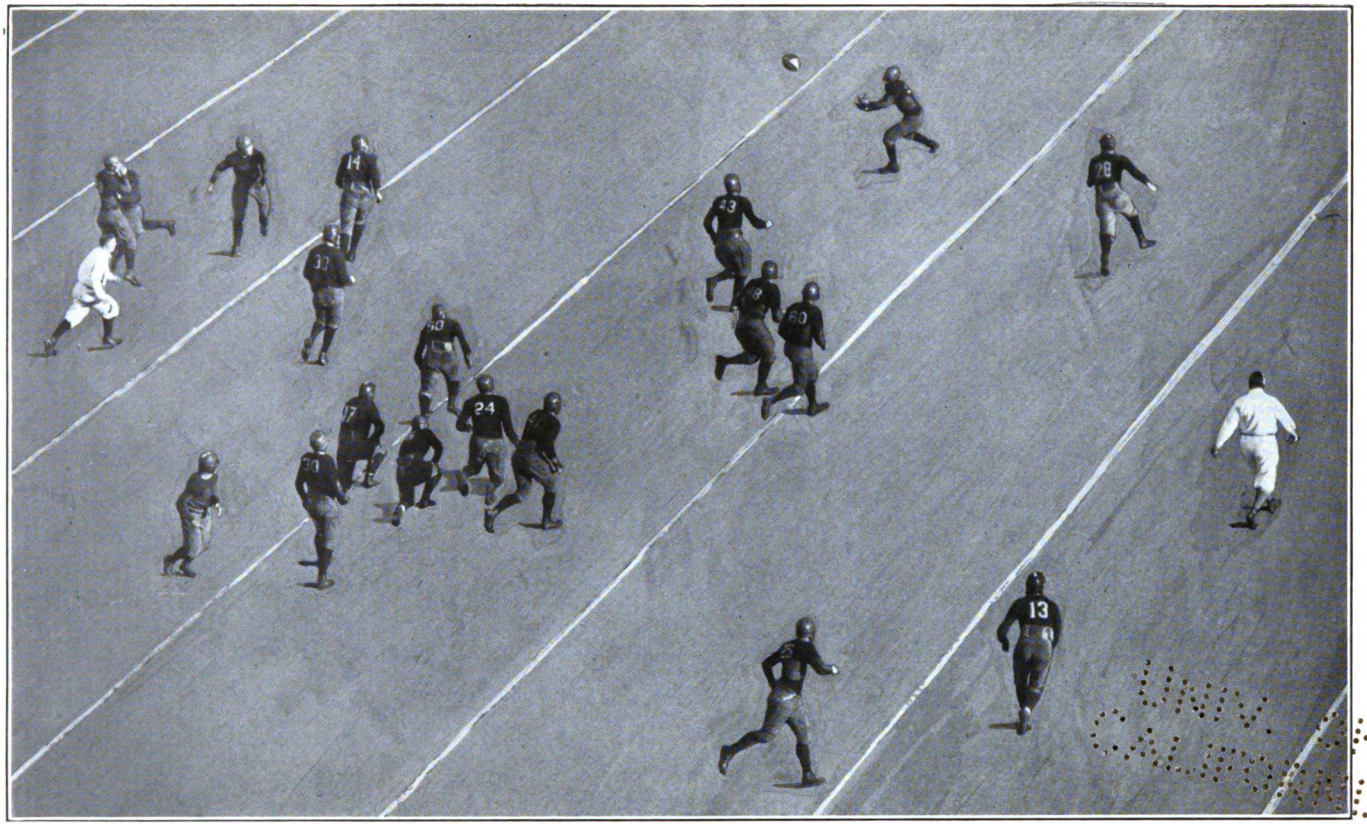
THE greatest team fighting game in the world, either from the standpoint of player or spectator, is American football. Its analogy to war has been so frequently drawn that it is useless to dwell upon it here, and it is an analogy not with unmixed values. The great underlying psychological basis for the team fighting games has been discussed in the early chapters of this thesis.

All the social, ethical, and emotional values of big-muscle activity and of the team fighting games are developed in their highest degree both for the player and the spectator by football. These principles must be kept constantly in mind as the foundation upon which the the practical coaching suggestions here presented are based.

In many respects, also, the general discussion of the previous chapter applies particularly to football: it is the purpose here, therefore, to add merely those specific and definite points that apply particularly to the game.

FIGHTING SPIRIT

Perhaps the first fundamental point is the fact that in spite of being our greatest team game it is peculiarly a man to man fight. In a peculiar sense for a team game it still remains a personal encounter between individual men in definite physical combat where strategy, brains, cunning, speed, strength, and endurance are pitted one man against the other. There is no dodging the issue; the game will determine which



HARVARD *vs.* DARTMOUTH

is the better man in every sense of the term. This is particularly true of the lineman where to a considerable degree the antagonist remains the same throughout the contest. With the backs, and to a degree with the lineman, each changing play may bring new contacts but even here the general effect is the meeting of an individual with a definite individual. In general this is true of all personal contact games. This brings in the subtle power of personality, and all that goes into the character of an individual; his fight, aggressiveness, nerve, determination, resourcefulness—everything. No man can go through a football game without having every psychological —as well as physical—trait which he has, tested to its limit. This should be fully realized by coaches. It particularly explains the great exaltation of victory and the crushing depression of defeat. The importance of the game and the intensity of the play determine the extent of this effect. It explains a large part of the reason why football is more "strenuous" than most sports. The coach who can build up personal self-confidence in his men before the game and then allows time for neural recovery along this line after the game, has learned one of the important points for a successful coach.

Danger and Pain

In an earlier chapter the relation of danger and actual pain was discussed. It should be further emphasized. Physiologically and psychologically the effect of shock is still but slightly realized. A man may come through a football game apparently without injury, but time after time he received bumps which were hardly noticed in the excitement of the game. These stimuli have bombarded the central nervous system and have registered their effect. It is a valuable thing for any individual to acquire the ability to disregard such impulses—to minimize their importance, to refuse to be turned aside from the business in hand by them, to inhibit undesirable

responses—and herein lies one of the great values of football. Nevertheless it is a phenomenon that the coach should recognize. Individuals doubtless differ greatly in the effect that such stimuli produce upon them as well as in their general susceptibility to injury. In sensitive cases this bombardment of pain impulses from a "Charley horse," a twisted shoulder, a turned ankle, or a twisted knee may put the whole nervous system into an irritated state that prevents rest, delays recuperation, and leads rapidly toward staleness. With extremely sensitive cases such a condition may come even without actual injury from the courage required to face *possibilities.* To reprimand and unduly drive such an individual is the height of folly. Yet many coaches know no distinctions, make no adaptations to temperament of players, and imagine that they can "knock such foolishness" out of the "babies." Rough, brutal treatment is a poor way to harden such natures; instead a potential star is frequently ruined. Such players should be thoroughly and carefully padded and protected. In general this is desirable for the entire squad in the early season training. Many troublesome and delaying injuries could be avoided by attention to this matter at this time. This should be done even for the purpose of getting the proper development and hardening as the season progresses. Special individuals should continue the use of adequate protection, *by the coach's orders,* thus freeing them from the suspicion of "yellowness." The use of heavy padding and plenty of protection through all practice scrimmages, even though lighter clothing is used for the actual game will be found a great help in preventing injuries and in conditioning the squad. Many of our most successful coaches are now advocating a big reduction in the amount of tackling and scrimmage work done by the team after the early fundamentals are mastered believing that too much of this shock work produced a subconscious aversion to it that may be responsible for many acci-

dents. Coach Rockne's famous "shock troops" who have so frequently started Notre Dame's games in recent years, are essentially an illustration of this idea. The effect of pain and the element of courage involved adds a distinct problem to the task of securing condition in football, not found in many sports.

"Team Mind"

The "man to man" spirit has been emphasized; and yet football is our greatest team game. In no other sport is it so essential nor so difficult to get a "team mind." It is a great thing to feel the unity of a smooth working, well-organized team. This spirit spreads out into the squad and through the student body. The unity of the team, of the institution, of the body politic, is one of the great objectives and one of the great problems of modern democracy. The technique of producing such unity is the problem of Americanization. Football may help to suggest the technique; for in no other activity of college life do we come so near getting real unity. The student body feels that the team is *their* team, it is *their* game; they—not the team—are playing.

The writer was once associated with a football team on which there were ten ex-high school or college captains. It was a great collection of stars; but they lost their early season games. Toward mid-season the real leader began to emerge; soon the real quarterback was recognized; the team "hit their pace," the individual cogs began to fit in, a team sense, a group mind developed, a sense of unity, power and confidence sprang up—the team had become a *team* not ten ex-captains.

The problems of the team mind have been earlier discussed in this treatise. It is a problem in all sports but nowhere so big or so important as in football. In other sports each individual must stand or fall on his own efforts. No matter how high the team organization, the individual must come

through with his performance. But in football, much may be done to aid and support a weak spot; coöperation, helpfulness, forgetfulness of self, working for the good of the group are fundamental parts of interference, protecting kickers, decoying the defense, opening holes in the line and countless other activities.

When finally a unity, team mind, is secured, its type and nature must still be determined. Inflated with previous success it often becomes over-confident, arrogant, and lazy; shaken by defeats, or by the loss of important individuals it may be vacillating, hesitant, impotent, and unable to realize even the potential possibilities that really exist. In the game itself the break of luck, such as the interception of a pass, recovery of a fumble, infliction of a penalty, blocking of a punt, or a sudden big gain may be seized by a clever leader to suddenly weld the team together for a determined dash to victory; or lacking such optimistic and bracing leadership such a break against a team may demoralize and depress it so that its defense is temporarily gone and the team goes down to defeat because of its own dejection and disorganization rather than the power of its lucky opponent. Coaches and players, especially captains and quarterbacks, should understand this subtle psychology and be prepared to use it. Such situations should become for both teams a powerful stimulus for a unified fighting response. They seldom do unless there is instant and aggressive leadership.

Dosage of Work—Physical Fatigue

The dosage of work in football has far greater psychological significance than is generally realized. The success of some teams with rather short training hours and of some coaches that are known to order but little scrimmaging for their regulars, suggests that there may be a reason for this aside from the ability of the coach to organize his time or his

technical coaching ability. *Most football teams are given too much work.*

Accidents are often the direct result of fatigue. The curves of fatigue and injuries in industry show high correlation. No data exist along this line for football, but the writer believes that the same would be true. Overwork is the greatest cause of injuries as well as staleness. It seems difficult for coaches in their enthusiasm and eagerness to teach the game to realize that a team will actually do better going into a game in good condition without injuries knowing less football than to go in knowing more football but in poor shape.

The heavier the schedule, the more this point should be emphasized. Young coaches are particularly likely to err in this respect. It is a fact that has been repeatedly demonstrated. The best coaches are avoiding overwork.

Football should be a strenuous game; but it is wrong to take all of the pleasure and all of the joy out of it. After all it is still a game and a boy should be able to look back upon it as one of the greatest joys of his life. Driven as men too often are to-day there can be no joy in it. It is hard, grim, terrible *work*. A man may feel that the training was good for him, that the prize was worth while, that he would do it all over again—but a joy—*No*. This is wrong psychologically as well as dangerous physiologically. If the psychological traits that we wish football to inculcate are to be realized there must be satisfaction, pleasure, and joy in it. The line between the joy of supreme effort and overwork is a delicate one; the coach who can sense it for the squad and for each individual on the squad must be a skillful conditioner of men.

To properly determine and arrange the work period requires knowledge of the laws of learning. The right plan for the day's work, the climax of effort for the week in anticipation of the Saturday game, the length of practice, the number of scrimmages, proportion of time spent on fundamentals, new

plays, and scrimmages, are all points varying with the daily condition of the squad, time in the season, effect of previous games, and they vary for each individual on the squad. Obviously no one can lay down a rule for such a program. The "typical" squad never exists. The coach must determine his program. A few suggestions may be useful.

Sunday following a game should be a day of complete relaxation and rest. A short walk of a couple of miles is often good for limbering up, starting the circulation, and helping remove bruises and muscle soreness. Monday may best be devoted to removal of game effects. Men who did not get into Saturday's game may be given a good workout. Many football coaches have been surprised to discover the value of soccer as a Monday workout for their regulars. It works out the "kinks" beautifully, improves the mind, and when played in a rather free and easy style furnishes an interesting objective while providing real fun. At times, a part of Monday may be profitably used for learning the details of new plays, taking the time to walk through them against dummy opposition. The mistakes of Saturday's game may also be profitably corrected in the same way. Tuesday, Wednesday and Thursday are the work days with time spent on fundamentals and scrimmage in a sharp crescendo culminating in the week's practice summit on Thursday. Some coaches prefer to put this on Wednesday and taper off a bit on Thursday. Friday's practice should be brief, snappy, directed toward securing speed and fixing in mind particularly the plays to be used in the coming game. The week's program should bring the men to Saturday's game "rearin' to go," "on their toes," full of "pep." This is a psychological quite as much as a physiological condition, but the psychological condition depends upon right physiological conditions. Men that are overworked, tired, and fatigued, cannot come to the game right psychologically. Much of the ill-will, meanness, petty

quarreling, irritability, grouchiness, quick temper, and general sourness of ordinary life is due to poor condition from indigestion, lack of sleep, monotony, and overwork. People do not quarrel when they bound out of bed in the morning feeling "like a fighting cock."

The arrangement of the daily program is quite as complicated as that for the week. In the early season time must be spent in hardening the men, taking off weight, building up condition, and mastering fundamentals. As this is accomplished the daily program should be shortened. The work of the day should gradually rise to a climax both psychologically and physiologically. This is usually represented by the scrimmage. It should be followed, however, by a brief relaxing period such as a jog run or occasionally correction of mistakes in a dummy scrimmage before the men are sent to the showers.

"Skull" practices—the mental and teaching part of the work—present a real problem. Some coaches prefer to do it on the field. Conditions, however, are never really ideal there. A blackboard is often needed; the men should be seated and relaxed—there are countless distractions on the field. As a result some coaches make a practice of starting each day's work with a meeting in some room where attendance can be checked, general directions given, and any instruction needed outlined. This rather interferes with early individual practice, although, of course, such men can be excused from the assembly if desired. The greater danger is that the coach will get too fond of talking. It is strange—though probably perfectly psychological—how teachers, preachers, and even football coaches can grow to love the music of their own wisdom; how long it takes to "get the idea across," how much repetition is thought necessary and how wearied and bored a class, and especially a football squad dressed and anxious to get out on the field, can become! The assembly at the be-

ginning of practice is valuable *if short!* It has advantages but it is also dangerous.

Instead of this many coaches have hit on the plan of conducting squad meeting on certain days immediately after the evening meal. This is usually a free period for the men. They are hardly ready to begin the evening's study. The afternoon's practice is still fresh in mind, and they would probably discuss it informally anyhow. An organized, leisurely discussion, without haste and too great intensity can then be secured that not only gives necessary instruction but can be made to yield splendid results in fellowship, unity, and team morale. Again the danger must be guarded of making the discussion too long. Better frequent—even daily—short discussions than too long sessions.

Long intense discussion of this kind might easily consume the students' study period at the same time adding neural strain to the physical fatigue already often too great. It must not be forgotten that football men are *still supposed* to come to college to study something besides football, and there are still college faculties old-fashioned ("more power to their elbows"—or backbone) enough to expect them to study even during the football season. The coach who drives his men to a point of physical fatigue that makes normal study in the evening after practice impossible—and it can be done, and is too often done—does not belong on the faculty of an educational institution. The coach who has an hour and a half a day of a student's time with a maximum period of thirty minutes after dinner has all the time that he ought to need, and certainly all the time that the student can afford to give him.

Diet

The psychology of diet is one of the most interesting as well as one of the most difficult not to say ridiculous and absurd

problems faced either by football coaches, athletes, or people generally. "One man's food is another man's poison"; "As a man thinketh in his heart so is he." If a man thinks a food is good for him, it is; if he thinks it is bad, it is bad. The writer recalls a high school team coached by a friend—a master or perhaps a pseudo-psychologist. These boys had two brands of "rub down"—one blue and one red. One squad "swore" by the blue brand while the other group simply could not play unless they had a rub from the red. It was indeed a *blue* day for them if the red fluid was not available. But one day I saw my friend fill up the rub down bottles from the *same* tank pouring into a *blue bottle* and a *red bottle.*

The traditions of the training table, the idea of rare beef, oatmeal water, and plenty of dieting sacrifices is so thoroughly ingrained that a coach who entirely ignores them must be woefully lacking in psychological knowledge. Physiologically there is need in such a strenuous game as football for great care with regard to the diet. Food should unquestionably be plentiful, nutritious, easily digested, well-cooked, and most palatable, and should be served in pleasant surroundings. The etiquette and fellowship of the training table should be most pleasant. Only so can the psychic secretions needed for proper digestion be assured. A certain element of sacrifice heightens the psychological value of the diet, and for this reason as well as for physiological reasons, sweets, pastry, most fats, stimulants, and too much milk at meals should be eliminated. A glass of milk with a rest immediately following practice has proven valuable. The use of excessive quantities of meat is a physiological mistake. This is now sufficiently well understood so that it is no longer psychologically necessary. In fact the extensive common modern dietary knowledge is bringing about a much saner point of view regarding the football training table. Squads can even be trained to-day without a training table at all, but it is well to exercise some supervision and

direction of the diet. An ample menu of nutritious foods can be arranged in any boy's home that will bring him to the "pink of condition." Fats, though usually rather indigestible, furnish the maximum amount of energy. Taken as butter and cream they are easily digested. Plenty of toast as an excuse for butter, baked potato mixed with cream and butter, rare beef in moderate amounts, light desserts, plenty of fruit, copious water, and a limited amount of milk make up the physiological and psychological backbone of the football training table menu.

Technique [56-64]

In the actual playing of the game there are many psychological applications—details learned from the field of educational psychology—that may be used with great advantage. Compared with the great fundamental principles underlying athletics these matters, as has been said before, are details; but it should be remembered that it is attention to details that makes the successful winning coach.

Signals

The voice of the quarterback should be clear and sharp and commanding. It should be a voice that men like and it should reflect a likeable personality. There are people whose voices at once repel one. You know even if you cannot see the speaker that you would not like him. A complaining, quarreling, whining, hesitating, indecisive voice will never give confidence, secure leadership, or draw a following. The voice in some way must give an impression of confidence, of optimism, of assurance, and of reserve power. A frightened, dejected, discouraged, or fault-finding tone will lose a game when the breaks go against your team. It never gets support and men rankle under it. Unless such a man can change his tone

—and he sometimes can—he cannot make a real quarterback. He may be a carrier, not a commander.

The numbers or letters chosen for signals should be the short, sharp consonants that a man can crack out like a whip. Generally numbers are more satisfactory than letters. The vowels are especially unsatisfactory. Think of calling a-e-i-o-u for a code! The team would require an alarm clock to get started. Symbols that are easily distinguishable should also be used; thus t and d, two, three, ten are often hard to distinguish clearly in the noise and confusion of a game. Single numbers are much better than double and the "teens" are especially undesirable and hard to call.

The use of a code as contrasted with numbered plays is an open question. The system should be simple, easily learned and remembered—almost automatic—easily changed on occasion, yet complete, adaptable, and capable of covering the season's requirements. These are qualifications not easily combined in one system. The danger of a code is always that it will become too extensive and too complicated. It usually tries to tell too much. Numbered plays on the other hand are forgotten as the season progresses, and there is an increase in the number and variations of plays. With the modern tendency, however, of limiting the number of plays and perfecting those few this fault can be reasonably overcome. Similar plays from different formations can also receive the same number. With care in such ways it is probable that a scheme of numbered plays is more satisfactory than a code.

The key number in the combination is also important. It should seldom be the first or last number. The second or third numbers called are best. The key number should occasionally be changed, though this must be done with caution and practiced for one would be amazed at the confusion and difficulty caused in an ordinary football team by such a slight modification as a mere change in the key number.

A right and left code (odd numbers left, even numbers right, etc.) is often recommended. It is the writer's observation that this usually leads to some bad collisions especially when double and single numbers are used; thus four means right but forty-three means left. This must *be thought* out and somebody is sure sometime to crash. A system beginning at one side or the other, the same for all formations, and running up has been found less confusing.

The introduction of the huddle system for giving signals has started a world of discussion. Aside from its mechanical possibilities—the shifting of men and hearing of signals when great cheering exists which might alone justify its use—it presents a number of psychological considerations. The pulling of the groups together doubtless tends toward a feeling of unity and coherence and a real leader can in the isolated group appeal to a special individual or to the team as a whole for that particular play at a critical time as he cannot do in a shouted number. On the other hand unless there is a real leader in charge the huddle is very apt to become a debating society, wasting time, dissipating the energy of the team, and "crossing up" the quarterback. It also loses the magnetic personality of a good quarter's voice.

Theoretically, the huddle should make signals unnecessary, but as a matter of fact they are still needed for any one who has attempted to describe varying plays to a group of men has found that his command of English was pretty completely taxed with uncertainty and confusion still existing. It does, however, make possible great simplification of signals. It is likely that at least a partial use of the huddle system has come to stay.

The Passing vs. the Running Game [65]

The forward pass is the greatest psychological weapon in football. It is also the greatest attraction to the spectators for

it brings to the game unlimited possibilities of strategy. Real strategy demands that the passing game shall be used as a part of the regular, perfected, ground-gaining attack of a team and not as a desperate last-minute chance to avert defeat or snatch an unearned victory. Only so is it really successful and only so do the spectators enjoy it. This means that the passing game must be properly developed and practiced, that much time must be given to it, and much thought spent upon it.

There are peculiar differences in the passing and running game; they are played differently; the men who are good at them are often different and the psychology behind them is different. The triple threat player who can run, kick, and pass is a most desirable but really scarce prize. As a matter of fact it is difficult to find time to develop both styles of game to a high degree of efficiency. As a result most coaches, according to inclination, tend to run to one or the other type of game. The coach who believes in the forward pass and favors it, frequently puts too much time on it and develops it at the expense of his standard running attack. This is abetted and furthered by a peculiar insidious "psychology" that unconsciously and almost unavoidably creeps into a clever passing combination. Ground via the forward passing route is so easily and so quickly gained—when it is gained—and there is always the subtle temptation to adopt it as a sort of "get rich quick" scheme. Players tire of the hard work necessary to advance the ball in regular style; they resent the bumping and smashing necessary in making interference for a team mate; they get lazy; they gamble on a wild chance. As a result it is difficult to get a team that has developed a good passing game to have the patience and willingness to work to develop their running attack. For this reason the running game should always be developed and perfected first and the men taught that a passing game can

only be successful when based on a powerful and successful running game. The passing game is the completion, and perfection, and addition to the running game; it cannot do away with or take the place of the running attack. Many forward pass enthusiasts fail to realize this fundamental relationship and do not realize this peculiar psychological attitude that creeps into their squad. As a result they win their early games with forward passes; as the season goes along their team imperceptibly and unconsciously depends more and more for its real gains and scores on the pass; gradually the opponent's defense for the passing game develops and finally when the big game at the end of the season comes, the squad is fighting with one arm and that thoroughly covered. There must be punch in the running attack and psychologically it must be developed first.

Rhythm and Timing

Modern football is more and more emphasizing the importance of rhythm and of proper timing. It has even been strongly urged that a large part of the success of some of our greatest coaches has been based chiefly upon this subtle quality. Some of the coaches are reported to have had their players take dancing lessons to train and develop them in this respect.

Rhythm is a peculiar psychological and physiological characteristic. The automaticity of muscular contractions in lower types of animals, the automatic and rhythmic action of cardiac and plain muscles in higher animals, and the tendency toward rhythmic activity of wild animals all suggest the idea that rhythm is a basal and fundamental characteristic; almost in fact instinctive. This tendency should be recognized and taken advantage of in coaching. Unquestionably better timing and greater unity can be secured when the team develops a rhythmic tempo.

Every coach recognizes the importance of proper timing of

plays; the hole in the line must open at the right time, the backs must reach the critical point, the interference must hit their man, the passer must throw and the receiver turn, or "get set" to receive the pass, all at the right instant. How can this *right instant* be *felt* and realized? Obviously only by getting the team trained, tuned so to speak, to a regular, uniform, compelling rhythm—a rhythm to which the plays are adapted, which at times may change in tempo, now fast, now slow, but always compelling, unifying, gripping the team, hurrying the slow and phlegmatic members, holding back the nervous and excitable ones, and so bringing the whole group into a smoothly working, coördinated machine in which every part does its perfect work in perfect time.

It is so that a jump signal becomes valuable and effective. No matter when it comes—and it should come with frequent and easy variations—it gets an instant and unified charge, the time for which is perfectly definite to the offense and uncertain to the defense. So, too, the rush from the huddle into the line, or from one side of the line to the other, or of the back field from one formation to another should have a regular cadence; now fast, now slow, ever-changing, but always definitely clear to the offense, giving the legal pause necessary and determining the time for action. In the same way the feeling of time for the punt and the pass should be sensed.

The development of this sense of rhythm in a team depends first upon careful thought and planning for it by the coach. The plays must be developed and built with this in mind. The starting position of certain players may need to be changed in or out, up or back, to give the right number of steps, or the length of the steps themselves may need to be changed to bring everybody in the right position at the right time with the right momentum. Given properly developed plays much depends upon the quarterback. Generally his calling of signals determines the cadence. He determines the

tempo, speeds up the team, determines the key number, and sets the rhythm. A jerky, poorly timed quarter is irritating, disconcerting, and confuses and disorganizes a team instead of unifying it. This need not prevent "pep," and fire, and enthusiasm.

Open Field Running

Nothing in football brings a greater thrill to players or spectators than an open field run. In a flash all of the old racial emotions of the hunt and the hunted are awakened. A lad's mother, bitterly opposed to football was persuaded to attend a game. Suddenly the lad broke loose and started dodging through the opposition. Instantly the mother leaped to her feet and screamed above the tumult, "Run! Run, Jimmie! Don't let them catch you!" She has never been heard to utter a syllable of objection to football since.

The open style of the modern game is the greatest reason for the present popularity of football. The forward pass is chiefly useful in promoting and helping to make possible this open game. Any attempt by rule makers, or football authorities to prevent or handicap the open game will be a psychological mistake. The old, close, compact, pounding, smashing game was psychologically wrong in every way; it can never come back.

Successful open field running involves the highest types of psychological characteristics. It represents a combination of instant decision, determination, speed, breadth of perception, indirect vision, judgment in time and space, and strategy. Individual initiative shines here as nowhere else. At the same time wonderful opportunities for team work present themselves. The players, who like the runner instantly grasp the situation, and take out the dangerous opponent are quite as important and derive quite as much satisfaction as though they had themselves carried the ball. And the clever ball

carrier who instead of depending entirely on himself, slips behind a team mate and so scores a touchdown, brings a wave of satisfaction and pleasure to all the men on the team that unifies and grips them as one man.

Developing the ability to do clever open field running is a subtle and difficult thing. A few coaches have been notably successful in this art. A study of the games of one great coach would show that the great majority of the touchdowns made by his team came from outside the twenty-yard line. His game is planned to get men loose in the middle of the field; once free his ball carriers, with the assistance of superb interference, will score. Speed, rhythm, and quick openings get the men up to and through or around the opposing line. Once there, superb individual initiative combined with instant team assistance brought the "Four Horsemen" undying fame.

Such ability must be based on certain physical fundamentals; these are the ability to sidestep, to dodge, to lengthen the stride, change direction, change speed, throw the hips, pivot, and turn. Strong ankles and knees are required. There are many ways of developing these basal skills. The difficulty is that too few coaches pay any attention or give any definite time to practice in these things. But given a fair ability in these, the successful use of them still remains a psychological characteristic. The realization of this fact has produced the feeling that such "stars" are born not made, and is probably a partial explanation of why coaches have so generally disregarded training in this department. But, undoubtedly, practice would develop and improve this psychological ability; it is easily possible that training in it might bring even greater results than practice on the physical fundamentals. Such training both for the individual and for the team assistance could be secured by starting a man through a scattered field of opponents and team mates, the tackling being reduced to mere tagging. Such a situation approxi-

mates the actual situation to be met and develops most of the qualities needed without the danger of actual tackling. Of course, at times, the actual complete process must be allowed in order to develop the last ounce of desperate determination with which a man tears loose and struggles on to the goal. Such training is essential both for the offense and the defense. The danger of injury has doubtless kept many coaches from adequate practice of this type but a failure to recognize the psychological importance of it seems to the writer a more potent reason.

Catching Punts

There is no position on the football field that requires more real nerve than that of the safety man as he watches an approaching punt and notes out of the corner of his eye (perhaps that is just the thing he ought never to do!) the oncoming ends. With certain knowledge that opponents are trying desperately to get at him, that the instant he has touched the ball he may be buried under an avalanche of tacklers whose one desire is to bury him, that he has at the best but inadequate protection and assistance, with the spectators hushed and breathless and the moment tense with suspense, at such a time a man feels absolutely and utterly *alone*. It is *him for it;* the game, the season, the college, his entire football and collegiate reputation seems to hang up there with that ball! The man who can calmly and collectedly await this cataclysm, who can efficiently and effectively complete his part without hesitation or indecision has established a confidence and a self-control of a very high type.

Many coaches make the mistake of expecting immature boys to accept and carry through such a situation with but very little training or practice in it. The writer has known a sensitive player whose costly fumble under such a condition lost a game, to be almost ruined by the sarcastic criticism

of a peeved and disappointed coach who in reality had no one but himself and his own failure in training to blame for the fumble. Extensive training in this, with tagging again substituted a part of the time for actual tackling, will help to build up the confidence necessary. The placing of an additional man back when a kick is obviously likely, so that the catcher knows that at least the first tackler will be delayed, sometimes a word of advice from this extra man, and absolute concentration, especially with young players, on the ball are important helpful psychological suggestions.

Fumbling

The bane of a coach's life is fumbling. Of course, the first thing in correcting it is to remove any mechanical causes that may exist. After all these are righted, however, there still remains a high percentage of "psychological" fumbles. The first cause of this frequently lies in over-anxiety shown in an over-tense, strained, unrelaxed position and attitude. This results in "fighting" the ball. It is a hard thing where one is fighting opponents and throwing one's self desperately and tensely against them to still be supple, yielding, and properly adaptable in receiving and handling the ball. How to get a player to relax and conserve his energy so that he may receive the ball with a proper yielding motion, yet not become careless and reckless; how to teach men to be easy and relaxed when they may, and yet "throw into high" and "step on the gas" when they should, is not simple. But unless men acquire this ability they wear out, and fatigue, and frequent fumbles occur. Long and intensive practice seems to be the only antidote, but a word of encouragement instead of "bawling out" by the coach, and sometimes an explanation of this situation to a player will often accomplish wonders. The over-intensity of football in general, the great desire of players to make the team, and the driving of anxious coaches all con-

tribute to an attitude that tends to defeat its own purpose. To prevent fumbles build up ease, rhythm, and confidence.

Offensive Strategy

Football and baseball present more opportunities for strategy than any other games played. Many others give ample chance for this characteristic but in the final analysis, speed, power, or actual strength really determine the issue. Not so in football or baseball; knowledge of the game, experience, quick decision, taking advantage of opponent's mistakes, deception, strategy, are determining factors. *Brains* determine the victor and keep men in the game long after younger, speedier, muscularly more able men have demanded their places. This is notably true in baseball where men like "Ty" Cobb, Tris Speaker, Rogers Hornsby, and others, not only hold their places but lead the league. The professional life of football has been too short yet to indicate whether this will also obtain there; it may well be that the danger of injury, the physical contact, and the general strenuosity of the game will prevent the development of such records even though in the judgment of the writer as a coach of both sports the opportunity for strategy in football is quite as great, possibly greater even than in baseball.

Successful strategy is a most delicate, indefinable, indescribable entity. It involves the most sympathetic understanding, agreement, and comprehension—psychic fellowship —on the part of team mates, quarter, coach and players, captain and men, imaginable. Seldom is a piece of strategy "pulled" by an individual; occasionally it is, to be sure—but generally it is done with the coöperation and assistance of several players each executing his own part.

Further what constitutes actual strategy is often a very uncertain thing. "Percentage ball" wins pennants. As a result the game becomes stereotyped and uninteresting and

finally unsuccessful. Some one has to take a chance, break up the percentage, try the unusual, the unexpected, deliberately "pull" the "bone-head." Its very audacity makes it successful. It was brilliant strategy. But not every successful "bone-head" should be so considered. An unusual, unexpected play, generally inadvisable, should be regarded as good strategy when for definite reasons the play is consciously and purposely attempted. It is then good strategy whether it succeeds or fails.

For football certain "percentage," "experience" charts have been worked out indicating for a quarterback the general type of plays to be used in that section of the field. These will be found in most textbooks on the technique of the game. They divide the field into zones; behind your own twenty-yard line is your defensive area, kick on the first down, get the ball out of there; from your twenty- to your forty-yard line running plays but kick on third or fourth down; in the center of the field, the transitional zone, long passes, end runs, everything; from your opponent's forty- to his twenty-yard line shorter passes, trick plays; within his twenty-yard line, the aggressive zone, punch, power, special scoring plays. Now such a chart, such a scheme, is a good general program. Generally speaking it represents the experience of successful coaches; it is "percentage" ball. All football players, particularly captains and quarterbacks should be taught this scheme and the reasons for it. The writer has no quarrel with the idea as a general scheme and as basic, fundamental football.

But equally important is it that it be made clear that nothing about football is mechanical, cut and dried, or set. A thousand considerations must constantly be taken into account. No chart will take the place of a *thinking, observing* quarter. The place where a given man is playing at this moment in the line or in the back field, the relative strength

or weakness of every man on the opponent's team as well as your own players, the peculiar and special abilities of your own players, the number of the downs, distance to be gained, relative score, time of the game, wind, condition of the field, —these and many other factors determine whether "regular football" should be played or the widest variation attempted. In a game recently a team received the ball on downs on their own two-yard line. They lined up in kick formation. The defense dropped four men into the deep back field leaving one man to back up the line with a wide open space directly in front of center. The alert quarter grasped the situation, called a pass into this area, a back slipped through the line, picked the ball out of the air and raced to the twenty-yard line before the four lying back for the expected punt recovered from their amazement at the "bone-head" play. His team then punted safely down the field out of danger, and the opponents began a laborious sixty-yard journey back to the spot where but two plays before they had been but two yards from a touchdown and victory. Such is football! Next day the local press warmly "panned" the brilliant quarter for his "lucky" fluke thereby thoroughly demonstrating that particular reporter's incompetence as a quarterback whatever his mastery of English may have been.

To train men in such ability is not mere muscle training. Nowhere in the college curriculum does more opportunity, greater concentration, richer satisfaction, more popular approval result than from such mental exploits. Modern football is not merely beef and brawn; it is a highly intellectual game and its psychic training is of far greater value than its physical. The coach who regards himself simply as a physical trainer is demeaning himself and has no conception of his educational opportunity or responsibility. Such a man has no place in any educational system.

To train men then to be football "generals," to use strategy, to *think*, is one of the football coach's duties and problems. To teach men to be alert, to think, is not easy and the process has not been entirely elucidated by teachers of mathematics, science, literature, psychology, or even pedagogy. Clearly the more the coach knows of the experience of teachers in these fields the more able he should be to accomplish his object. Here nothing more than a few suggestions can be offered.

The first is the importance of real study of football generalship by all who have anything to do with running the team or who have any aspirations to become coaches. Actual definite knowledge is the foundation. This means study, discussions, quizzes, class sessions not unlike academic courses in other subjects—a course in football quite as intellectual in method and content as mathematics or logic.

The second is heightening the power of observation. This involves concentration of attention, conceptual breadth, mind set, and other pedagogic factors. The training of this type may be vastly greater here than in most scientific laboratories. Pedagogic methods for doing this must be discovered by coaches. Doubtless, practice on the field, often perhaps as "dummy" scrimmage, will be most useful. After the daily practice, sessions with paper diagrams, stated conditions, etc., may be used to advantage.

Third, decision must be cultivated and action secured. Ability not only to see the opportunity but to grasp it—the "will to win," must be produced. It is in this respect that modern education still remains most deficient. We present an intellectual situation to our students; they conceive the situation, understand it, nothing happens. We stir their emotions from desk, platform, and pulpit—nothing happens. Education needs places for students to see, understand, and then *DO*. Athletics, peculiarly football, furnishes such a

laboratory. Coaches should strongly command, encourage, and praise decisive action; even when the action is wrong or doubtful it should be lightly criticized and encouraged in right directions, not inhibited.

The football coach must be a thinker and a teacher.

CHAPTER XII

THE PSYCHOLOGY OF BASEBALL COACHING

THE psychology of baseball is so closely interwoven with the technique of the game that it is almost impossible to discuss the one without the other. The purpose here, however, is to discuss only those phases that have psychological relations; other texts adequately cover the technique.[66-68]

Baseball is peculiarly American in its temperament and psychology. It is doubtful for this reason if the game will ever appeal very strongly to other nations although the French and the Japanese have shown considerable interest and aptitude for it. A description of the psychology of baseball will be a description of American psychology; it is our *national game* not alone because of history and development but by nature and characteristics as well. The game "fits" Americans; it pleases, satisfies, represents us.

What are the psychological characteristics that make baseball typically American? In the first place it is a remarkable combination of a team and individualistic game. Team offense and defense may be developed to its highest possibilities yet the success of every maneuver depends upon the correct performance of each individual's part. An error (failure) by any one defeats the whole. In football, and many other games, weak links may be supported and assisted by team mates or offset by strength in another place or department of the game. Not so in baseball! Every man stands on his own feet, plays his own game, succeeds or fails on his own merit, wins or loses by his own effort, and his team wins or loses with him. No matter how complicated the team strategy

each man must come through with his part. In this respect baseball stands for individual responsibility, independence, self-confidence, personal aggressiveness—the pioneer characteristics that are distinctly and perhaps almost uniquely American. And yet all these characteristics, each individual's contribution are molded together for the accomplishments of a team—a social purpose. The individual fails or succeeds *for the group.* He is personally responsible if he fails and he personally gets the credit and glory if he succeeds.

This individual credit is also typically American. An American will do anything, dare anything, attempt the impossible and achieve it, if he knows that recognition, personal appreciation, and glory will crown his successful effort. Baseball does this perhaps to too great a degree. Too much of the game is a chronicle of the exploits of "Babe" Ruth, Rogers Hornsby, "Ty" Cobb, "Tris" Speaker, and other stars. With difficulty the pendulum is slowly swinging back to the sacrifice team game. Nevertheless, this has meant individual opportunity, and reward according to merit; a free and fair chance for every man to go to the top according to his ability—America the land of opportunity, an ideal dear to the American heart, unconsciously expressed in this our great national game.

This underlying inherent characteristic of the game suggests a cue as to the psychology of its coaching. *Men must be handled in baseball as individuals.* Each man works as an individual; he fails or succeeds as an individual, he must be dealt with as an individual. Uniform team methods are not applicable: there may be, should be, some generalizations but each man must be studied, his personality developed, his confidence established. More perhaps than in any other team game the successful baseball coach or manager must be a keen student of human nature. He must know how to get the best out of each man and so altogether out of the group as a

whole. This involves personal contact, not mass methods. The baseball coach must like his men and be liked by them—respected and obeyed, to be sure; but because he *leads* and they gladly follow, not because he drives them ahead. The best baseball coaches are *leaders* not *drivers*. This does not mean that the discipline of a baseball team is any less definite, or any easier, or less strict than that of a football team; but it does mean that it is accomplished in different ways and by different methods—methods adapted to the individual; with one sarcasm and prodding, occasionally, though most coaches err in using this far too much; with another praise and encouragement; with another suggestion or correction; and with others providing a motive for real effort.

Always the great task of the baseball coach is to build up individual, personal, self-confidence. The individual must "come through." Confidence in himself and control of himself is his first essential for success. If a man can be trained to transfer this characteristic into life in general the baseball coach becomes peculiarly a builder of character. In football the great problem is to build up a fighting spirit. This is needed, too, in baseball but it is based here not upon a wild abandonment of self but rather upon a solid foundation of quiet, unconceited knowledge of ability. The training work must be planned and developed to bring about increasing experiences of success. Thus is confidence established.

Another characteristic of the game is the necessity of being "on edge"; "on your toes"; alert, set, ready, "playing for the breaks." This, too, is peculiarly American; the patience of the Indian in the long tiresome hunt, then the sudden pounce, the wild yell, the sudden effort, and *victory*. Thus often the game wears along inning after inning, no hits, no errors, "air tight," everybody alert, on edge, perfect ball: then suddenly the pitcher falters, an error, a hit, pandemonium breaks loose, the game is decided. Or the bases are filled,

victory is almost within grasp but a great pitcher and a great team rise to superhuman effort, the defense tightens, the side is retired, and the game is saved. A game may be full of such occasions or there may come but one such in the whole game. The point is, are the players set, are they ready when the opportunity comes? If so, they win; if not, they lose! This is American and in this, too, baseball epitomizes the American spirit. This it is that explains and partly justifies the constant talking, the senseless and meaningless harangue of the players on the field. It is an attempt to keep themselves and each other fully alert and ready. What is said doesn't matter. Strictly analyzed it is often foolish, senseless, meaningless, and to an outsider ridiculous. But a team that does not talk is *dead* and a dead team is whipped.

This raises one of the greatest problems in handling men. Psychological "edge" depends largely—though not entirely—on physical "edge." A team that is psychically over confident or physically tired can seldom be brought to baseball "edge." The first essential is to care for the physical condition. Training diet and training procedures are not generally considered as necessary for baseball as for football or track. This is true so far as endurance is concerned but from the standpoint of alertness, "edge," no sport is more exacting. What can the trainer and coach do to bring the club into the game physically ready?

For one thing over eating or the eating of indigestible substances before a game should be carefully avoided. Too heavy a meal, too much milk, or indigestible food generally will make men "loggy," slow, and careless. In such condidition batters do not follow the breaks on the curves, fielders are just a step behind fast hit grounders, runners are tied to the bags, and the team strategy in general is stereotyped and "safe." Such a team does not force the "breaks" or take advantage of opportunities when they come.

This same condition may easily result from lack of sleep. Very few people realize the importance of a large amount of sleep in furnishing "pep." It should be taken, too, at the proper time. To be out late at night and then try to make up sleep during the forenoon before a game only makes a player unused to this régime more loggy. This is one of the problems of college coaches on trips where several games are to be played. Men wish to go out nights to "movies," chat late at fraternity houses with friends, or otherwise delay bed time; they sleep in unaccustomed beds in unusual surroundings; the result is a gradual loss of sleep and rapid reduction in alertness and snap.

If traveling is involved as well, as is often the case on college jaunts, this is further intensified. The writer believes that it is impossible to carry a ball team more than fifty miles by auto—or probably by any other conveyance—on the day of the game and have them play up to their proper efficiency. This is partly related to eyestrain. Wind in the eyes, dust, moving objects, and "movies" are bad for the ball player's eyesight and in the reflex nervous effects upon the neuro-muscular apparatus. Such a four-game trip is recalled where the traveling club, using every precaution that a group of careful earnest men could employ, after three hard battles both psychically and physically, lost their fourth game in the twelfth inning 3-2, simply because their "edge" was gone. They were set to win their game in the first inning with the bases full and one down: they scored one run, then hit into a double and wrecked a beautiful chance for a bunch of runs; time after time throughout the game batters hit directly to opposing fielders in spite of the fact that the pitcher had "nothing on the ball." They railed at their luck, bemoaned the fact that no breaks came their way, and fought on desperately until an error and a three-base hit defeated them. The team felt that they were

simply "out of luck," but the coach knew that they had lost to a poorer team simply because psychically and physically tired, the "edge" that would have brought victory was gone. Bringing and keeping a baseball club up to playing "edge" is one of the most subtle problems of a manager or coach. To get nine men together at one time all at their best, in spite of the distractions of modern life and to keep them continuously "on their toes" through an afternoon's playing is a psychological experience. The physical basis is fundamental, but on top of that must come the constant injection of "pep," fighting spirit, "will to win"—the great psychic qualities that spell victory.

Finally baseball is psychologically American in that it gives to every man a fair and equal chance because success does not depend upon size or muscle but upon brains, intelligence, and strategy. Men of every kind play the game well. Occasionally games are determined by luck, by "breaks," but generally and over long periods "percentage" ball holds true. Variations from this and acceptance of its possibilities depend upon mental alertness. The popularity of the modern game of football shows that the old weight, beef, machine game was not American. We desire games in which the psychic characteristics control the purely physical. Baseball is preëminently such a game. With every pitched ball a mental battle is on between batter and pitcher, between the two teams. In an ordinary game a pitcher pitches nearly two hundred times. With every pitch, especially with runners on, there are at least four possible decisions to be made by the batter and offensive team as to style of play and to be anticipated and prevented by the pitcher and defense. At least a thousand decisions, instant and entirely dependent on conditions are called for in every regular game. This is the mental side, the strategic side of baseball. Upon this, more than upon anything else, hinges victory or defeat. These rapid and multi-

tudinous decisions are one of the reasons why a constant and continuous guidance from a trained coach is desirable. Many have urged that the coach should be eliminated from the bench in college baseball; that the boys should be left to play the game by themselves, and so develop their own strategy and mental alertness. The point of view has much to commend it. It is doubtful however if, with the limited time now available for baseball training, these numerous decisions could be taught by discussion alone; they must be taught largely by example. The coach on the bench is not primarily a device for winning games; it is there that he has his best opportunity and does his best work not only in teaching the game but in developing sportsmanship and character.

The discussion thus far has been directed to the general psychological characteristics of the game. There are also some such considerations that apply in the coaching of some of the fundamentals of the game.

Batting

This is particularly true of the art of batting. There are, to be sure, important mechanical matters that make up good and correct batting form. Other things being equal the better the batting "form" the better the batter. But the variety of styles used by good batters, the success of individuals of entirely different types in form and physique, goes far to indicate that success in batting is not primarily a matter of mechanics but really of brains, strategy, psychology.

The single greatest essential for successful batting is confidence. The big problem of the coach is to develop this. Nothing breeds confidence like success. Correct form by helping to bring success is therefore very important but not all of the problem. This matter of confidence is a subtle and delicate thing. No man will admit that he is physically afraid.

But it requires no small amount of physical courage to stand up to a batter's plate and watch hard-thrown balls whiz by. The catcher and umpire are well protected; not so the batter. He knows by experience and example what is coming to him if inadvertently or intentionally a wild pitch reaches his anatomy. He knows that the control necessary to place a ball over the plate is great and that the best of pitchers are not always able to do it. The best of them often unintentionally make a batter "hit the dirt." More than this the batter knows that the pitcher is seldom trying to "split the plate"; rather he is "working the corners." Now the inside corners are very close to the batter and a little mistake in the pitcher's control may mean a ball directly at him. Worse than that, this is a personal battle between pitcher and batter: one or the other wins with the odds largely in favor of the pitcher. If the pitcher should intentionally "dust him off" (throw at or very near him) attempting to drive the batter back away from the plate for strategic purposes, real agility may be needed to prevent injury. Signals are used by the battery to enable catchers to follow sharp breaking curves. Nothing is considered more dangerous or traitorous than for a pitcher to "cross up" his battery mate on this matter. The batter has no such assistance. He must follow the curve, judge the break, see the "hop on the fast one," as best he can. If he should mistakenly guess that a slow curve was coming, and instead "step into" a fast "bean" ball, even death might be the result. Even a little carelessness in following the curve might so result. Such things *have* happened! Few men once hit on the head with a pitched ball ever entirely recover their confidence. *Batting requires courage*—lots of it! No man can be blamed for pulling away and "stepping in the water bucket." It is "instinctive" and natural. The coach must organize his batting practice to overcome this fear. It is the biggest single factor having to do with batting.

There is also often a fear of another kind which must be overcome. It is the idea that the pitcher is better than the batter, that because of excessive speed or sharp breaking curve the batter cannot follow the ball successfully and so cannot "hit" that particular pitcher. The batter fears he will be "shown up," made to "break his back," look "bad" before the crowd. The batter acquires an *inferiority complex.* One of the most common occurrences is to have a batter who has just struck out come back to the bench declaring that the pitcher "hasn't a thing on the ball." Teams that are not hitting will loudly proclaim what terrible things they are going to do to that pitcher next inning. It is an attempt to sublimate their complex. On the other hand teams that are "driving a pitcher to the showers" will tell you that he is pitching good ball, that "he's got everything," but "he's out of luck"; they are hitting anything. And it is a notorious and common fact that a team once started to hit is very hard to stop. They establish a confident, aggressive, *victory complex.* Viewed in the quietness of the study these psychic conditions are amusing and foolish to the intelligent coach; but out on the bench in the midst of a tight, heart-breaking game where reputation is at stake, they are very real, very important, and exceedingly difficult to handle.

How shall the coach develop batting confidence? He should begin with the earliest indoor work of the season. At first batters may simply stand in the box alongside the plate while pitchers are taking their training workouts. This is valuable for the pitchers as well as the batters. After a little the batter may move about in the box, now close, now back away from the plate, getting confidence himself and teaching control and disregard of the batter to the pitcher. Merely standing in the box without any intention of swinging gives good eye training to the batter and make it easier for him to duck a bad pitch. He learns to weave his body easily away from close ones and

this rapidly develops assurance. Very soon bunting should be started. The writer is a great believer in bunting as a fundamental preliminary form of training for batting. It is the best possible training for the eye. It teaches aggressiveness and fight to the batter, at the same time, if taught in right form, giving him opportunity to avoid close balls. Even where a proper cage is not available it can be taught in an ordinary gymnasium. Bunting is an absolute necessity for offensive strategy. Taught thus early in the season, indoors, it gives an opportunity to master a game fundamental, which the men dislike to spend time on outdoors, and at the same time be advanced in their regular hitting training.

As soon as regular hitting practice begins pitchers should be selected who are known to have good control. They should pitch at first with little more than half speed. At this time the pitcher should "lay them in," "groove the ball," put them in the easiest possible place to be hit and assist the batter in every way to successfully hit the ball. The time for fighting the batter has not yet come. There is a different psychological purpose at this time. Incidentally this is also true in the batting practice preceding a game. The pitching then should also be good for hitting, not bad, and practically every ball pitched should be "in there." A team should rain out a storm of hits in the pre-game batting period and get the impression that they are good. And this should be accomplished too without apparently easing up on the speed or effort of the pitching. A really good pitcher for this pre-game batting practice is rare.

In the regular batting training carefully organized plans should be made to get lots of hitting practice. Coaches are gradually realizing that hitting should occupy by far the largest part of the practice time. But much can be done to speed the hitting and give players opportunity. In the first place the use of a battery of cord lanes making three or

four batting cages together at one part of the field aids in the supervision of the hitting, reduces danger to players, speeds up the return of balls to the pitchers, and produces a peculiar psychological desire on the part of the hitters to drive the ball directly out of the cage just over the pitcher, to "hit 'em on the nose." This last phase is very valuable; for balls hit on the ground go safe only in about one case in ten, high flies are worth only "five cents a bushel," but line drives over second are 100%. This type of cage practice unconsciously promotes such hitting.

The cage hitting is especially valuable in the early season when the chief purpose is to get lots of swinging practice and to simply connect with the ball. Later it is desirable for the men to bat on a regular diamond so that each hit may be followed and its real value noted.

Generally speaking catchers should always be used in batting practice because they greatly improve the control of the pitchers. Enough scrub catchers should be retained and a squad developed so that this can be done. Even in good cages they add materially to the value and reality of the practice.

At first when curves or slow balls are to be used the batter should be told what is coming. As he acquires mastery he should be placed "on his own." Special practice may also be arranged for a batter's particular weakness, as low balls, curves, or slow balls. In ways like this each batter must be patiently and gradually developed until he acquires a feeling that he is better than the pitcher. In this same way individual faults such as pulling away from the plate (stepping in the "water bucket"), stepping too long, swinging too hard, dipping the rear shoulder, failing to watch the ball, failing to follow through, etc., can be corrected. Batters can be taught to study the pitcher, to notice the position of his fingers on the ball, to see the spin of the ball as it travels to the plate,

to notice the slight bend of the pitching arm that "telegraphs" a curve, to detect whether all balls are thrown with the same motion, and a host of such things that help the batter to "outguess" the pitcher. Batters should never adopt the habit of guessing what a pitcher will pitch. Serious accidents have resulted from such a practice. From knowledge of general battery strategy and close observation of a pitcher's peculiarities and ability, such as is possible in the leagues, but almost entirely impossible in college ball, batters may be reasonably sure what to expect in some situations. It is logical to "get set" in such a case for the expected pitch provided always that an open mind and a keen eye are maintained for the unexpected. This is not guessing: it is *thinking*. Oftentimes in a game a coach may greatly assist his team by calling their attention to such peculiarities, advising changes of position in the batter's box, having them "choke up" on their swing, etc., and so greatly increase the success of one or two men, start a batting rally, disconcert the defense and so win the game. *Little things win ball games.* A coach reviewing a recent season records five defeats that a single hit at the right time would have won for his team. The getting of these hits at the right time is primarily a mental and psychical problem.

Bunting

Most of what has been said regarding batting applies with equal force to bunting. It remains merely to discuss certain additional psychical features.

Generally bunting has a distinct and definite purpose—the sacrifice of the batter for the purpose of advancing the base runner. It brings in immediately a social purpose and forgetfulness of self. One who does not have this point of view or who cannot develop it, who works for himself rather than his team, almost invariably dislikes to bunt and therefore often

"foozles" the attempt because of a half-hearted, indifferent effort. Successful bunting requires a determined, whole-hearted, fighting attitude—an aggressive, "up-and-at-him," and "go-get-him," victory complex—an attitude that plainly says to the pitcher, "Now we've got you! There is a man on first. I'll push him to second, then we'll score him and you'll be licked." No disgruntled, dissatisfied, disappointed player bunts well: he is not "on his toes," and he misses, fouls, pops up, or bunts stiffly into a force-out. One is tempted to wonder whether the reduced use of the sacrifice game in recent years reflects a growing spirit of selfishness among ball players and the American public generally?

Occasionally the bunt is not used as a sacrifice but as a strategic method of getting on. A fast batter notes a third baseman lying back "taking tickets," or remembers the pitcher's inability to field his position well and dumps the ball before a surprised and "flat-footed" defense. Here, as in many other cases with bunting, beginners make a common mistake of thinking that their intention of bunting must be covered up until the last instant. This often leads to a poor, incorrect bunting movement and a poor bunt. It is well not to disclose one's intention of bunting too soon, but it is far more important to lay down a good bunt than it is to mask the batter's intention.

Fumbling

Handling ground balls, or even thrown balls, requires a peculiar adaptation of the player to the movement and rhythm of the ball. The writer has frequently seen a ball hit to an infielder and had an instant presentiment that an error would result because in some way the player was obviously not "en rapport" with the ball. The speed, rhythm, and bound are all a part of this intricate adjustment. In addition the ball should be received with a yielding, giving, adapting motion.

A non-compromising, unadjustable, stabbing player who fights the ball makes many fumbles.

It is probable for the above reason that some players are temperamentally unfitted to make infielders. Many men, however, can be taught this attitude and with it the correct mechanical movement. The right attitude and right movement go together.

Another frequent cause of fumbles is overanxiety, overnervousness, haste, and a tendency to throw the ball before the player gets it. The fielder must be convinced that he has plenty of time. He must be made to concentrate solely upon the ball, and first upon getting it, to the utter exclusion of the runner, throwing the ball, or any other factor. He should learn to time all balls, except wide hard hit ones, so that he comes forward to get them yet receiving them with the proper yielding motion. Some players find it impossible to wait for the ball. At second and short a certain amount of this is often necessary. The proper rhythm requires a certain leisurely motion. A player may be too nervous, too intense to adapt to this motion. Such players belong on third. At that base the balls come fast: there is no time for adjustment; it is a case of knock them down, any way to stop them, then pounce on them like a cat, and throw the runner out. The temperament of the ideal short stop and third baseman are widely different. It shows up particularly in this matter of fumbling. Put the nervous, snappy, scrappy fighter on third.

Base Stealing

Base stealing has almost become a lost art. Studies by Hugh S. Fullerton [69] show that opportunities to steal are accepted only one time in twenty. Yet the supposed mastery of the battery over the runner does not exist and is even less

[69] Articles in *American Magazine*, May, 1910 and May, 1911.

effective in college ball than with the leagues. College players, when properly trained, can use base stealing successfully.

Bases are stolen on *pitchers* not on catchers. The secret of success is a psychological matter rather than a mechanical one. The essential is to secure a start on the pitcher. A series of experiments on Ty Cobb showed that when the ball beat him, it was by a close margin; when he beat the ball it was by a big margin showing that he won by getting a start on the pitcher.

Every pitcher has some peculiarity, some mannerism, that indicates whether he intends to throw to first or to the plate. Successful base stealing depends upon discovering this sign. This is correct "outguessing" the pitcher. It is a mental and psychic affair. Suggestions as to such signs will be found in the books on technique.

Tagging the Runner

Coupled with base runing is the art of "putting the ball on the runner." To concentrate solely on the ball, catch it, place it in proper position to tag out an incoming base runner is no easy or simple task for a baseman. He is uncertain just where the runner is coming, when he will arrive, and how his spikes will be used. It requires courage, real "guts."

With this is tied up the question of blocking runners off the base and of the runner "cutting his way" to the bag. There is no rule against blocking; consequently if blocked a runner must have the right to cut his way. This is dangerous business for both. It is purely a question of courage and sportsmanship. The further around the bases the more important it becomes to make sure of the runner by blocking him off. This is recognized at the home plate by providing the catcher with shin guards and he is regularly expected to block if he can get in position to do so.

This is one place—and there are many others in baseball—

where the college rules should take a higher position of ethics and sportsmanship than the present professional rules. If a baseman tags correctly it is unnecessary to block. To do so is a confession of poor playing or an insult to the umpire. It means that the baseman is either uncertain of his ability to tag correctly or else he fears that the runner will beat the ball—in which case the runner deserves the decision. Otherwise it can only mean that the baseman feels that he cannot rely on the competency and honesty of the umpire; that he had to force the umpire to call the runner out. Either point of view has no place in a game played by college gentlemen. Collegians should adopt a rule requiring basemen to give half the bag and forbidding runners to cut their way to the bag. Such a decision is no more difficult for umpires than on balls and strikes.

It is obvious that this is one of the great psychological situations in the game. This condition is further intensified by the danger involved in base sliding. To see a runner dash for a bag, slide, come up standing, and dash for the next bag is a pretty sight and it looks easy. But it is far from it! "Strawberries" (skinned hips), bruises, sprained ankles, twisted knees, and broken legs to say nothing of the possibility of being hit by a hard thrown ball are constant dangers. Even the expert is far from immune. The teaching of sliding, tagging, and base running is therefore a big problem of developing correct technique and consequent confidence and courage.

Offensive Team Strategy

There is no need here to discuss in detail the fundamental forms of offensive attack such as the straight hitting, sacrifice bunt, hit and run, stealing, bunt and run, squeeze, and sacrifice fly style of game. Psychological and mechanical considerations determine the wisdom of each. Here it is desired to call

attention merely to some psychological points in relation to general offense.

The first of these is the extreme strategic value of the unexpected. Nothing unsettles a defense so much as to be "crossed up." Plays mathematically impossible and ordinarily poor baseball often succeed wholly because they were unexpected. A "bone-head" play thus often becomes brilliant baseball. The difference between "bone-head" and "inside" ball is often merely a matter of success. A word of caution however should be sounded. No play should be tried simply because it is an improper play under the conditions. On the contrary a play which would not ordinarily succeed may be tried, and it is good baseball to do so, when because the defense is playing in a certain way or obviously expecting something else, or because of peculiarities of certain players, there is a reasonable chance that the play will succeed. Such an unexpected attempt is then good baseball whether it succeeds or not.

A new offensive problem has come to coaches and managers with the modern *home run* craze. "Babe" Ruth, the "King of Swat," has made a psychological appeal to fandom that can scarcely be gauged. Physically and mentally he strikes back, in true "home run" style to our old fundamental beginnings. His remarkable success has almost revolutionized (shall we say spoiled?) the game. Every sand lot, college, and bush league player imagines and believes he is a future "Babe" Ruth. Hard swinging and free hitting is the order of the day. With the pay-roll so closely following the batting average it is not strange that leaguers loathe the sacrifice, base stealing, "inside" game and demand their chance to "take their cuts." College and amateur players without analyzing the differences between themselves and leaguers follow their example. As a result the bunting, base stealing, "inside" game has been almost lost from baseball.

But there is but one "Babe" Ruth and even he "Ain't what

he used to be." Only a man of superlative batting power as well as most remarkable accuracy in connecting with the ball can hope to hit consistently as "Babe" Ruth has done. A shorter step and shorter swing with careful attention to meeting the ball "on the nose" instead of driving "out of the park" is essential for any beginner even if he is to eventually become a "Babe" Ruth. The problem of getting young players to realize this and to realize that the amateur game may be, usually is, vastly different from that of the professionals, is a problem of education by the coach. Even in big-league ball there are strong indications that the pendulum is swinging back from the extreme home run craze of a few years ago to a more constructive coöperative team game, "Babe" Ruth himself being one of the contributing influences.

With this situation has come one of the great offensive strategical problems of the game. Is it better strategy to play for *one run at a time* or *for a bunch of runs?* This is primarily a psychological problem. Will you earn your runs or play for the breaks? Most college and amateur ball games are won in one inning. This often happens in league ball as well. We suggested this in our general discussion of the psychology of the game. In general the more efficient and mechanically perfect the players become, especially the better the pitching, the more necessary to play for one run. At the same time what are the mechanical weaknesses of amateur players? The first is hitting ability. The second is throwing. As a result the college defense for the bunting game is decidedly inferior to that of leaguers. There is no place where a college team is so likely to throw a game away as on a well executed bunt. With amateurs therefore, the one run game often becomes the surest way of getting a "bunch of runs." It often forces the "breaks." Played persistently, continuously, and under right conditions with the right switch to the hitting

game when the pitcher is "up," it produces and takes advantage of the psychological situation for winning.

If instead a straight hitting game is played the situation usually remains tamely commonplace; the pitcher and batter fight it out in a quiet duel between themselves with the chances at best probably not more than 300% for the batter. The writer has studied many games where the question of the value of the *sacrifice and squeeze* as contrasted with the *hit and run, and straight hitting* offers much food for thought. Naturally, all kinds of factors must be considered and would determine individual cases, but the writer has gradually come strongly to the belief that in amateur ball the psychological advantage is with the sacrifice and squeeze game as against the hit and run and straight hitting game. If this be true it also gives coaches an opportunity to develop one of the great social assets of the game.

This same discussion applies in a very large measure to the problem of scoring a runner by use of the "*squeeze*" *or sacrifice fly.* Every coach will have his own convictions and arguments on this matter and, of course, much depends upon the mechanical ability of the batter as well as the skill of the opposing pitcher. The only point that it is desired here to emphasize is that if the "squeeze" play is to be used, the time for it should be psychologically determined. To simply adopt a habit of having the runner dash for home on the first ball pitched whenever a squeeze play is in order is nothing short of suicide. The defense must be outwitted and at least a reasonably good ball for bunting secured if the "squeeze" is to be uniformly successful. For this reason it is often good offensive strategy to use the sacrifice fly up to and unless you succeed in getting the pitcher "in the hole."

A very important psychological consideration relates to the *effect of runners on base.* This is also more true of amateur ball than professional. It is not only true that runners tie

up the baseman, and that the pitcher uses a different motion in delivery thus making the defense mechanically less perfect, but the presence of runners on the bases greatly unsettles and disturbs the defense. In the first place it is an unaccustomed and unusual situation; it gives additional things to attend to—increases the span of attention, often too much for some players. This psychic effect is greatly intensified, especially with amateurs, the further around the bases the runner or runners go. A runner on third, though only 20% better off than on second, is psychically 50% more dangerous in college ball. Most college pitchers are decidedly more worried by a runner on third.

This condition is still more intensified after a runner has scored. It is for this reason that teams should be trained to "*get them while the getting is good.*" The time to score is when you are started. Once the defense has had a chance to reorganize, to recover itself, the opportunity may be past. This is often the reason for "times out," strategy talks, and fake injuries. It is a question if rules committees should not find ways of preventing such delays.

Defensive Team Strategy

Defensively the psychological side of the game is just as keen and important as the offensive. Naturally it follows many of the same lines. It is peculiar however in the central rôle which the pitcher occupies and the extent to which it depends upon the pitcher. No worthwhile team defense can be developed without knowing what the pitcher is going to pitch and unless the pitcher has good enough control to do what is signaled. The more perfect defense of big league teams is attributed not to superiority in mechanical details, though this often does exist, but primarily upon the team work, knowing what is to be pitched, therefore where the ball is likely to be hit and being there to play it. "Hit 'em where

they ain't," growled a player on the bench. "I do, but he's always there," returned the player who had just been retired by the old strategy master, Johnny Evers, on a ball hit through his "groove." This requires and assumes a great confidence between pitcher and team. A team that knows that they can depend upon their pitcher, knows that he will keep cool and keep his control and not simply "throw them up there," and a pitcher that feels that he has eight men working with him—such a combination is as different from nine ball players as white is from black. In this connection the psychological work of the catcher is extremely important. Many catchers really pitch their pitcher's game in the sense of directing what shall be pitched. It is a remarkable fact, possibly for good and sufficient reasons that cannot be considered here, that catchers are often better at this phase of strategy than the pitchers themselves. Aside from that, however, the catcher can be of great assistance "in the pinches" by the way he encourages the pitcher, makes his target, and generally "holds him up." In the same way the catcher extends his own attitude and spirit to the whole team. Facing them, he is observed by them, signals to them, and unavoidably sets them an example of vim, vigor and victory, or depression, despair and defeat. No team is ever very successful with a catcher that they do not like. No grouch or fault-finder ever makes a good catcher.

Together the pitcher and catcher, the battery, make seventy per cent of the team's defense. Here it is that the offensive strategy must be anticipated, the defensive counterplay planned and the play broadcasted to the team. This involves at least a simple set of defensive signals. This should be simple but adequate. It should include plays for catching runners on bases, for nothing so discourages the offense and cheers up the defense as to pick a potential run off second.

With the importance of the pitcher it follows that the

handling of pitchers is one of the greatest problems before the coach. Pitchers are almost invariably sensitive, high-strung artists. Handling them requires a high knowledge of human nature and individual methods. This has been previously discussed. The selection of a pitcher before a given game, however, or the question of changing pitchers during a game are delicate questions.

The selection of a pitcher before the game is complicated by the fact that the "feeling" or the opinion of the pitcher himself as to his condition is of little value. If the manager is working his pitchers in order as often happens in league ball or has only one real "ace" as is often true in college ball, the question is simple. But the selection of a given pitcher for a special team, left or right hander, over arm or cross-fire delivery, fast or slow ball, and the determination of which of two equally good pitchers is nearer "right" on a given day is not easy. Pitchers will often tell a coach they feel "great" and go in and pitch an abominable game; conversely, pitchers have been known to be very doubtful of their condition, to feel decidedly "off," to even be actually ill and yet step into the box and deliver a wonderful performance. Physiological or psychological tests that would actually determine a pitcher's ability to deliver would be a great asset. Such tests if they could be found would throw a flood of light on psychological problems, not only of sport, but of industry and modern life in general.

Lacking such assistance the best a coach can do is to warm up his possible pitchers, watch their action, test their control, and select the one that seems best. Care should be taken to see that the men are fully warmed up and that they make a real effort. Many pitchers fail to get themselves fully ready before entering the game. This should not involve an excessive amount of work. Some men will almost pitch an entire game warming up. This is a mistake. The pitcher should warm

up, as quickly as possible, to his greatest efficiency, demonstrate his control, and then if he is "right" step into the box physically and especially psychically ready to "go."

"Pulling" a pitcher is still more difficult. Often a poor start develops into a brilliant game, particularly if the pitcher gets by the first inning without being scored on. The writer believes, however, that many college games are lost by failure to change pitchers soon enough. Especially in college ball there is almost always an advantage in change of style. Lack of control is probably the most significant indication of a pitcher's distress. Merely "walking" a batter however is not necessarily indication of lack of control. Note whether the pitcher is working the corners and losing on close decisions or whether he has lost the plate and has to "groove" the ball in order to get it over. If the latter is the condition "walks" followed by hits are sure to lose the game. In this case any change offers a better chance unless the pitcher can be immediately settled down and his control reëstablished.

All of this relates to stopping a batting rally. Here a host of problems confronts the coach: Is the pitcher physically exhausted and his control therefore gone; is he "rattled" because of a lucky hit, an inexcusable error, or opponents' "razzing"; has he the "guts" (psychological control) to recover himself; can any one else better meet the situation? Tightening up both by team and pitcher to meet such a rally is a psychological matter: it is the real test of a team's merit. The "money" player, the man who "comes through in the pinches," the fellow who can "bear down" when he needs to, these are the men that prove their reserve power and distinguish the veteran from the tyro.

There may be no transfer of such abilities to other fields of life. But it seems to the writer that there is no way known to modern education to develop such abilities except to put

pupils, time after time, into such situations where social contacts, ethical decisions, and emotional control will be possible and are demanded and then by every means available through wise leadership and the pressure of public opinion, produce satisfaction with right responses and annoyance with wrong ones until we build up a *habit* of desirable reactions. So shall we build up good citizenship and right character. So do our team-fighting games serve education.

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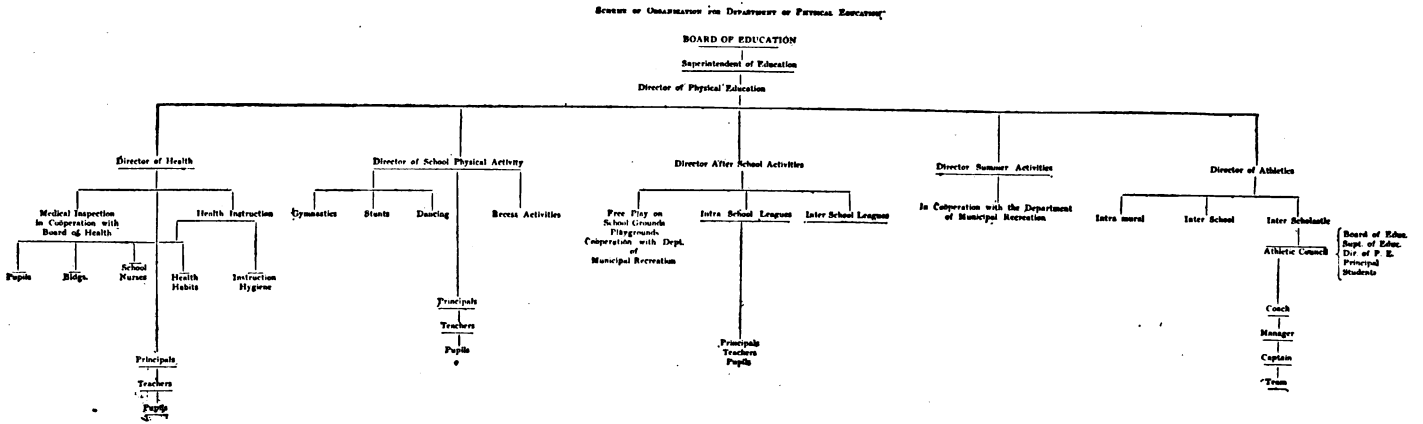

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