Attitudes toward athletics: a comparison of five groups

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Attitudes toward athletics: A comparison of five groups

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Attitudes toward athletics: A comparison of five groups
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CHAPTER I. INTRODUCTION

The workings of institutions of higher education are complex and worthy of scholarly investigation. There are many different areas that can be examined and the individuals related directly and indirectly with these areas can be divided and compared in various ways. The aspect of higher education activity to be examined here is attitude toward athletics. The groups chosen for comparison are alumni, faculty, parents of student-athletes, students, and student-athletes.

Definition

Athletics: "A competitive test of superiority, its norm is the rigorous practice of fairness within rules and conditions aimed at establishing through competition, the objective and accurate determination of superior performance and ultimately of excellence" (Zaner, 1980, p. 8). A more detailed definition is found at the beginning of Chapter II.

Rationale

Need for study

L. L. Baird, R. T. Hartnett and Associates (1979) write of the need to regularly assess college environments. Important aspects of these environments are the perceptions, expectations, satisfactions and dissatisfactions of people who make up the college community. Measures can provide information unavailable from other sources and thereby help decision makers understand and
evaluate their institutions, plan and assess the success of programs, and improve the quality of college life for students and faculty. (Baird, p. 61)

Why study athletics?

Athletics, in one form or another is a part of most educational institutions and according to researchers is deserving of scholarly investigation. The observation of R. J. Higgs (1982) about athletics (sport) is representative of comments on the subject.

While we know that sport is, we don’t know with certainty what it is. Nevertheless, anything that so engages the interest of mankind, compels us to seek an understanding of it... The influence of games on societies from the bloody Roman spectacles to the staged demonstrations of the modern Olympics and the Super Bowl staggers the mind. Indeed, sport has become as ubiquitous as the weather and is understood just about as well. (p. 3)

If a quest for knowledge is not sufficiently compelling, the frequency with which athletics appears in the electronic and print media, should be. Most news programs on radio and television devote a portion of their time to sports, which includes scores from local, regional, and national contests, from amateur, interscholastic, and professional organizations. They also interview individuals from these groups and comment on anything they consider newsworthy. In addition, nearly every newspaper has a sports section.

There are also many scholarly journals devoted to the study of many different aspects of athletics. A partial list includes: The Academic Athletic Journal, The British Journal of Sports History,
Purpose

Baird (1979a) lists five reasons for developing an instrument for assessing any kind of campus attitudes.

(1) they can serve as a general monitoring function, alerting the administration when things may be going wrong; (2) they can help the university deal with problems; (3) they can be useful tools in evaluating programs and innovations; (4) the information can be used to help decision makers understand the subtle and complex culture analyzed; (5) perceptual measures can help colleges understand the consequences of their emphases. (pp. 59-61)

In addition to the benefits Baird sees accruing from this type of research, Pace (1979) asserts that differences among groups and subgroups "are interesting and important phenomena in their own right and description and systematic measurement of differences permits relationships to be explored, classifications to be developed, and a better understanding of the groups to be promoted" (p. 91). He also indicates that the purpose of such environmental measures is more to
classify than to change.

To accomplish the purpose consistent with these researchers' suggestions, two investigative instruments have been created. The first research question is whether or not identifiable groups of individuals (alumni, faculty, parents of student-athletes, students, and student-athletes) possess significantly different attitudes toward athletics. A corollary that bears directly on this question is "Is the instrument created for this study capable of discriminating between selected groups in regard to their attitudes toward athletics?" Attitude toward athletics is defined by this study as a broad multidimensional construct. There is no intent to assess attitudes toward any one particular athletic program.

Should the instruments show differences, reasons could then be researched. Examination of the now unexamined demographic variables might prove enlightening, or it may be that other methods will be needed. Significantly different attitudes between different groups would need to be assessed as to whether or not they constitute a problem on campus.

Profiles could be built of those who have the most positive attitudes toward athletics and those who have the least positive. This would be accomplished by taking those scoring the highest and those scoring the lowest and then looking for any clustering of the demographic variables, especially those not already analyzed by this study. Such profiles could be used to promote a better understanding of athletics and to direct publicity or fund-raising campaigns.
The emphasis here has been on attitudes toward athletics and the student-athlete has been merely one of the examined groups. The rationale is that the individual student-athlete carries with him/her all the individual frailties of the ordinary human condition. Athletics as a construct is much broader and would seem to have substantially more carry over to all individuals associated with the construct.

The individuals who could use the information from this study would be those at policy-making levels within the university and/or the athletic department.

Limitations of this Study

The first limitation of this study has to do with the characteristics of the Likert scale to be used in the assessment. The Likert technique does not conform to the requirements for ratio or interval data (Jahoda, Deutsch, & Cook, 1951; Sellitiz, Jahoda, Deutsch, & Cook, 1966). Therefore, it is not possible to say that a score that is a multiple of two of another score is twice as good, bad, positive, or anything else.

Another problem, according to Baird (1979b), is that researchers must resist any attempt to have results from this type of study treated in some meritocratic fashion. The relationships that are found indicate differences between groups, not absolute positions on some finite scale.

Any study using a self-report survey of attitudes is limited by
the truth that the subjects perceive and what they are willing to reveal (Cunningham, 1986; Nunnally, 1978).

Mail-back questionnaires tend to have relatively low response rates, although research has shown that respondents and nonrespondents do not differ on any "significant personality dimensions" (Borg and Gall, 1983, p. 434). However, findings of this study are limited to the individuals who responded to the questionnaire.

Glaser and Strauss (1967) and Strauss and Corbin (1990) indicate that grounded theory studies, in addition to highlighting relationships, can yield estimation and prediction. The selection of the groups is done in a manner consistent with statistical sampling, in order to permit the possibility of future estimation or prediction. However, it is understood that any estimation or prediction could not extend to members of the general population. The only prediction or estimation that could be done would have to fit the same parameters for selection as did the original groups.

This study makes no claim that the items included in this questionnaire include all possible elements making up the construct, attitude toward athletics. There is also no claim of relative importance of one element over another. The primary focus is identifying relationships among multiple groups using a single instrument.
Focus of the Study

The attitudes that people hold toward athletics are the subject of this research. The focus is on relationships, primarily those among the five selected groups (alumni, faculty, parents of student-athletes, students, and student-athletes). However, the demographics questionnaire that accompanies the attitude questionnaire contains additional variables which can be used to further divide the selected individuals into additional or alternate groups. Two of these additional demographic variables are also included for study at this time, gender and whether or not the subject graduated from high school in the state of Iowa.

Test Groups

Baird (1971, 1979b), Chickering (1974), Clark and Trow (1966), Craeger (1971), Feldman and Newcomb (1969), Hartnett and Katz (1977), Hovland, Janis, and Kelly (1953) and Selvin and Hagstrom (1966) state that their research shows that people tend to cluster and form groups with those with whom they have much in common. T. M. Newcomb (1943) indicates that membership groups are a strong influence in the development and maintenance of attitudes. Astin (1979), Baird (1979), and Pace (1979) in discussing the different subgroups existing on campuses, make the statement that these subgroups do not necessarily know a lot about each other. In this particular study, five groups are selected for comparison. The first group is the most directly involved with athletics, the student-athletes themselves.
The second is made up of the students with whom the first group must compete in class and with whom they interact in other ways. The third group is composed of the faculty who directly effect the athletes they have in class by giving grades, which determine an athlete's eligibility to play. The fourth group is comprised of the parents of student-athletes and the final group is made up of alumni.

Grounded Theory

Many studies use the deductive method of investigation which starts with a general theory against which specifics can be verified. In the case of attitudes toward athletics, no theory, no body of literature exists comparing different groups with each other in regard to attitudes toward athletics. Grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990) uses inductive reasoning; moving from individual bits of information (data) to the general theory. Glaser and Strauss (1967) indicate "generating a theory from data means that most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the research" (p. 6).

Strauss and Corbin (1990) indicate that a large body of information should be examined. Then by comparing and examining the data, groupings or categories are logically formed. Strauss and Corbin (1990) stress the importance of naming these categories of concepts. They indicate that the name should be "graphic enough to remind you quickly of its referent and be more abstract than the ones it denotes" (p. 67).
In order to generate the conceptual categories and their properties, substantial amounts of literature about athletics are reviewed. Scholarly research is examined as well as material from the electronic and print media. Many direct quotes are included because it is possible, at times, that the words themselves might have an impact, or connote a special meaning.

Previous studies

There have been very few studies researching the attitudes toward athletics by individuals at the collegiate level. Most research on this subject includes a statement to the effect that there are almost no similar studies in existence. However, since the entire domain of colleges and athletics is available, it seems wise to first review what has been done, even if it is not directly relevant. Some of the studies are much smaller in scope, but they have variables that can be used in developing the questionnaires for this study.

In 1932, G. J. Dudycha conducted a study of 755 freshmen and 296 seniors from what were mostly small colleges in the Midwest. In 1953, B. F. McCue published "Constructing an Instrument for Evaluating Attitudes Toward Intensive Competition in Team Games." She developed a 77-item questionnaire. Variations on this list were used by R. M. Scott in 1953 and by R. McGee in 1956. Scott examined attitudes toward athletics in elementary schools and McGee limited her survey to attitudes toward athletics for high school girls.
In 1973, J. P. Williams Jr. surveyed students at Iowa State University. Williams used three scales: a demographics survey, an attitude scale constructed by Williams using items from a scale by Bronzan in an unpublished dissertation, and a questionnaire on values orientation taken from the *Higher Education Measurement and Evaluation Kit* (Pace, 1972). Williams' sample consisted of 409 individuals from a freshman-level sociology class and an upper-level history class.

In 1975, Spreitzer and Snyder studied "The Functions of Sport as Perceived by the General Population." They used a mail-back questionnaire to assess the attitudes of 510 (the actual mail-back number) individuals in the city of Toledo, Ohio. The results indicate that the subjects generally saw sport as a "beneficent institution" (p. 93).

In 1979, Grove and Dodder continued the Spreitzer and Snyder research (see above). They surveyed 637 faculty and students at Oklahoma State University. The comparison was between the way that the test groups viewed sport (athletics) as being beneficial to society and the way that the same groups viewed sport (athletics) as being beneficial to the individual participant. They report finding that individuals surveyed saw a distinct difference between the two.

J. M. Jones and S. A. Williamson published research in 1979 using four different scales: a demographics questionnaire, attitudes toward a group of slogans collected from locker room walls by Snyder (1972), Rotter's locus of control perceptions, and role-playing
estimates of psychological reactions to hypothetical athletic situations. Their research was limited to athletes' attitudes.

In 1980, R. P. Matross published the results of a short phone questionnaire conducted at the University of Minnesota. Four hundred seventy-one students were surveyed across 28 items covering both knowledge and attitudes.


In 1983, Miller Lite commissioned a report on "American Attitudes Toward Sports." This was conducted by Research and Associates, chaired by J. C. Pollock. Professional interviewers collected information, by phone, from 1646 individuals. Many different variables were considered.

In 1985 Miller Lite also sponsored a study on athletics for women. The report surveyed members of the Women's Sports Foundation, a cosponsor of the study. In 1988, Wilson Sporting Goods Company sponsored a report (Garfield), "Moms, Dads, Daughters and Sports."

**Athletics and Higher Education**

Athletics has been a part of the college scene for over 100 years (Adelman, 1983; Horowitz, 1987; Redmond, 1984; Smith, M., 1971;
Smith, R., 1981, 1983, 1985; Watterson, 1981; Westby & Sack, 1976). Some college presidents have been active promoters of athletics, as was Charles Adams of Wisconsin from 1892 to 1901 (Smith, 1971). Others, such as Charles Eliot of Harvard or Robert M. Hutchins, president of the University of Chicago, who succeeded in permanently banning football (Nyquist, 1978), were not so favorably disposed.

Many changes took place in intercollegiate athletics between 1850 and 1910. In the mid-19th century, athletic events were thought of as being play and were run by the students and ignored by the faculty. Eventually, it was found that this play was serious and very competitive. Abuses were common and it became obvious that more control was needed; formal rules were needed to protect the competitors.

Although team sports are the most visible, the rules for what is essentially an individual sport provide the ideal in the establishment of rules:

All competitive swimming events held under Corporate sanction shall be conducted in accordance with the following rules which are designed to provide fair and equitable conditions of competition and promote uniformity in the sport so that no swimmer shall obtain unfair advantage over another. (United States Swimming: Rules and Regulations, 1987, p. 13)

Competitors need to be guided and protected by rules, but there is also the concern of pleasing the audience. There has been an audience involved since the earliest days of sports or athletic contests (Brasch, 1970; Evans, 1963; Hawkes, 1963; Henderson, 1947; Olivova, 1984; Thompson, 1974, 1985, 1986; Umminger, 1963). Pleasing
the audience is an important part of professional athletics, since its success depends upon support through gate receipts and sponsorships. Pleasing the audience is also being perceived in the same manner for amateur contests, including those involving interscholastic competitors.

**Attitude theory and conceptual category selection**

Because a broad relationship to attitude is desired, the conceptual categories are also related to the integral parts of attitude. A number of definitions are stated here for this purpose. Krech, Crutchfield, & Ballachey (1962), Ostrom (1968, 1969), Scott (1968), Secord and Bachman (1964), and Sudman & Bradburn (1982) conceptualize attitudes as consisting of three components: an affective component, a cognitive component, and a behavioral component. Shaw and Wright (1967) define the construct attitude as "an affective component which is based upon cognitive processes and is an antecedent of behavior" (p. 2-3). In all cases, a single defined referent must be included. In this case, that referent is athletics.

Herek (1986) classifies attitudes into two types. The first type derives its affective content from personal needs that are met by the attitude's expression. Herek indicates that the holder of this type of attitude often sees the referent as being more important than it actually is.

This type appears to go along with the attitudes held by those
who identify strongly with athletic teams and their symbols. Cialdini et al. (1976) write of this phenomenon in athletics calling it Basking-In-Reflected-Glory or BIRG. This is one of the conceptual categories selected and statements toward this area are included in the questionnaire.

Herek (1986) states the other type of attitude stems from thoughts that the referent will in some utilitarian way enhance something they value. The area that most demonstrates these qualities is the one showing that individuals believe that the university directly and indirectly benefits (usually monetarily) from athletics.

There are two areas that combine these two beliefs. One is that athletics helps in the integration into society and that society benefits from this activity. The other is that those who participate in these activities, themselves, benefit from this activity.

Areas surrounding the site of competition can benefit measurably from the location of competition, amateur (including interscholastic) or professional (Wegner, 1987). The idea that athletics is good for a locale is emphasized by the media. During the 1987 National Basketball Association playoff game between the Boston Celtics and the Detroit Pistons, the broadcasters spoke frequently of how beneficial the success of the Pistons had been for the Detroit area.

Indianapolis is an example of a city that used athletics to help in a city-wide revitalization program. Indianapolis is the site of a number of different athletic events, one being the "Indianapolis
A mayoral committee investigated ways that the existing events could be used as a cornerstone for rebuilding. The results confirmed the viability of their concept (Hansen, 1991; Miles, 1987).

To some, area revitalization may not seem to be in the purview of higher education, but not to all. Southeast Missouri State University is following the precedent set by Southwest Missouri State University, which in 1982 moved to Division I basketball to enhance its image to the public and increase enrollment (Chronicle of Higher Education, 1988). Not all schools have used the same strategy. Drake University in 1984 dropped from Division I to Division III in football while not only retaining their Division I status in basketball, but also including basketball and the building of a new arena as a part of their overall enhancement plan (Carothers-Kay, 1988; Knapp, 1987; Witosky, 1987).

In addition to the desire of colleges and universities for the publicity of outstanding athletic programs, there are ever increasing pressures from funding bodies (Boards of Trustees, State Legislatures, etc.) who want the institutions they help fund to give something back to the area in which they are located.

The Iowa legislature has stated it expects the state-aided universities to help provide jobs for Iowans by developing new technologies and other programs that will help the state to grow (Westphal, 1987).

In a survey developed by the College Football Association, the benefit to areas surrounding the college football games is documented
along with the benefit to the immediate game sites. Many quotes are available concerning the perceived importance of college athletics.

People want to be associated with the best. Southeast Missouri's association with well-known Division I teams would help the struggling economy in Cape Girardeau by attracting crowds to sports events on the campus.

For whatever reason, athletics has exposed university environments more than academics. Newspapers don't devote three and four pages to chemistry departments.

(Quote attributed to Jim Limbaugh, president of the largest bank in Cape Girardeau (home of SE Missouri) and an alumnus. (The Chronicle of Higher Education, May 11, 1988, A32-33).

Research by Newcomb (1943) shows that some groups know little about other groups' perceptions and problems. The accuracy of perceptions also depends upon knowledge of the elements being perceived. Bradburn and Sudman (1988), Krech, Crutchfield, and Ballachey (1962), Scott (1968), and Shaw and Wright (1967) identify a cognitive component of attitudes, which is directly related to the perceptions of the individuals whose attitudes are being assessed. If these perceptions are incorrect, the attitude is likely to be inconsistent with true facts. Because the accuracy of information possessed by the groups surveyed is, by definition, a critical part of attitudes, its assessment is included in the investigation.

Krech, Crutchfield, and Ballachey (1962) also refer to the emotional loading that often accompanies the affective aspect of attitudes. One integral part of athletics that may have emotional loading of its own is competition (Martens, 1975). Some individuals feel that competition, in and of itself is wrong (Kohn, 1986).
Relationships in regard to the construct competition are included.

The conceptual categories selected are: **Belief** (that athletics helps with socialization into society), **Benefit to Athletes**, **Basking-In-Reflected-Glory**, **Competition**, **Fact**, and, **Importance** (to the university).

No broad-based investigation into the comparative attitudes toward athletics held by groups of individuals associated with colleges and universities has been found. A large number of studies into limited aspects of attitudes toward athletics by some of the groups is used to create a test instrument for the assessment of the five groups (alumni, faculty, parents of student-athletes, students, and student-athletes) in relation to their attitudes toward athletics; however, any prediction as to the outcome would be highly speculative.

The focus of this research is on relationships and the demographics questionnaire called for the recording of the information relative to a number of different variables. A great deal of literature exists on the effects of gender on attitudes toward competition and athletics (Basow & Spinner, 1984; Crown & Heatherington, 1989; Croxton, Chiacchia, & Wagner, 1987; Melnick, Vanfossen, & Sabo, 1988; Snyder & Spreitzer, 1983), enough so that differences could be predicted. In addition, athletics for females has existed in Iowa for many more years than it has in other states. Not only has athletics for females existed, it has flourished (Beran, 1983; Enright, 1976; Lenskyj, 1986; McGee, 1956). It could
therefore be predicted that those who graduated from high school in Iowa might see athletics for females in a more positive light than would individuals who graduated from high school outside of Iowa.

Data collected in the area of gender also indicate that subjects might answer the Benefit to Athletes questions differently if the athletes were identified as being of one gender or the other. The data in this area appear to justify dividing the conceptual category, Benefit to Athletes into two, one identifying the athlete as a female and the other identifying the athlete as a male.

Research Question

The major research question to be answered is: Are there any significant differences in attitudes toward athletics held by alumni, faculty, parents of student-athletes, students, and student-athletes? A corollary to this is: Is the instrument created for this study able to discriminate among the groups as to their attitudes toward athletics?

There is no literature from which to predict the answer to the primary question, but the answer to the corollary could still be meaningful. Therefore, two secondary variables were added to the analysis suggested by common knowledge, as well as reviewed literature. The idea that men and women view athletics differently is a common stereotype, one that has been reiterated by scientific researchers as well as the popular media (Friedman, Robinson, & Friedman, 1987; Halgeson & Sharpsteen, 1987; Horner, 1972; Pollak &
Gilligan, 1982). The popularity of and the publicity given to girls' basketball in Iowa also implies that girls' sports might be looked upon differently by those who graduated from high school in the state of Iowa as opposed to those who graduated from high school someplace else.

The two additional research questions are:

1. Do males and females have different attitudes about athletics?
2. Do individuals who graduated from high school in Iowa have a different attitude toward athletics than do individuals who graduated from high school outside the state of Iowa?

Assumptions

1. The subjects filling out the questionnaire will be able to understand the directions.
2. The subjects filling out the questionnaire will be aware of their attitudes.
3. The subjects will answer truthfully.
4. Attitudes are distributed along a continuum from a given positive point through a zero point to a like given negative point.

Operational Definitions

Alumni: (Alumnus/Alumna) Any individual who holds a degree from Iowa State University and is listed in the Alumni Directory. To try to minimize the presence of confounding variables, those alumni listed in the Alumni Directory as being employed by Iowa State University or living within Story County, Iowa are excluded from the list.
**Athletic Attitude Inventory**: A 70-item instrument developed by the researcher for the purpose of comparing attitudes toward athletics held by the groups selected for study. The instrument uses a 7-choice, agree-disagree format and statements about athletics selected from those published in scholarly journals and the popular media. Prior to the completion of the instrument, it is referred to as the **Attitude Questionnaire**.

**Athletics**: (as defined in the directions of the Athletic Attitude Inventory) A competitive physical activity, played according to established rules resulting in the determination of a winner.

**Cluster**: A group of ten statements developed from a single conceptual category. Example: *Competition Cluster* Competition is the normal healthy need of human beings to succeed—Competition does not ruin a friendship—Being in the "Top 10" is important. . . . (For further explanation see Chapter II and Appendix D.)

**Demographics Questionnaire**: The questionnaire asking questions about existing or past characteristics or experiences of the respondents.

**Factor**: A group of statements that have been determined to have a statistical relationship identified by the statistical procedure, **Factor Analysis**.

**Faculty**: Any individual listed as faculty in the Student-Faculty Directory of Iowa State University.

**Negative Attitude**: A total additive or average minus score (corrected, see p. 107) on any of the measured scales.
**parent of Student-Athlete**: An individual listed as parent or guardian on the list of athletic participants provided by the Office of the Athletic Director of Iowa State University.

**Positive Attitude**: A total additive or average positive score (corrected, see p. 107) on any of the measured scales.

**Student**: Any undergraduate registered for classes at Iowa State University whose name does not appear on the list of student-athletes provided by the Office of the Athletic Director of Iowa State University.

**Student-athlete**: An undergraduate registered for classes at Iowa State University whose name appears on the list of student-athletes provided by the Office of the Athletic Director of Iowa State University.

**Document Organization**

The remaining chapters of this dissertation are organized in the following manner:

**Chapter II**: The Review of Literature covers a definition of athletics, and a brief review of athletics in history to indicate its long association with society, and with colleges and universities.

The literature used in the building of the conceptual categories that justify the clusters of the attitude questionnaire is reviewed: **Belief, Benefit to Females, Benefit to Males, Basking-In-Reflected-Glory, Competition, Fact, and Importance**. In this area, a
large number of quotes, from print and non-print media, are reviewed for use as, or guidance in creating the cluster statements.

The topic, women and athletics is included within the Competition and Benefit to Females clusters, and contains differing views about women, athletics and competition.

The relevant literature about attitude theory and measurement is reviewed and literature pertinent to the selection of the groups to be studied is surveyed. A summary is included after each major section of the Review of Literature.

**Chapter III:**

Methodology will review literature covering test construction, for both the attitude scale and the demographics instrument. Item selection is covered, along with the results of the pilot testing, the selection of the samples, and the methods of distribution of the questionnaires. Information on the reliability and validity of the instrument is presented, along with the test procedures used to analyze the data to find answers to the research questions.

**Chapter IV:**

This chapter presents the findings of the study and an analysis. The answer to the primary research question and its corollary are stated. The response rate by group and gender within groups is reported. A needed correction in the scoring is explained and a comparison of alumni vs. non-alumni within the Faculty group is made. A cluster by cluster analysis among the five groups (alumni, faculty, parents of student-athletes, students, and student-athletes) is
presented. Since the focus of the study is on relationships, an analysis of all possible combinations of the primary independent variable, group, and the two secondary independent variables, gender and location of high school from which the subjects graduated, are also included. The chapter is concluded with a factor analysis across all 544 returned questionnaires and the discussion it generates.

Chapter V:
This study may pose more questions than it answers; however, the primary research question and its corollary had to be answered first. This chapter produces suggestions for further research, including reuse of the questionnaires constructed as a part of the study. Some recommendations for use of the findings are included. In some cases a further analysis of the demographic variables in relation to the dependent variables will be required first. A large amount of data was gathered but is not analyzed as a part of this study. It is possible that further analysis of the data might lead to possible explanations of some of the findings.
CHAPTER II. REVIEW OF LITERATURE

The purpose of this study is to compare the attitudes of five different university related groups, alumni, faculty, parents of student-athletes, students, and student-athletes, in regard to athletics. The term athletics is defined and compared to the term sport. The worth of athletics as a topic for study is documented by tracing its place in society, historically and currently. The close association of American colleges and athletics is also reviewed.

This is grounded theory research (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Many quotes are included from the reviewed literature. Many of these quotes act as data and are used in the development of the conceptual categories. From these categories clusters of ten items each are drawn to form the questionnaire developed to examine attitude toward athletics. Direct quotes are considered especially applicable in forming conceptual categories. These quotes are expressions of attitudes attributable to a variety of experts in a variety of areas. The fact that they have been reported in the media, or contained in drama, also creates the opportunity for these statements to influence others in the formation of their attitudes (McGranahan, 1951; Sudman & Bradburn, 1982). Best (1981) indicates that when choosing items to be used in conjunction with a Likert-scale for the assessment of attitudes, the number of individuals expressing an opinion is more important than is the accuracy of what is stated.
Definition of Athletics

The different definitions of the term athletics, or the terms sport, game, or play and the confusion that surrounds them, mirrors the differences in the perceptions that can be held by different groups. The definitions of play according to Webster's New Collegiate Dictionary (1949) are:

(1) an act of briskly handling or using a weapon or instrument (2) the conduct, course, or action of a game, (3) a particular act or maneuver in a game, (4) the spontaneous activity of children. (verb) (1) to engage in sport or recreation, (2) to deal in a light, speculative, or sportive manner, (3) to move or function freely within prescribed limits, (4) to engage or take part in a game.

Webster's definitions of sport and athletics in order are:

(1) a source of diversion, (2) physical activity engaged in for pleasure

(1) exercises, sports, or games engaged in by athletes, (2) the practice or principles of athletic activities

The confusion over the term athletics even occurs as to its proper grammatical use, as to whether the term required a singular or plural verb. A grammarian was consulted who at first stated that the term required a singular verb as in athletics is. However, some continued discussion created less surety. The dictionary definition still left confusion, but when referring to "-ics" as directed, the situation became clear.

-ics A suffix used in the names of many sciences, arts, and systematic studies. Form: Such nouns as acoustics, athletics, dynamics, politics, statistics, originally had in English the singular form, as still in arithmetic, logic, music, rhetoric; but since 1600 their plurals have been the
regular forms probably in imitation of the Greek. . .

Construction: As denoting a science or art or its
subject matter, nouns in -ics are now construed as
singular. (p. 410)

Many individuals mistake athletics for sport. Though their
histories parallel each other and sometimes intertwine, the
difference between the two is described by Saner (1980):

Sport has its own distinctive characteristics:
its purpose is the delight and pleasure of the
participants, its norm is the mutuality of generous
sharing, a kind of magnanimity. The other, athletics,
is quite different . . . a competitive test of
superiority, its norm is the rigorous practice of
fairness within rules and conditions aimed at
establishing, through competition, "the objective and
accurate determination of superior performance and
ultimately, of excellence."

Thus, one may say, whereas sport rests on an
agreement to join with others in shared fun and
pleasure, and thereby involves a spirit of spontaneity,
cooperation, and even collaboration in the others' fun
quite as much as one's own, athletics rests on an
agreement among competing parties to abide by the
conditions and rules, and will tolerate no secret or
forbidden advantage over the other in the trial for
superiority. (p. 8)

Michael A. Salter (1977) arranges kinesthetic activities on a
continuum that goes from the solitary play of a child to the terminal
contest. For the majority of world history, this holds true. Salter
presents this continuum as an aid in discussing the rituals of Native
North Americans. He lists "play," "ludic game," "sport,"
"athletics," and "terminal contest." Salter, in listing the terminal
contest, means just that, a fight to the death. There were times
when the most skilled individual had to compete to protect the entire
band, sometimes even against his/her will. However, the tenor was
not always grim. Prizes were awarded and betting was common.

The "ludic game" as listed by Salter may refer to the treatise, *Homo Ludens: A Study of the Play Element in Culture* by Johann Huizinga (1939). Huizinga is frequently quoted in studies on the "professionalization of play." Huizinga is usually presented as a stalwart protector of the fun, lighthearted aspect of play. Salter sees Huizinga's definition of play as emphasizing the fun aspect, but not to the exclusion of winning.

Huizinga, in defining play, also includes some of the points of athletics. He defines play as "a stepping-out of real life into a temporary sphere of activity with a disposition all of its own." He notes that the activity is played in a special place, one used only for this play. Huizinga also stresses the solidarity of the group that extends beyond play. These things can also be said about athletics. The one aspect missing in the ludic game seems to be the seriousness found in varsity athletics and the financial reward found in professional athletics.

During much of history, kinesthetic activities occurred across most of the width of Salter's continuum. During part of history, the participants of the activities were socio-economic equals. However, the idea of sport activities being important for their form and not for their outcome is one concept that didn't appear before the end of the nineteenth century and the beginning of the twentieth (Keating, 1979).
"Not that you won or lost--but how you played the game," was the slogan of a national Sportsmanship Brotherhood whose eight rules were:

1. Keep the rule.
2. Keep faith with your comrades.
4. Keep your temper.
5. Keep your play free from brutality.
6. Keep pride under in victory.
7. Keep stout heart in defeat.
8. Keep a sound soul and a clean mind in a healthy body.

When the Olympic Games resumed in 1896, organizers saw the competition as sport, not athletics. These were to be true amateurs competing, representatives of the elite. The dramatization of the conflict between this philosophy and that of the competitive athlete's need to win is shown in the film, *Chariots of Fire* (1981). This film follows a period in the life of two track athletes competing for Great Britain in the 1924 Olympics. One of the men is Harold Abrahams, a student at Cambridge University. Abrahams is characterized as a man with a consuming need to win. When some of the professors at Cambridge heard that he was paying a professional coach and was participating in arduous training, they felt the need to intervene. The dramatized dialog shows the conflict:

Professor (to Harold): You aim to win at all cost?

Harold: At all cost, no, but I do aim to win. Perhaps you would prefer that I play the gentleman and lost?

Professor: To playing the tradesman, yes. My dear boy, your approach has been a bit too plebeian. You are the elite and you should behave as such.
Abrahams wins a medal, but the film ends without any discussion of what happens directly after the games. However, the film begins with Abrahams' funeral and mentions that Harold Abrahams had become a revered member of the British Olympic Committee. For an in-depth review of history refer to Appendix F.

Earlier Studies Using a Questionnaire to Assess Attitudes Toward Athletics

A computer search was conducted that showed only one report that dealt with attitudes, athletics and higher education. The article, "College Students' Attitudes Toward Intercollegiate Athletics", by Jensen, Leonard, and Liverman (1981), is taken from a paper presented at the First Annual Conference of the North American Sport Sociology Society, in Denver, Colorado, October 16-19, 1980.

Academic major is the primary independent variable investigated by Jensen, Leonard, and Liverman, who, in looking at the interaction effects of gender, found gender had no effect. The dependent variables for their study were taken from a questionnaire by Ward (1970) taken from a Laboratory Manual in Experimental Social Psychology. The physical education majors differ significantly from the sociology and math majors. The sociology and math majors do not differ significantly from each other.

A quote from Jensen, Leonard, and Liverman is representative of those found in most of the other studies reviewed.

Ironically, there is a dearth of research regarding attitudes toward intercollegiate athletics. It is as
if the results would be so self-evident that the time and effort involved in carrying out such an investigation would be seriously questionable. A search of the literature regarding attitudes toward intercollegiate athletics was nearly fruitless in substance but very surprising and revealing of the neglect of empirical inquiries in this arena. (p. 67)

Consistent with this statement, very few other studies were located. Those that were, often had a very narrow treatment of the subject (Dudycha, 1932).

In 1953, B. F. McCue published "Constructing an Instrument for Evaluating Attitudes toward Intensive Competition in Team Games." The study includes a 77-item scale. Many of the items are interesting, but the focus is too narrow for this study.

Also in 1953, P. M. Scott published a study, "Attitudes Toward Athletic Competition in Elementary Schools." The age group is wrong for this study, but the results comparing teachers, administrators, and parents are interesting. Parents tend to respond more favorably than teachers or administrators. However this is in degree only, since all groups tend to respond favorably.

In 1956, R. McGee published "Comparison of Attitudes Toward Intensive Competition for High School Girls." She analyzed 1,347 individual answer sheets received from parents, teachers, administrators, and coaches of high school girls from three different venues: schools in Illinois that did not sanction competitive athletics for girls, schools in Iowa that did not take part in girls' athletic competition and schools in Iowa that did take part, and were members of the Iowa Girls' High School Athletic Union.
The questionnaires from members of the Girls Athletic Union were returned at a rate of 48% while the other two groups returned about 27% each (the percentage overall was 34%). McGee reports no significant difference between the groups in Illinois and the non-participating schools in Iowa. Both groups, however, vary significantly from members of the Iowa Girls High School Athletic Union, whose responses are most positive.

In 1973, J. P. Williams, Jr. conducted an assessment at Iowa State University. His assessment utilizes three different forms, College Students Speak, a demographics questionnaire, a questionnaire regarding value orientations based on scales published in the Higher Education Measurement and Evaluation Kit (Pace, 1972), and an attitude scale constructed by Williams using items from a scale used by Bronzan in an unpublished dissertation (1965). There was a large drive under way to raise money to build a new football stadium at the time of the Williams study and whether or not this was money "well spent" seems to be one focus of the study. The other seems to center on value orientations of the subjects. These specific foci tend to make the items unsuitable for this study.

In 1975, Spreitzer and Snyder published "The Psychosocial Functions of Sport as Perceived by the General Population." They randomly selected 945 persons from the city directory of Toledo, Ohio. Ultimately, 510 questionnaires were returned. The responses generally show sport to be regarded as a "beneficent institution." Females tend to see sport as a positive socializing force slightly
more frequently than males. Males tend to see more positive personal
benefits more frequently than females. Both men and women disagreed
that the emphasis on competition causes more harm than good.

In 1979, S. J. Grove and R. A. Dodder used the 15 items
developed by Spreitzer and Snyder to assess attitudes held by faculty
and students at Oklahoma State University. Grove and Dodder, using a
seven-point scale, indicate the subjects generally feel positively
about the social value of sport. The relationship between the
orientation toward winning and the perceptions of sport as being a
socially valuable institution provides special comment:

Popular notions and the literature in general seems to
maintain that the greater the emphasis placed upon
winning, the less likely are there to be benefits in
other areas. The present findings, however, do not
support this idea; . . . this research indicates that
the greater the orientation toward winning, the more
likely people are to perceive social benefits to
accrue from sport. (p. 90).

Also, in 1979, J. M. Jones and S. A. Williamson, published
research using the "Athletic Profile Inventory," a four-part
instrument the researchers created from a number of other sources.
Two hundred five athletes in nine different sports in both high
school and college completed the forms.

R. P. Matross (1980) conducted a phone survey at a large public
Midwestern university. The survey examined attitudes about and
knowledge of the university and its athletic program. Small
majorities report that intercollegiate athletics helps the quality of
campus life and is not overemphasized. Larger majorities agreed that
athletics provides good public relations for the university, entertainment for the students, and development for the student-athletes. One group of questions evaluates the accuracy of the students' information about athletics and the campus. Fewer than 40 percent of the respondents correctly identified the source of funding for athletics.

In 1983, Snyder and Spreitzer published the results of a study on attitudes toward the acceptance of female athletic participation. They added four new groups to the one they analyzed in 1975, one of which was from Iowa (123 people drawn from the Iowa general population in 1981). The results are generally positive in the direction of female participation; however, the most positive is the Iowa group. The researchers hypothesize that since Iowa has a long history of female sport participation, it may be that Iowans in general look upon females in sport more positively. This study also contains quotes referring to the "dearth of material available":

It is clear that the social expectations associated with gender prescribe different orientations toward sport for males and females. According to Hall (1978), the anomalous nature of female sport participation may be a factor in the dearth of research concerning girls and women in sport. For example, Hall (1978, p. 2) has written, Women's sport is rarely evaluated sui generis, something worthwhile in its own right as an autonomous and meaningful sphere of human experience. (p. 3)

In 1983, Miller Lite commissioned a report (Pollock, 1983), "American Attitudes Toward Sports." Professional interviewers surveyed 1666 individuals (1319 from the general public, 117 sports
The study contains a large number of variables. Most of the results are positive.

The findings in regard to parents' attitudes toward their children's participation in sports provide some insights. The results state that 75% of the parents surveyed *almost always* or *often* encourage their children to participate in sports and 72% encourage their children to practice their skills away from the game. Sixty-one percent encourage their children to be aggressive and 34% encourage their children to try to be better than other team members. Subjects who class themselves as "fans" do these things to a greater degree than those who do not see themselves as fans. Forty-five percent of the parents feel as if they are actually competing as they watch their children play. Ninety-two percent of the respondents *agreed strongly* or *agreed somewhat* that competition is "good for kids" because it teaches them to strive to do their best. Eighty-six percent feel it is important for girls to participate in sports as they are growing up and 95% feel this is true for boys.

The study shows that 75% of those surveyed believe that athletes provide good role models for children and 59% rate the athlete as the best role model. Results indicate that 24% of those questioned feel that sports brings the family together. Researchers find that slightly more women than men feel this way. A majority (57%) of couples share a very high interest in watching sports. Only 11% report they have a low interest in watching while their spouse has a high interest.

*Lite Beer from Miller along with the Women's Sports Foundation*
commissioned a report on women in sport (Pollock, 1985). Questionnaires were mailed to a random sample of members of the Women's Sports Foundation. They received 1,682 responses. Ninety-three percent of the respondents feel that successful competition in athletics helps them later in life. Sixty-nine percent of those surveyed agree that "women's sports should be kept separate from men's so that women are free to develop their own skills." Though 57% agree that society forces them to choose between being feminine and being an athlete, only 41% see intense athletic involvement as complicating romantic relationships. Ninety-one percent see participation in racially mixed groups as reducing prejudice.

In 1988, the Wilson Sporting Goods Company commissioned a report (Garfield, 1988), "Moms, Dads, Daughters, and Sports." The survey was conducted using telephone numbers selected at random, containing at least one from each state in the Union. The study indicates a high level of acceptance among parents for their daughter's athletic participation, which they perceive as being generally beneficial to their daughters.

More than any other advantage, parents value their daughter's sports experience because it contributes to her physical well-being; when asked how girls benefit from playing sports, 55% of parents mentioned physical and health factors. Sports and fitness activities also help build confidence and self esteem (41%); they promote teamwork, foster cooperation, and they encourage friendships (27%). As one parent summed it up, girls who play sports "become better coordinated, they are healthier, and they learn to get along with others. They learn to be part of the team." (p. 3)
Summary

The literature reviewed generally deals with responses to individual items, without making an attempt to view athletics as a whole. Only a small number of studies deal with college/university athletics in general, and those that do, make no attempt to compare the groups selected for this study. A number of demographic variables are suggested by the reviewed studies. McGee (1965) and Spreitzer and Snyder (1983) both indicate that Iowans seem to be more favorably disposed toward athletics for females. Comparison over all these variables is beyond the scope of this study. However, since some data exists as to prior responses to these items, it seems wise to include them so that they might be reviewed at a later time to aid in judging the possible validity of the attitude instrument.

Development of Conceptual Categories

This is a grounded theory study. Strauss and Corbin (1990) indicate that all kinds of data are usable. A review of material published in scholarly journals and in the popular media as well as anecdotes told to the researcher suggest a number of conceptual categories for consideration. These are Basking-In-Reflected-Glory (the tendency of individuals to identify with athletic teams and their symbols), Belief (in athletics as an agent for socialization into society), Benefit to Athletes (benefit to the individual participant), Competition (attitude toward competition), Facts (knowledge of facts about athletics and
athletes), and Importance (to colleges and universities).

Each of these conceptual categories, later called clusters, with related research is presented. The relationship of each cluster to attitude theory is also included. Because of the need for large amounts of evidence in creating the conceptual categories, and the value seen in using items from earlier studies (Sudman and Bradburn, 1982) and from the electronic and print media (Best, 1981; McGranahan, 1951) a large number of quotes are used.

"Basking-In-Reflected-Glory" Cluster

The work by Cialdini, Borden, Thorne, Walker, Freeman, and Sloan (1976), Cramer, McMaster, Lutz, and Ford (1986), Lee (1985a, 1985b), Mann (1974), and Sloan (1979), examining what they have named "Basking-In-Reflected-Glory" has isolated an attitude that is concentrated in the affective area. This affective content is believed to stem from personal needs broadly related to issues of self and identity. Individuals holding attitudes of this type generally are believed to see the object as a symbol, often more important than it really is (Herek, 1986). They tend to imbue the referent with positive qualities that tend to, in turn, imbue to those involved the same positive qualities and can be seen as satisfying needs of the person to improve his/her ego strength. Researchers identifying this type indicate it comes from conditioning early in the individual's life and is unresponsive to rational arguments. Sherif, Sherif, and Neberglall (1965) theorize that the stronger the ego involvement, the
more resistant is the perceiver to making a change in attitude.

This is also an example of an attitude or a part thereof, where one can test the proposed action taken or intended. This is because it can deal with overt behavior in conjunction with a sporting event. Objectively one can count the number of people at a football or basketball game or other athletic contest who are wearing the school colors and/or symbols. One can objectively count the number of students who pass a given spot on campus on a given day wearing clothing with the school colors and/or symbols (Cialdini et al., 1976).

One anecdote disclosed to the researcher tells of an alumnus, who went shopping at a mall in Minneapolis wearing an Iowa State sweatshirt. A clerk in a store the alumnus and his wife visited indicated that it was too bad that they had missed the owner, also an Iowa State alumnus. Shortly after leaving the store, the alumnus and his wife found themselves being chased down the aisle of the shopping mall by a former Iowa State and Minnesota Vikings football player. He caught them and they enjoyed a number of cups of coffee and reminiscences of Iowa State, even though they had never met before.

A quote from a study by Cramer, McMaster, Lutz and Ford does a thorough job of summarizing much of the research in this area of close identification with athletic teams. Several of the items for the cluster, Basking-In-Reflected-Glory are based this lengthy quote.

Sport fans and athletes comprise what Sloan (1979) terms a "fan-team group." A number of empirical investigations provide support for the widely held opinion that the role played by sport fans often exceeds spectatorship; fans do not see themselves as mere spectators but as participants in an important
They believe that they are an integral part of an important meaningful group pursuing a common goal. Their financial, emotional, and motivational inputs can often dramatically influence the result of an athletic contest (Edwards, 1973; Roberts, 1976; Thirer & Rampey, 1979; Tutko & Richards, 1971).

Fans not only affect sporting events but in turn, are affected by the sporting events. For example, Sloan (1979) indicates that fans and athletes respond similarly to the anticipated contest. Before a game, fans, like athletes, "prepare" for the sport by ruminating over past games and predicting and discussing strategy for upcoming ones" (Sloan, 1979), p. 222). Because sport fans make a contribution to the team's performance, they also share with the athletes the consequences of the contest's outcome (Edwards, 1973; Roberts, 1976; Tutko & Richards, 1971). Members of the winning fan-team group feel happy and excited while members of the losing fan-team group feel angry and discouraged (Sloan, 1979). As a result, fans of the winning team frequently attempt to emphasize their identity with the fan-team group, whereas fans of the losing team do not (Cialdini et al., 1976). Hence, the important role played by emotion in sport (Wallerand, 1983) pertains to all members of the fan-team group. Consistent with their reports of feeling happy and uplifted following their football team's victory, winning fans are more benevolent than losing fans when help is requested (Sloan, 1979). Mann's (1974, 1979) research into the sore-loser phenomenon suggests that losing fans are less likely to help because they are angry, frustrated, and sad. (p. 31)

Goodger (1985) argues that in some cases this type of attitude or behavior is similar to that shown toward religion. Eric Dunning (1986) makes the following observation about sport:

Viewed from yet another angle, it is a trend in which, in countries all over the world, sport . . . for many people, seems to have religious or quasi-religious significance in the sense that it has become one of the central, if not the central, sources of identification, meaning and gratification in their lives. (p. 205)
It is said that "everyone loves a winner." Indeed, many public figures as well as people in the general population want to identify with a winning team. Presidents and governors have received champion teams in appreciation of their victories. New York has given its famous "ticker-tape parades" for winning sports teams as well as its country's military heroes. Championship teams are often met at airports with crowds of well-wishers wanting to share in the good feelings surrounding the team or individual.

W. L. Umphlett (1985) also speaks to this phenomenon:

Sport confronts the individual with his/her own personal terrors and rewards persistence and courage. In the crowd cheering of the victory of the underdog can be found their collective hope that they too, the underdog, may sometime be granted that same victory (p. 44).

Summary

Herek (1986) sees attitudes as strategies for satisfying psychological needs. This cluster includes two different types of statements. Some statements are intended to assess the tendency to identify positively with the athletic teams, their logo, and the University in general, as well as a tendency to desire regional identification with athletes. Another side of this cluster includes statements about identification with the negative side, when a team loses. This cluster is called the Basking-In-Reflected-Glory cluster. The ten items in this cluster and the mean (average) scores across the 544 subjects for each item-statement are found in Appendix D.
Belief Cluster

Spreitzer and Snyder (1975) and Grove and Dodder (1979) tested subjects' beliefs concerning the integrative aspects of athletics in regard to society. The Spreitzer and Snyder research, surveys individuals in the general population. The Grove and Dodder research takes place on a college campus. The subjects perceive that athletics acts as a positive influence on participants in keeping youth out of trouble, developing a sense of patriotism, acting as an agent of social mobility, teaching self-discipline, respect for authority, and developing a desire for and sense of fair play.

Wohl (1970) sees the integrational function of athletics as being something of "exceptional social significance." Dips in the suicide rate have been found around certain public holidays. Curtis, Loy, and Karnilowicz (1986) hypothesize that such a dip might also be found around major sporting events such as the World Series in baseball and the Super Bowl in football. "The effects of the sport ceremonies are weak, but the common elements in the patterns of findings for the sport events and civil holidays suggest that the suicide-dip phenomenon extends to these sport ceremonies" (p. 1).

Athletics has taken a central part in area revitalization within some communities. A mayoral commission in Indianapolis, Indiana in looking for a binding force for their area revitalization program, noted that there were a number of athletic events in their area that were national in scope. They used this as a starting point and found some definite positive results (Miles, 1985; Hansen, 1991).
When the Detroit Pistons of the National Basketball Association first made the playoffs in 1987, the sportscasters covering the game frequently mentioned that the success of the Pistons contributed a great deal in returning pride to the Detroit area.

G. J. Smith (1976) examines the phenomenon of sports heroes and whether or not this contributes to social integration. He makes the point that sport is something that the "common man" can observe and talk about authoritatively. The spectator can immerse himself emotionally and visually. Smith indicates that, though there are many worthwhile models in science, education, and humanities, they are rarely models adopted by large numbers. One reason stated is that the average person rarely has the knowledge to really appreciate the model. Smith makes a final point by stating that athletes stand always ready to meet public challenge. They are decisive, take risks, and, win or lose, come back for more.

In the same vein, W. L. Umphlett (1985) makes the following observations:

Over a lifetime, no athlete wins all the time. Teaching oneself how to lose, how to learn from errors, how not to make excuses, and how to rise to struggle again on another day is learned in every battle with oneself to master every element of a given sport. (p. 47).

Sport is also important in countries other than the United States. In "International Functions of Sport in the Light of Research Based on Questionnaires," Michel Bouet of France (1969) concludes that sport is connected with the need for affiliation. He
sees the need for victory coming out of this affiliative connection and acting to reinforce it.

Andrzej Wohl of Poland (1970) writes of "Competitive Sport and its Social Functions." He lists four major functions that sport (athletics) has performed over the years: (1) defense of the individual or groups, (2) perfection of forms to be adapted and used for the masses, (3) education and development of role models, (4) integration of individual group members. As an example of this last function Wohl states:

Top-class athletes have become the travelling salesmen of international cooperation. Competitive sport recognizes no local, national or racial barriers or differences of world outlook and it could not exist at all if one wanted to set up such limitations for sport. (p. 123)

Umphlett (1985) passes on two opinions about sport as a contributor to American society:

Sport is both a metaphor for American life and an escape from the banality or complexity of life. It is an expression of values fundamentally important to the American people, a reinforcement of those values—like equal opportunity—truly exist in the society. Sport thus offers the writer an ideal microcosm for analyzing and criticizing these American characteristics. (Criard, p. 181)

Competitive professional sports, notwithstanding their shortcomings, uphold standards of competence and bravery that might otherwise become extinct. (Lasch, p. 55)

Wohl (1970), in response to criticism of competitive athletics makes the following statement.

Therefore nothing is wrong if young people accept top-class athletes as their heroes, whose example they
Social mobility is a very specific and much debated possible benefit of athletics. Many individuals see college athletics as an opportunity for social mobility--those starting with no economic advantage rising to a higher socio-economic status (DuBois, 1979; 1980; Garfield, 1988; Loy, 1972; Oliver, 1981; Picou, & Hwang, 1982; Pollock, 1983, 1985; Sack, & Thiel, 1979). Many see this as a benefit to society, a strong force for integration and a beginning of the solution to racial troubles. However, other individuals (Edwards, 1983; 1984, 1985; Harris & Eitzen, 1978) see this as a "tragic trap." They feel that young minority males with athletic ability often concentrate only on that aspect to the detriment of their academic life. The enormous salaries published in the media make these individuals strong role models. It is undeniable that for a few, the degree of socio-economic mobility is immense. The fact of potential social mobility was seen in ancient times as well. It was less criticized then than now, because then, there was virtually no other alternative. Education was a privilege of the elite. Athleticism was one of the few ways those below the privileged classes of society had to improve their position in life. (For a further review of history see Appendix F.)
Summary

The quotes in this category appear to fit into the framework of attitude theory in having both affective and cognitive components. Fishbein and Ajzen (1975) state that this type of attitude is shaped by perceived social norms governing behavior and by beliefs about the ability of the behavior to meet personal goals. These items are similar to the ones used by Snyder and Spreitzer (1975) in regard to development of belief that athletics aided with socialization into society. The ten items selected from this category to form the Belief cluster are found in Appendix D. The average (mean) score across all 544 respondents for each individual statement within the cluster is also included.

Benefits of Athletics to the Athlete Cluster

In general, many items on the existing questionnaires deal with specific beliefs people have in regard to the benefits of athletics. Quotes from individuals speaking of their experiences with athletics, as participants or observers, are presented.

Frank N. Gardner (1960) wrote of his experiences with intercollegiate athletics:

As an ex-athlete who also participated in intercollegiate debate and student religious activities, sang second tenor in the college male quartet, played a not-so-hot trombone in the college band and orchestra, and engaged in more strictly academic co-operative enterprises, I can testify that there were some things I learned better and faster as a participant in intercollegiate athletics than in any other way. These things were cooperation; striving
for individual excellence; self-discipline; the subordination of self, if necessary for the good of the group; achieving and winning if at all possible; and best of all, winning within the rules. Quite readily I will grant that these values may be learned in other ways and in other activities. Yet I must state that for me, they came chiefly through intercollegiate athletics. (p. 364)

it seems to me that intercollegiate athletics serves better than any other activity as a rallying point for student and alumni interest and loyalty. For years I have observed that the concerts of the Drake-Des Moines Philharmonic Orchestra or the Drake University Theatre's presentations do not quite engender the kind of personal involvement which takes place when my university plays St. Louis University in basketball. Some may deplore this, but it remains a fact. The important thing is to utilize the fact wisely. (p. 365)  

In his book, *Open Field*, John Brodie, a collegiate and professional football quarterback (cited in Umphlett, 1985) states:

Quarterbacking had provided me with a great education. I had found a way of being me and being in the world that I value very much. It's one reason I finally learned to love football, and love it now.

The film, *Hoosiers*, (1986) deals with student-athleticism. A conversation is held between the basketball coach of a very small rural high school and one of the teachers. The teacher has persuaded the local high school star to give up basketball and concentrate on his academics.

A moderately heated exchange takes place between the two:

Teacher: Mr. Dale, leave him alone. He's a special kid. If he works real hard, he can get an academic scholarship to Wabash College and get out of this place.

Coach: Is there something wrong with this place?
Teacher: For Jimmy, yes. You know, a basketball hero around here is like a god. I've seen 'em, the real sad ones. I don't want this to be the high point of his life. I've seen 'em. They sit around the rest of their lives talking about the glory days when they were seventeen.

Coach: You know, most people would kill to be treated like a god just for a few moments.

Jack Kemp, Secretary of Housing and Human Development was in Des Moines, Iowa in mid-October, 1990 making a political speech. Kemp had been a college and professional football quarterback. During his speech he was interrupted by a heckler shouting at him. As the heckler was removed by the police, Kemp said, "When you've been booed by 60,000 people, one doesn't hurt very much."

This reinforces the comments made by W. L. Umphlett (1985):

Most athletes, like most teams, lose more than half the time. Each athlete discovers in himself certain limitations and finds himself inferior to others in certain skills. Moreover, our major sports take place under the eyes of connoisseurs, and ridicule for failures is quite open and unabashed one of the most important experiences in sports, therefore, is the experience of public failure. Failure to which is added, sometimes in good humor and sometimes meanly, an element of humiliation. Since every exercise of freedom involves the risk of failure, there is in sports an excellent preparation for learning how to try things publicly, even at the risk of public failure, and of learning how to accept both failure and defeat with a certain grace. (p. 47)

There are studies that attest to the fact that athletes, especially in high school are popular and receive substantial amounts of adulation or hero worship (LeUnes & Nation, 1982; Rehberg & Cohen, 1975; Snyder & Spreitzer, 1979 Spady, 1970). Thirer and
Wright (1985) studied 600 high school students. They report that being an athlete is a key to popularity for males, less so for females, though it is becoming increasingly so for females also. Buchanan, Blankenbaker, and Cotten (1976) report that athletic ability and popularity are positively related as early as elementary school. The studies also indicate that those who participate in athletics in high school are also more likely than their peers (keeping SES, IQ, and GPA constant) to attend college. However, those who participate only in athletics do less well in college than the athletes who participate in service-type extracurricular activities as well as athletics. Snyder and Spreitzer (1977) find that correlation between extracurricular involvement and college aspiration is highest for the participants with lower academic records.

Ogilvie (1968b) reports that those who are still participating in competitive activities, as they reach adulthood, are likely to have the following personality traits: Ambition, organization, deference, dominance, endurance, and aggression. There are few introverted types and emotional maturity ranges from average to high-average. Other qualities commonly found are self-control, self-confidence, tough-mindedness, trustfulness, intelligence, high conscience development, and low levels of tension. Ogilvie states that some of this may be due to self-selection, but many believe that participation in athletics tends to encourage these qualities.
W. F. Blann (1985), in looking at male and female athletes at Division I and Division III schools makes comparisons as to how much time the athletes spend thinking about their sport and how well they make realistic plans for the future. Blann's findings indicate that male athletes in all cases spend more time thinking about their sport and have less realistic goal-setting behavior than do female athletes. Hall (1990) reports that males also have less realistic goal-setting behavior when predicting ultimate performance from pre-competition skill and a trial performance.

To a large degree, the benefit, or lack thereof, to the athlete from participation in his/her selected sport depends on who is doing the evaluating. Brower (1979) states that parents expect their children to have contact with good role models, and to generally have experiences that produce a sense of autonomy, power, and social and interpersonal skills. The study, "Moms, Dads, Daughters and Sports" (Garfield, 1988) and the "Miller Lite Report on American Attitudes Toward Sports" (Pollock, 1983) also find that parents expect, and feel that their children find good role models in athletics.

Research, media hype, and myth indicate that the amount of benefit the individual sees athletics bringing to the individual athlete depends to some degree on whether the athlete is a male or a female. For many years, a desire for achievement in competitive situations was considered anxiety producing and unfeminine (Horner, 1972; Lenskyj, 1986). For many years, the media and female physical
education instructors promoted the idea of the frail, sweet woman, who was totally disinterested in anything competitive, especially athletics. They asserted that competition was harmful for females, physically, emotionally, and morally (Beran, 1983; Lenskyj, 1986; Robicheaux, 1975).

Helen Lenskyj (1986) gives a representative account of the various negative views of females involved in sport. In the following two paragraphs, Lenskyj includes most of the negative statements made, concerning female athletes.

Throughout the century of women's mass sporting participation, femininity and heterosexuality have been seen as incompatible with sporting excellence: either sport made women masculine, or sportswomen were masculine at the outset. In the last half-century, the term "masculine" has often implied lesbian. Such reasoning reinforced the polarized view of masculinity and femininity, both social and biological, thereby underscoring sex differences and legitimating male supremacy.

The polarity was illustrated in sport by chromosomal measures of sex phenotype and by two scholarly inventions: role conflict among female athletes and the pathologizing of "tomboyism." It is not coincidental that efforts to establish the abnormal sex-role identity and sexual orientation of female athletes were concurrent with a wave of feminism, nor is it new to discredit female intruders in sport, politics, business and other bastions of male supremacy as man-aping, man-hating and/or lesbian. (p. 95)

In 1923, the Women's Division of the National Amateur Athletic Federation was organized. Agnes Wayman lists the abandonment of girls' state basketball tournaments as the first of a list of accomplishments of the organization (Robicheaux, 1975). Despite the
expert opinion of the day (physicians and female physical educators), the Iowa Girls High School Athletic Union was formed in 1925 for the purpose of sponsoring continued athletic opportunities for females (Beran, 1983; Enright, 1976). During the 1920s, 30s and 40s, girls playing basketball in rural Iowa high schools refuted the claims of these experts on an almost daily basis (Beran, 1983; Enright, 1976; McGee, 1956). Between 1956 and 1970, the Iowa Girls High School Athletic Union sponsored championships in golf, gymnastics, track and field, softball, swimming, tennis, and volleyball (Enright, 1976).

The girls basketball tournament is a part of the social fabric of the state (Beran, 1983; Enright, 1976). On March 13, 1991 two front-page stories were devoted to the Iowa Girls' High School Basketball Tournament. In March, when the tournament is held, the weather in Iowa is frequently unpredictable, often very snowy. Snowstorms in early March are generally referred to as "Tournament Weather." The lead on a story by Patrick Beach reads "Tournament-time snowstorm keeps date with destiny." The next day, March 14, the Des Moines Register carried a color cartoon, drawn by Brian Duffy, on the front page, showing a female basketball player dribbling a large snowball with a small figure representing the public, trapped within (see following page).

Because of Iowa's long and successful history in regard to athletics for females, it would seem that Iowans might see a smaller differential between athletics being beneficial to females when
compared to males, than might individuals from other areas of the country (Beran, 1983; Enright, 1976; McGee, 1956; Snyder & Spreitzer, 1983).

Beran (1983) reports finding female basketball players in Iowa unconcerned about their popularity. In fact, they felt that they had benefited from athletic participation.

A study by Eva K. Balazs (1975), "Psychosocial study of outstanding female athletes," includes an "ex post facto analysis of
the life histories of 24 Olympic female champions." Her findings include the following attributes:

- a deep desire to excel, early goal setting, and the ability to follow through on these goals, a strong self-concept, well-developed heterosexuality, and parents who were supportive and had high expectations for their daughters.
- The personality profile of the group showed a balanced curve, indicating emotional stability and normal personal adjustment. (p. 267)

Prior to the late 1970s both the popular media and scholarly research have been devoted to the idea that male athletes are very popular and that their sexual image is enhanced by their participation in athletics, but that females are very concerned about the negative connotations that athletic participation has for them in the same areas (Nixon, 1980; Snyder & Kivlin, 1977; Spreitzer, Snyder, & Kivlin, 1978). However, Ho and Walker (1982) report that the female college athletes they surveyed had a more positive body image than did non-athletes. They also indicate that statistically significant differences exist between the groups for the qualities of self-confidence, achievement, dominance, and aggression with no perceived loss of femininity. Snyder and Kivlin (1977) also find that athletes are less concerned about any negative consequences in regard to their femininity than are non-athletes. Kingsley, Brown, and Seibert surveyed 240 college women, half athletes and half non-athletes. They compared their attitudes toward high and low aspiration softball players and dancers. They found no lack of social acceptability for the athletes.
Nixon, Maresca, and Silverman (1979) and Selby and Lewko (1976), report females see substantially more benefit to females in sport than do males. Spreitzer and Snyder (1975) find that females are more likely than males to see athletics as a positive socializing force, while males tend to see more benefit accruing to the individual athlete.

McGee (1956) also notes that parents of girls who participated in athletics show more positive views about athletics for females than do parents of girls who did not participate. Snyder and Spreitzer (1978) published "Socialization Comparisons of Adolescent Female Athletes and Musicians." This is interesting from the point of view that in addition to female athletes, they also looked at a group of girls who were actively involved in instrumental music. They indicate many common findings in investigating both the musicians and the athletes.

The possible discrepancy between male athletes and female athletes necessitates finding a way to indicate the gender of the athlete deriving benefit. The idea of leaving the definition to chance was rejected, as was the idea of defining all athletes as males. The chance exists to compare the subjects' attitudes about athletics being beneficial for males with the same attitudes toward females. Each of the ten items in this category is listed twice, once naming the athlete as a male, and the other naming the athlete as a female.

More recently, psychologists have studied feminine and masculine
traits, traits having to do with personality, not sexual orientation. Many experts find the presence of both male and female personality traits within one person (androgyny) to be positive. Psychologists (Baumrind, 1982; Bem, 1975) divide groups into sex-typed or androgynous. The female traits are nurturance and passivity; male traits are aggressiveness and self-assurance. Researchers find that women who possess the traditional male qualities or who are androgynous, exhibit higher self-esteem than those possessing the traditional female qualities (DelRey & Sheppard, 1981). DelRey and Sheppard questioned 119 female college athletes. They report that more of them fell into the androgynous category than any other single category (39). The remaining 80 were divided evenly among masculine (27), feminine (26), and undifferentiated (27). The findings of Crown and Heatherington (1989), Croxton, Chiacchia, and Wagner (1987), Fabian and Ross (1984), and Snyder and Kivlin (1977) indicate that the female role may be situationally specific.

Summary

Literature contains many studies questioning or attesting to the fact that athletics is beneficial to the participants. Generally the research agrees that athletics is generally beneficial to males; however, there are concerns being voiced by a number of researchers that are concerned that young males, especially black males, may be concentrating too heavily on athletics at the expense of academics. Females are thought by some to benefit less than males. A
number of researchers have questioned whether or not females can actively pursue competitive athletics, although recent studies indicate that females also benefit from participation in athletics. Athletics for girls in Iowa has had positive connotations for at least ninety years. There have been differences of opinion during that period, but at all times there have been some individuals that saw positive qualities existing for female athletes. Not only the history of Iowa, but the history of society extending beyond written evidence, also includes female participants (see Appendix F).

Ten items have been selected from the research reviewed in this area. The ten items are transformed into two clusters by identifying the athlete in one set as a female and the athlete in the other set as a male. The items included in these clusters (conceptual categories), Benefit to Males and Benefit to Females, along with the mean (average) scores across all 544 individual respondents for each individual item-statement are found in Appendix D.

**Competition Cluster**

Competition is a social process that is so pervasive in Western civilization that no one can escape it. Indeed the pervasiveness of competition has so polarized our views that some people shun it and others glorify it. Apathy toward competition is not a problem; extreme emotion and irrational thought frequently are. (Martens, 1975, p. 66)

Sherif and Cantril (1945; 1946; 1947; Sherif, Sherif, & Nebergall, 1965) find that an attitude once formed, can in turn, affect subsequent selectivity in perception. Bias can manifest
itself by an individual's selecting only perceptions that are congruent with the belief system of that individual. Newcomb (1943) indicates that individuals tend to form attitudes that are congruent with the attitudes espoused by the groups with whom they associate.

Competition is, by definition, an integral part of athletics. E. E. Snyder (1972) classifies into categories, the slogans often seen decorating locker room walls. He divides them into nine categories, one of which is competition. Some of these slogans are used as part of the study by Jones and Williamson (1979).

It appears that many individuals view competition, winning, and athletics as a part of the American ideal. However, some individuals (Kohn, 1986) find all competitive activities unacceptable. The fact that such an attitude can predispose individuals to feel negative about athletics without knowing anything about athletics, other than it is a competitive activity, makes it necessary to include an investigation of attitudes toward competition in the investigation of attitudes toward athletics.

Kohn's attitude toward competition in athletics is shown in a quote from his book, No contest: The case against competition, where he in turn selects a quote to make his point.

Competition, though, is very serious indeed, unavoidably so. Consider the following passage from Joseph Heller's novel Something Happened, in which a school "gym teacher" is complaining to the narrator about the behavior of the latter's son:

"I try to give him a will to win. He don't have one....He passes the basketball deliberately - he does it deliberately, Mr. Slocum, I swear he does. Like a joke, he throws it away - to some kid on the other
team just to give him a chance to make some points or to surprise the kids on his own team. For a joke. That's some joke isn't it? ... he's ahead in one of the relay races, do you know what he does? He starts laughing. He does that. And then slows down and waits for the other guys to catch up. Can you imagine? The other kids on his team don't like that. That's no way to run a race, Mr. Slocum. Would you say that's a way to run a race?"

"No." I shake my head and try to bury a smile. Good for you kid, I want to cheer out loud ... I can visualize my boy clearly far out in front in one of his relay races, laughing that deep, reverberating, unrestrained laugh that sometimes erupts from him, staggering with merriment as he toils to keep going and motioning liberally for the other kids in the race to catch up so they can all laugh together and run alongside each other as they continue their game (after all, it is only a game). (p. 82-83)

Such behavior, under some circumstances would be ruled unsportsmanlike conduct. Lever (1980) observes that Piaget states that as the child grows, there is a natural and socialized increase of work over play. Zaner (1980) notes that the only games that persist into adulthood are those that are serious and governed by rules:

There seems as little room for childhood's play in an adult world of work, as there is for generosity or magnanimity in the contest of competitive athletics: the athlete mistakes his purpose and insults his opponent if he views the contest as an occasion to display generosity and magnanimity. The very same insult or mistake would occur were one to cut a jig during a serious committee meeting. (p. 9)

Algren (1983) reports on 2,130 boys and girls in grades 2 through 12 as to their attitudes toward cooperative and competitive activities. The attitudinal referents in this study are non-athletic and non-sport related. He reports finding no significant differences
at all levels; however, competition becomes a more positive construct for both males and females as they grow older.

Crown and Heatherington (1989) create a situation where the subjects, both male and female, have to make a choice for an individual in an athletic situation where the individual is of superior ability to another player. The subject has three choices: he/she can do his/her best and win (achievement orientation), can let the other individual win (affiliative orientation), or can seek a middle ground by winning, but in such a way that the opponent does not look bad. In this instance the subjects are non-athletes.

Crown and Heatherington also create another situation where the athlete has already made the choice and the subjects are to judge the action. In this case the subjects are athletes, themselves. In neither case did the subjects choose, or approve of a choice already made, to deliberately lose. Crown and Heatherington hypothesize that the subjects saw this as "dishonest behavior."

In regard to the morality of sport, Michalos (1976) sets forth a philosophical argument that athletics, and specifically football, is morally superior to life in general. One of the tenets of his argument is that in football, when a team scores a touchdown, the players are required to give the ball to the other side, so that the opposing team may try to match the feat. He indicates this is rarely paralleled in everyday life.

The Reverend Theodore M. Hesburgh, President of Notre Dame, a private university with a strong religious affiliation, (one,
therefore, assuming a strong commitment to moral behavior) and a high won-lost ratio states (Keating, 1963):

The won-lost record is no ultimate criterion for a reasonable and thinking man. It is not victory, but excellence of performance, spirit and the will to win which are to serve as criteria for judging excellence in intercollegiate football. (p. 201)

Kohn (1986) seems unable to discern how individuals can work assiduously to win against an opponent, yet still have positive feelings for him/her. Hyland (1985) presents a different view.

Many of our closest friends are people whom we "get to know" in competitive situations. For many of us, playing sports with someone is a way of preserving and deepening an established friendship. Sometimes we can even say that "I never play harder than against my friend," yet even this greater intensity enhances rather than diminishes the positive strength of the relationship. I note with interest that there is less disposition to attribute a causal relation here between competition and friendship; we are rarely informed that competition causes friendship. Still anyone who has never experienced this sort of friendship in competitive play has had an extraordinarily unfortunate—not to say perverse—sporting experience. (p. 133)

Craig K. Lehman (1981) discusses whether cheaters can win. He comes to the conclusion that many people agree that by definition, someone that cheats cannot win. He argues, however, that those who cheat sometimes win, or at least place first.

In 1969, Harry Webb published a study, "Professionalization of Attitudes Toward Play Among Adolescents." Webb finds that as children grow older, they rate, to play as well as you can, as being more important than, to play the game fairly. Webb finds differences along the lines of gender, race, religion, and
socio-economic status of the respondents. Webb indicates that those who have the biggest need to succeed by virtue of skill and hard work are those most likely to see, to **play as well as you can**, to be more important than to **play the game fairly**. Webb relates this to the socialization into a society that professes to reward skill and hard work. It appears that Piaget (as cited in Lever, 1980) finds this "professionalization" to be a part of ordinary maturation.

Kidd and Woodman (1975), studied a group of students at Iowa State University in the fall of 1974. They studied three similar reasons for participating in sports/athletics as Webb (1969): for **fun**, to **play well**, and to **win**. The last two options are the same as Webb's but they replaced to **play the game fairly** with playing it for **fun**. Kidd and Woodman (1975) predict that females would be more likely to play for fun but their findings indicate that the males and females "exhibit almost identical percentages." They also predict that more males than females would want to **play as well as possible**. Here, their findings indicate that more females than males report they want to **play well**. They go on to hypothesize that both males and females may perceive that **playing as well as possible**, as being more socially acceptable than the alternatives of playing for fun or to win. One consideration these studies fail to mention is the possibility that skilled players may want to play as well as possible, and in doing so, expect also to win and have fun, while also playing fairly. Crown and Heatherington (1989) in looking at playing as well as possible as a moral issue,
find that both genders consider this the correct choice.

Fabian and Ross (1984) examined groups of male and female non-athletes, and male and female varsity athletes at the college and high school levels. Their findings indicate that female athletes are more competitive than male non-athletes, but males within the same descriptive group are higher in competitiveness than females. Another finding is that female athletes increase in competitiveness between high school and college while males do not.

Croxton, Chiacchia, and Wagner (1987) indicate similarities in males and females when assessing their attitudes toward competition and in factors to which they attribute their winning.

Competition in this study is primarily defined as having to do with athletics, but it is also expanded to include academic competition. Kohn (1986) is critical not just of athletics, but also of America's school system. Intense competition is found in the academic areas of our colleges and universities. One accepts this as understandable when realizing that classes of students compete against each other for grades, each aware that grade-point is often an important factor in getting their first job.

Griffin-Pierson (1988) hypothesizes that it may be that females are as competitive as males, but that it may take a somewhat different form. She studied a group of male and female subjects regarding their attitudes toward competition for both athletic and academic situations. Her data indicate that women are comfortable with competitiveness toward a goal, rather than in trying to defeat
an individual, which is the type of competitiveness usually seen in men. She used three groups of women deemed to be competitive. Two of the groups were in professions that demand a degree of competitiveness (doctoral students and pre-medical students) and one group was composed of female athletes (swimmers). Griffin-Pierson's findings indicate that, of the three groups, the swimmers were more oriented toward individual competitiveness than the other two, but they were also more positive toward interpersonal competitiveness than the other groups. This may be partly explained by the nature of swimming as a form of athletics. Swimming is very goal-oriented—the swimmer is constantly setting and working toward goals that are objective (time goals) and not necessarily interpersonal in nature. Vealey (1988) finds similar orientation in elite athletes of both genders. She finds that the level of athletic skill and participation is more significant than gender. Gill (1988) shows findings similar to those of Griffin-Pierson.

Competition also comes into play at a higher institutional level. Professors must compete with each other for grant money that often impacts heavily on gaining tenure and promotion. At Iowa State University, at the time this study is being conducted, there is also an administratively defined goal of becoming one of the top five land-grant institutions in the country and the university is to link its research to the formation of new industry to promote more jobs in the state (Westphal, 1987).

Differences in attitude toward competition between men and women
is attested to in many studies. A variety of individuals who have professed expertise in the field of physical activity or individual development have proclaimed the evils of competition, indicating that women especially are not suitably disposed toward competitive activity (Armitage, 1976; Beran, 1983; Del Rey & Sheppard, 1981; Lenskyj, 1986; Robicheaux, 1975). A frequently given reason is that women are somehow morally superior to men and therefore unable to compete, implying that competition is somehow morally inferior. This is not the position taken by ancient civilizations. Their athletics were frequently associated with their religious activities, which one would assume were considered at the time highly moral.

A studied comparison between males and females in regard to their reactions toward competition and affiliation began with a study by Horner published in 1972. Horner was concerned about a fear of success in females. She adds verbal cues to the end of the Thematic Apperception Test, a projective test used by clinical psychologists, asking subjects to respond to a situation where a female finds herself at the top of her medical school class and also to the same situation for a male. Horner defines the motivation in women's fear of success behavior as "internal psychological representative of the dominant societal stereotype which views competence, independence, competition, and intellectual achievement as qualities basically inconsistent with femininity even though positively related to masculinity and mental health" (p. 157).

In 1975, Levin and Crumrine attempted a replication of Horner's
study. Seven hundred male and female college students wrote stories to cues about male or female medical students. They found no significant differences between genders in making comments showing a fear of success. They indicate "These and other findings underscore the need for careful examination and replications before tentative concepts in popular or controversial areas become conventional wisdom" (p. 964). In 1968, Ogilvie wrote "The Unconscious Fear of Success." He writes not of females, but of the concerns and fears about success (winning) among elite male athletes. Cano, Solomon, & Holmes (1984) find fear of success is related to the absence of masculine traits rather than to the presence of female traits. They failed to find a relationship between fear of success and competitiveness.

In 1982, Pollak and Gilligan (1982), published findings agreeing with Horner (1972). Benton et al. (1983) indicated they were unable to replicate the study of Pollak and Gilligan. Helgeson and Sharpsteen (1987) reviewed both studies, finding some agreement with both.

In her book, In A Different Voice (1982), Carol Gilligan introduced the idea that men and women observe morality on a different continuum; women have an ethic of caring, while men have an ethic of justice. Gilligan's ethic of caring seems consistent with Griffin-Pierson's research (1988) showing that females were competitive but varied from males in the way they interpreted competition. Griffin-Pierson's research, however, shows that the
competitive orientations of female athletes are less demonstrative of her theory than are the groups of academically competitive females in her study.

Crown and Heatherington (1989) tested Gilligan's theory and the ethic of caring (female) and the ethic of justice (male) orientations in regard to males' and females' judgments of athletic decisions. They report on two related studies. In one case the subjects non-athletes are asked to give an opinion before an action is taken and in the second a group of athletes are asked to predict the outcomes or the ramifications of an act already committed.

There are three options available to the subjects. The athletic participant is identified to the subjects as being superior to his/her opponent in skill. He/she is asked if he/she would go ahead and win (achievement motivation), hold back and let the opponent win (affiliative orientation) or attempt to find a middle ground by winning, but in such a way as to save face for the opponent (combination orientation).

The researchers identified the subjects not just by gender, but by sex-role orientation (something the earlier studies failed to do). In the first study only three individuals (1 male and 2 females) showed feminine sex-role orientation. The remaining 37 showed androgynous, masculine, or undifferentiated sex-role orientation. Eighty percent of the subjects indicated that the subject should win. Crown and Heatherington asked the subjects to indicate their reasoning in coming to this conclusion. Forty-five
percent used justice reasoning; 40% showed care reasoning. No effect of gender of the subject was found.

Summary

Competition is something that many individuals have strong feelings about. Some favor competition and others oppose it. Pollak and Gilligan (1982) indicate that women fear competitive activities; however, their research did not deal with athletic competition. Crown and Heatherington (1989) found that in dealing with athletic competition, neither gender nor morality were issues in response to competitive, athletic situations. Case, Greer and Lacourse (1987) also find no correlation between moral-judgement development and perceived legitimacy of spectator behavior in looking at the incidents of fan hostility at sporting events. There are many researchers in earlier decades that decried competitive athletics for females. Some felt the biggest problem was the physical activity, others felt it was the competition. College life is also competitive in non-athletic ways. The ten item-statements selected to assess competition as a part of this study include some dealing with non-athletic competition and some dealing with athletic competition. There are also two statements in the cluster suggested by the research by Griffin-Pierson in regard to the interpretation of how winning is viewed differentially by males and females. The slogans about competition published by Snyder (1972) are also considered by this researcher in selecting the ten items for the Competition...
cluster found in Appendix D. As with the earlier clusters, the mean (average) of the 544 scores on each of the ten item-statements is also listed.

Fact Cluster

Theorists, including Borg and Gall (1983), Greenwald (1968), Newcomb (1943), Scott, (1968), Shaw and Wright (1967), Sherif and Cantril (1945, 1946, 1947), Sherif, Sherif, and Nebergall (1965), Smith (1976), and Sudman and Bradburn (1982) specifically state that the perceptions that the respondents have of the referent can have an effect on attitude. Sherif and Cantril, though acknowledging the active role of learning and conditioning in attitude development, emphasize that the individual's perceptions are above all other contributors to the acquisition of attitudes. (Ostrom, 1968, 1969).

Krech, Crutchfield, and Ballachey (1962) indicate it is necessary to try to determine the amount of contact with information the subjects have about the attitude referent and how accurate that information is. McGranahan (1951) stresses the importance in analyzing the content of the media in studying attitudes. Sudman and Bradburn (1982) indicate a "lack of clarity about the attitude referent is especially common where the referent is frequently discussed in the media" (p. 123).

Likert (1932) indicates that factual statements create a problem when included on attitude scales, because it would be possible for someone to be very negatively inclined toward a given referent, but
be forced to agree with a correct informational statement. Scott (1968) indicates that the characteristic of attitudes that makes them unique, is their emotional quality. He indicates that giving subjects an opportunity to respond, by giving them room on the scale to show the intensity of the feelings generated (positive or negative) by even factual statements, permits such statements to be included in a summative scale with nonobjective statements. The scale by Likert used to create attitude inventories shows both direction and intensity. The intensity of the feeling is shown by moving out along the scale, away from the midpoint. It can be handled several different ways. In this case, as suggested by Sudman and Bradburn (1982), the subjects are instructed to indicate how sure they are of their answer, by moving out on the scale toward strongly agree or strongly disagree.

Baird (1979a) indicates that different groups on campus often have little knowledge of each other. The report by R. P. Matross (1980) is the only study that actually asks the respondents questions with objectively correct or incorrect answers. One question from the study by Matross finds that few individuals interviewed knew the correct source of funding for athletics. Since the "knowledge" one has about a construct can be accurate or inaccurate, and has a direct bearing on attitudes to or about the construct, it seems important to test this. Some of the items are taken from the literature; some are taken from facts verified through campus sources. Some of these statements are in direct contrast to information frequently
distributed through the popular media.

Some information in the media tends to encourage people to think that athletes have many privileges that other students do not have. Mark Hansen, a sports writer for the Des Moines Register, a newspaper with statewide circulation, on June 30, 1991, published a column entitled, "Academics vs. athletics." In this column, he makes the following statements:

Of all male basketball players who entered Division I-A schools in the fall of 1984, only 32 percent earned degrees within five years. The percentage for football players was 42.

The percentage for other students was 50, which isn't quite so bad as it looks. Most non-athletes who leave school cut out for financial reasons.

What's more, they lack access to the support systems available to athletes. Comparing scholarship athletes to non-athletes is like comparing point guards to guard dogs. (p. 1D)

This type of information is representative of that often made available to the general public. The assumption that support systems are not available to students other than athletes is not true at Iowa State. There are support systems available to many students, especially those who are classified as high risk. Part of the support system consists of tutoring. Free tutoring is given to any student in certain classes by some of the scholastic honorary fraternities (Brown, 1988; Ellerbach, 1988). Funds are also available to pay for a tutor to first generation college students (persons who are the first in their family to attend college). A statement referring to tutoring and whether or not it is available to groups other than athletes is used in building this cluster.
The following advertisement appeared in the Iowa State Daily, September 24, 1991:

Student Support

We offer a full range of support services including basic skills instruction in reading, writing, math and science, and specially designed workshops. Students also receive tutoring, academic advice, personal and career counseling and assistance in obtaining financial aid. These services are free of charge to qualified students. For more information contact Student Support Services at 294-0210 or stop by 210 Student Services Building. (p. 5)

Another area has to do with grades. A great deal of publicity has been given, especially in Iowa within the last three years, in regard to the rigor of the academic programs of athletes. A number of individuals have been quoted as to the need for a special monitoring of the courses and grades of student-athletes (Walker, 1989; Waller, 1989; Witosky, 1991). The trial of two sports agents in Chicago exposed transcripts of athletes from the University of Iowa, to ridicule. These programs were generally considered to be unacceptable to many critics (Becker, 1989). Newspaper accounts of the trial, with criticism of the athletes and their academic programs were published frequently, during the Spring of 1989. The April 3, 1989 issue of Time includes an article by Gup, on student-athletes, targeting an Iowa State athlete, again raising the issue of weak academic programs.

Rules exist that require student-athletes to have 24 credits each year, that apply to their chosen major (NCAA Rules, 1990). No such rules exist for students who are not athletes. Rules for
athletes insist that they make specific progress toward a specific degree in order to remain eligible. No such rules exist for non-athletes.

Books and articles have been written about the problems of the undecided student (Baird, 1969; Glennen & Baxley, 1985; Gordon, 1981). The undecided student is a student who frequently changes major, or just avoids declaring one. Figures on retention indicate that a number of students who leave college each year do so because of indecision about choosing a major or establishing a career goal (Baird, 1969; Glennen & Baxley, 1985; Gordon, 1981).

Even grade-point-average leniency favors the non-athletes. A non-athletes can fail every course he/she takes during a semester and still return the next term (Iowa State Information Handbook, 1989). If an athlete were to fail every course one term, he/she would be ineligible to compete the next. It appears that some people believe that athletes are weak students and would not have been permitted to matriculate if they had not been athletes (Walker, 1989). Misunderstandings are not one-sided. Some athletes report that they feel "marked as a dumb jock" the minute they walk into the classroom (Adler & Adler, 1985). Some indicate they are afraid to wear their letter jackets to class.

The Office of Financial Aid at Iowa State University was consulted. They indicated there were no restrictions on the amount of merit-based scholarship money that could be awarded a student in non-athletic endeavors, while there were restrictions on aid to
A number of statements were selected that would not require any specialized information; information that should be available through every day observation.

A review of the Iowa State University Student-Faculty-Staff Directory (1985-86) shows that there are many individuals employed because of athletics. Watching news broadcasts and browsing through newspapers shows that athletes are interviewed frequently, while other representatives of the student body are not. The image of the school mascot, that which is associated with the athletic teams of the school is found on wearing apparel and many other items sold on and near campus. An over-sized mascot costume worn by selected students is also seen at athletic contests, fund-raisers, and in non-athletic related ways. Kruse (1991) writes of "Cy" (the name of the mascot) visiting hospitalized children to cheer them up.

Sloan (1979) writes that individuals watching an athletic contest can be seen to flex their muscles and clench their fists. Anyone observing others watching such a contest would be able to see this.

Two statements of fact thought to be non-controversial, are used to complete the cluster. One has to do with the fact that some sort of athletic behavior has been continuing for 6000 years. The other question states that the majority of students attend institutions that offer interscholastic athletic competition. Some researchers ask the same question repeatedly on a given test instrument as a
"validity check." This researcher has no wish to do that, but feels that two questions seemingly non-controversial in nature might pick up someone who simply marks straight down one column, assumedly without reading the questions.

Summary

Perceptions are an important part of attitude formation. Inaccurate information is available to the public through many sources. Several items will specifically investigate this area. It seems important to check the accuracy of individuals' information. Some of the items in this cluster are taken from observation and are thought to be non-controversial. Two items are added to bring the total number of item-statements to ten. It also seemed possible to use these to check to see if anyone is marking all negative responses. There is a tendency to gain a slightly higher score on factual items, but that is kept in mind when evaluating the findings from this cluster. The ten items and the average (mean) score for all 544 individuals on each item-statement are listed in Appendix D.

Importance Cluster

Herek (1986) writes of two types of attitudes. One is represented by the Basking-In-Reflected-Glory cluster. The other type of attitude is evident when the subject believes objectively that the attitude referent (athletics) is in some way going to benefit someone or something they care about. This aspect of
attitude is represented by the cluster, Importance (to the university). In building this conceptual category (cluster) opinion of those associated with universities is important. Many individuals will be quoted. It seems important to consider the specific words, in context, especially of public figures in this area. The perceived benefit can be financial (Atwell, 1979; Meisinger & Dubeck, 1984), or it might be more subtle, as in heightened morale (Boyd, 1980; Matross, 1980), or acting as a force for integration (Albonico, 1967, Chu, 1982a, 1982b; Pollock, 1983, 1985; Sack, 1977).

Athletics also has both internal and external values for the institution. Internally it can be a binding force that provides a sense of community. It instills pride and loyalty and helps morale. I thought that Berkeley's problems in the late 1960s would have been ameliorated best by a Minneapolis winter; next in line to that solution would have been a winning football team. I have witnessed twice the power of an athletic program to help propel an academic program, but I have also seen the deterioration of an athletic program contribute to the general malaise on campus. The fall of self-esteem caused by consistent losing hurts morale and is also humiliating.

Athletics binds forces outside the campus as well. There is an old cliche that the athletic program is the window on the university. Now it may seem like a stained glass window, but nonetheless there is some justification for the cliche. Higher education is judged by what is visible and audible, and in all too many cases that means we are judged by sports. Additionally, sports attracts money, some of which can be deftly diverted to academic affairs after a contributor's interest and loyalty have been caught. However, if a healthy athletic program is good for an institution, it is equally true that an unhealthy program is destructive for all. (Boyd, 1980, p. 27)

The first premise is the one most consistently ignored or denied or minimized by anti-athletic groups. It is the premise that competitive athletics offers stimulations and satisfactions so deep and widespread
that they must be considered a normal, valid, even important part of ordinary human nature. For thousands of years, in cultures of all levels, physical achievement for its own sake, apart from any obvious advantage in war or hunting (though such advantage has often been urged as a justification), has held great appeal for both participants and watchers. (Anonymous, 1963, p. 488)

by de-emphasizing big-time sports . . . we are often in danger of jeopardizing the financial health of our institutions and discriminating against the really talented athletes who deserve the chance to develop to their limits just as surely as do the young people in the English department or the student engineers. (Umphlett, 1985, pp. 119-20)

In addition to boosting enrollments and increasing alumni support, some have even suggested that winning football teams can attract the attention of state legislatures. To quote James Reston (Goodhart & Chatsway, 1968), 'it (college football) has held the interest and allegiance of legislators in state capitals and has in the process helped produce educational appropriations. . . (p. 86). Given the many financial benefits big time college football bestows on a university it is little wonder that boards of governors insist that their teams reign victorious and quickly dispose of a coach who can't produce a winner.

Individuals and groups, both inside and outside of the university benefit economically from college football. . . . Suffice it to say that billions of dollars are tied up in college football and that many thousands of well paying jobs depend on its survival. (Sack, 1977, pp. 88-89)

the expenditures and participation rates do not begin to reflect the importance that intercollegiate athletics occupies on the national scene. Some highly distinguished universities are better known for their athletic accomplishments than for their scholarship, and no other subject can stir the interests of alumni or governing boards any quicker or more intensively than athletics. (Atwell, 1979, p. 367)

The role of sports on some college campuses is more
important than many realize. Strong collegiate athletic programs can have significant economic, social, and even political effects on the institution, a state, and even an entire region. (Marmion, 1979, p.343)

Local business people in college towns know that they see more business when big sports events are in town. Jim Limbaugh president of the largest bank in Cape Girardeau, Missouri speaks in favor of Southeast Missouri's planned move to a Division I athletic program (The Chronicle of Higher Education, May 11, 1988):

Southeast Missouri's association with well-known Division I teams would help the struggling economy in Cape Girardeau by attracting crowds to sports events on the campus. (p. A33)

Admissions officers point out that any recruiting (of all students) they do is made much easier if many of the individuals in the town or school they visit are wearing the colors or clothes with the emblem of their school on it.

Many individuals write about the important role athletics has within the college community. Several representative comments follow:

For better or worse, intercollegiate athletics occupies a highly visible position on the American campus today and receives an unholy amount of attention from both supporters and critics—including students, faculty members, administrators, regents, alumni, legislators, governors, the media and the public. Such attention tends to magnify its importance. Intercollegiate athletics is a volatile topic fraught with emotion, honed on conflict, spotlighted by the media, and, in any given week during the college year, witnessed, cheered, and booted by millions of spectators across the country. (Davis, 1979, p. 420)
(football) is the symbol about which are gathered the loyalties of students, faculty, alumni and friends of the college. These loyalties are to the college, to the culture for which it stands, to the ideals it embodies and the service it renders. Football is merely the integrating symbol about which such loyalties are rallied and through which they are integrated. (Hutchinson, 1952, p. 461)

It is obvious that other areas of athletics can be substituted for football and serve as vehicles of solidarity; for example, basketball, baseball, and hockey. The athletic festivals held during antiquity and modern-day athletic events seem to have something in common; namely, the ability to act as a unifying force. (Thompson, 1974, p. 62)

In an Associated Press article on December 27, 1985, it was claimed that the matriculation of basketball superstar Patrick Ewing at Georgetown University brought in $12 million dollars. This figure is debated, but for the purpose of this discussion, the exact dollar amount is less important than the fact that Georgetown administrators saw applications for admission rise as well as other factors that are not specifically thought of to be athletic-related events.

In the Fall of 1987, Southern Methodist University was barred from competing in football under the "death penalty", imposed upon them by the NCAA for repeatedly giving large sums of money to football players. Rather than not hold Homecoming which has traditionally been associated with football, they had a soccer match as the athletic focal point of their Homecoming celebration.

Even the National Association of College and University Budgeting Officers in their publication, College and University
Budgeting, coauthored by Meisinger and Dubeck (1984) included "the reputation of its athletic teams" in their list of things to consider when preparing the College or University budget.

Summary

The literature addressing the perception that athletic teams serve a utilitarian function in regard to the operation of the University is reviewed. This utilitarian function can be monetary (Atwell, 1979; Meisinger and Dubeck, 1984), affective (enhancing morale) (Boyd, 1980; Matross, 1980), integrative (Albonico, 1967, Chu, 1982a, 1982b; Pollock, 1983, 1985; Sack, 1977), or could serve a variety of utilitarian functions, depending on the observer. Because a cross section of individuals who see athletics as important to colleges in a utilitarian way, is important to the building of this conceptual category it relies very heavily on the actual quotes of the individuals. The ten items selected for the Importance cluster are found in Appendix D along with the average (mean) score of the 544 respondents to each of the item-statements.

Literature Relevant to Selected Groups

The independent variable which forms the first line of inquiry or comparison is the defined group to which the subjects belong. The student-athletes are the first group selected. One might assume that they would be very positive about their chosen activity. This is part of the rationalization for doing this study; rather than just
assuming, people will be asked. There have been a number of books published, in which the athlete complained that his life was miserable; mostly the exact opposite of what the press indicates to be the truth. Whether these books indicate a true position or not is beside the point (Best, 1981). The fact that they are published and that it is opinion coming from someone who should know, could be enough to influence some public opinion and attitudes.


> We [Texas football candidates] were eighteen-year-old high school heroes lost in a new world and daily being stripped of dignity and any past identity. (p. 105)

Another common assumption is that the student-athletes' fellow students, admire, or envy the student-athletes and seek to strike out at, or to bask in the reflected glory that is assumed to emanate from the student-athletes (Basow & Spinner, 1984; Beran, 1983; Buchanan, Blankenbaker, & Cotton, 1976; Garfield, 1988; Jensen, Leonard, & Liverman, 1981; LeUnes, & Nation, 1982; Robinison & Morris, 1986; Snyder, & Spreitzer, 1979; Spady, 1970).

The review of literature shows that some alumni seem to believe that athletics creates opportunities for them to return, to relive the experiences of their college years (Boyd, 1980; Chu, 1982; Horowitz, 1987; Sack, 1977. The assumptions about the attitudes of the faculty have generally been negative (Anonymous, 1963; Letchworth, 1968).
The last group chosen are the parents of student athletes. The literature reviewed to this point indicates that attitudes of parents generally tend to be more positive than other groups (Garfield, 1988; McGee, 1956; Pollock, 1983, 1985; Scott, 1953). One could point out that much of the literature deals with parents of minor children. However, it must also be remembered that the attitudes of the parents toward athletics for those minor children have been acting as conditioning and socializing agents for most of their lives and will likely continue to do so (Lewko & Ewing, 1980). Attitude theorists have spoken of the source of some attitudes as being deep in the background of individuals, possibly stemming from beliefs created while children, by these same parents (Krech, Crutchfield, & Ballachey, 1962; Ostrom, 1969; Scott, 1968; Shaw & Wright, 1967).

Gilliland and Tutko (1978) in surveying 40 female athletes, 40 male athletes, 40 female non-athletes, and 40 male non-athletes report significant differences in the relationships between male athletes and their parents and female athletes and their parents. One finding they report is that it appears that female athletes need substantial show of approval from the male parent.

Ender (1983) indicates that enlisting the help of the family is very helpful in dealing with student-athletes, especially those categorized as high-risk. Oliver (1981) discusses the fact that the beliefs about the opportunity that sports afford for social mobility are often transmitted throughout the entire family. Alberts and
Landers (1977) find that mothers have a substantial effect on their children's careers. Snyder and Spreitzer (1978) report that for girls in both music and athletics, a supportive family is a very important quality.

In the book They Call Me Assassin (1979), Jack Tatum tells of his experiences prior to college football, through his college days, and into his days as a professional player. He tells of his recruitment by various colleges. He attributes his signing with Ohio State University to the fact that Woody Hayes, the Ohio State coach at the time, "really recruited my mother." Considering the tough guy reputation of both Hayes and Tatum, this may have been meant to be amusing and entertaining, but there is no reason to believe that it was not also true.

The literature has been reviewed and six different areas representing six different conceptual categories have been presented. These categories (clusters) have been drawn from professional research, journals, magazines, newspapers, movies, books, anecdotal research, and anything else that might affect public perceptions regarding athletics. They are Basking-In-Reflected-Glory (tendency to identify oneself with the school, its athletics, and symbols); Belief (to act as a socializing force into society); Benefit (to the athlete, male and female considered separately); Competition (attitude toward); Fact (factual statements about athletes and their relationships to the university and its rules); and Importance (to the university). In an
attempt to get a broad-based attitude toward athletics, the categories were also related to different theoretical aspects of attitude.

The purpose of this study is to compare the attitudes toward athletics, (as identified by the questionnaire introduced here) among the five groups: alumni, faculty, parents of student-athletes, students, and student-athletes. The focus is on relationships among these groups, as identified, plus any other relationships identified when considering the gender of the subjects and the location of the high school from which they graduated. The inclusion of the two Benefit to Athletes clusters permits an analysis of the question of whether or not male athletes are seen as benefiting to the same degree as female athletes. The possibility exists that members of the primary groups might view this differently. It is also possible that the gender of the subject might be related, as might the location of the high school from which the subject graduated. The gender of the parent crossed with the gender of their student-athlete might also show special relationships (Gilliland & Tutko, 1978). All these variables are examined.

The clusters developed during this review of literature are also analyzed individually to determine if any significant relationships might be discovered. The possibility also exists that faculty members who are also alumni might behave more like alumni than faculty.
CHAPTER III. METHODOLOGY

The purpose of this study is to determine whether or not there are differences in attitudes toward athletics as reported by five groups (alumni, faculty, parents of student-athletes, students, and student-athletes). In this study the groups are all associated with Iowa State University. Pace (1979) suggests that in order to analyze campus climates, tests for special purposes, sometimes, must be constructed.

This is grounded theory research (Glaser & Strauss, 1967; Strauss & Corbin, 1990). The conceptual categories formed during the review of literature, are termed clusters when part of the attitude questionnaire. The questionnaire, now called the Athletic Attitude Inventory, is used for the purpose of comparing the attitudes about athletics among the aforementioned groups. At the same time, the question, "Is the questionnaire able to distinguish among the selected groups?" is being answered. Because of the need to answer this question and the lack of comparative literature from which to predict the outcome of the comparison according to the primary independent variable, group, the demographic variables gender and location of high school from which the respondent graduated were analyzed.

The Athletic Attitude Inventory provides the scores representing the dependent variable. The independent variables, group, gender, and location of high school, are recorded on the demographics questionnaires and are combined in all ways possible in
a search for relationships, a primary concern in grounded theory research. Gender is also the one variable about which substantial theory has already been generated, although there is substantial disagreement among the theorists concerning the research already done (Benton et al., 1983; Cano, Solomon, & Holmes, 1984; Crown & Heatherington, 1989; Fabian & Ross, 1984; Gill, 1988; Gilligan 1982; Griffin-Person, 1988; Helgeson, & Sharpsteen, 1987; Levine, & Crumrine, 1975; Melnick, Vanfossen, & Sabo, 1988; Nixon, Maresca, & Silverman, 1979; Pollak, & Gilligan, 1982; Snyder & Kivlin, 1977; Snyder & Spreitzer, 1977, 1978, 1983; Vealey, 1988.

Considerations to be Observed in Creating a Test Instrument

Researchers seem agreed that attitudes must be assessed indirectly (Best, 1981; Borg & Gall, 1983; Bradburn & Sudman, 1988; Cunningham, 1986; Krech, Crutchfield, & Ballachey, 1962; Ostrom, 1969; Scott, 1968; Shaw & Wright, 1967; Sudman & Bradburn, 1982). Many of the theorists in the field of attitude measurement indicate that the best way to measure attitudes is to use multiple statements about the referent in regards to beliefs, feelings, or dispositions to act, in an agree/disagree format. Nunally (1978) specifically states that agreement scales are easy to work with and are easily understood by subjects.

Sudman and Bradburn in Asking Questions: A Practical Guide to Questionnaire Design (1982) suggest reviewing other tests of a similar nature and using any relevant questions. They indicate that
by using questions already used before, "much agony over the formulation of the questions and extensive pretesting" (Sudman & Bradburn, 1982, p. 120) can be spared. They also indicate that if the questions have been used on groups similar to those involved in the current research, "you get the advantage of comparative data from other time periods, or other samples" (p. 120).

In accordance with the suggestions given by Best (1981), Borg and Gall (1983), Bradburn and Sudman (1988), Cunningham (1986), Nunnally (1970, 1975, 1978), Scott (1968), and Sudman and Bradburn (1982), statements were selected from other studies, news reports, university rules and regulations, and literature about athletics in general. A copy of the *Athletic Attitude Inventory* is found in Appendix A and the 70 statements divided into clusters are listed in Appendix D.

In measuring the strength and direction of the respondents' attitudes, many researchers use the scale designed by Rensis Likert (1932). This scale goes from a positive through a zero point to a negative of the same magnitude. G. K. Cunningham (1986) and J. Nunnally (1978) suggest that a seven-choice format provides an optimum level of reliability.

An odd-numbered scale implies that there is a middle choice that indicates a *no opinion, don't know, or don't care* type of option. Sudman and Bradburn (1982) report that they noticed a tendency for researchers to use *forced-choice* format where the respondent has to choose a positive or negative response-option.

Ayidiya and McClendon (1990) and Schuman and Presser (1981) report
no change in the proportion of positives to negatives when a middle option is offered. Sudman & Bradburn suggest that the number of responses to the middle category can give extra information about the intensity of attitudes. Krosnick and Schuman (1988) report that individuals with "intense, important, or certain attitudes" are significantly less likely to use the middle option than those with less crystallized attitudes. The presence of the middle option would seem especially important here, where factual questions are being asked, and the don't know can add an additional dimension.

Affirming the need to measure attitudes indirectly, researchers assert that the sum of individual items defines the attitude (Best, 1981; Borg & Gall, 1983; Bradburn & Sudman, 1988; Cunningham, 1986; Krech, Crutchfield, & Ballachey, 1962; Nunally, 1978; Ostrom, 1969; Scott, 1968; Shaw & Wright, 1967; Sudman & Bradburn, 1982). Therefore, within reason, the more questions, the better the definition.

Mason, Dressel, and Bain (1961) found that the length of a questionnaire did not have a negative effect on response rate. Their research also indicated that guaranteed anonymity did not materially add to the response rate. Berdie (1973) in examining one-page, two-page, and four-page questionnaires reported no significant difference in response rate.

Linsky (1975), upon reviewing existing literature on ways to increase response rates for mailed questionnaires, reports no evidence to indicate that short questionnaires produce better response rates. He found, that in two cases, the longer questionnaires produced better
response rates.

Another concern is in regard to the mechanics of wording the questionnaire. Best (1981), Likert (1932), and Nunally (1978) recommend an interspersal of negatively and positively worded questions to guard against an "acquiescence bias." Other researchers seem less sure this is necessary (Krenz & Sax, 1987; Schriesheim & Hill, 1981; and Schuman & Presser, 1981). Though Nunally suggests interspersing positively and negatively worded questions, he also states (1978) that individuals cannot be counted on to respond in the opposite way when wording reversals are used. Ayidiya and McClendon (1990) report that respondents to mail questionnaires and those with higher levels of education are less likely to be susceptible to acquiescence bias. Krosnick and Schuman (1988) indicate that acquiescence is not an issue with mail-back questionnaires. Martens (as cited in Fabian & Ross, 1984) also indicates that a "single direction instrument" provides a number of positive options in regard to the integrity of the scale. This researcher, in consultation with committee members, decided it best to go with wording that seemed most natural and comfortable.

The statements were sorted into the clusters outlined in Chapter II: Basking-In-Reflected-Glory, Belief, Competition, Fact, Importance, Benefit to Females, and Benefit to Males. Initially a variety of statements were collected as the conceptual categories were formed and reviewed. The total at that time was 139. Following the suggestion of Borg and Gall (1983), the total was cut to 60 statements, ten in each cluster, then expanded to 70 by forming a
Benefit to Females cluster and a Benefit to Males cluster by identifying the athlete in one set of ten statements as being a female and as a male in the other set of ten statements. It must be remembered that the content in the Benefit to Females cluster and the Benefit to Males cluster is identical except for the gender of the athlete named.

Each cluster was randomly divided in half and each set of 35 statements was randomly listed in each half of the test. This was done so that the split-half test of reliability could be used on the forms from the test group.

Theorists (Bagozzi, 1978; Ostrom, 1969; Sudman & Bradburn, 1982) indicate that attitudes are divided into three types: affective, behavioral, and cognitive. They indicate that these types of attitudes tend to be positively related to each other, but that subjects can also have conflicting feelings between different types and even within a specific type. It must be remembered that the clusters were chosen with the intent to represent these different types, it is therefore possible that the findings may also show some conflicts.

Selection in some clusters is broad enough to encompass several different aspects of the conceptual category from which a cluster is taken. The Basking-In-Reflected-Glory cluster deals with identification with the athletic teams, and also with the symbols, such as Cy or 'Clone (Kruse, 1991), that are not exclusively related to athletics. There are also allusions to action taken or to be taken. The Competition cluster includes statements referring to both
athletic competition and academic competition.

The Fact cluster contains statements about everyday observable incidents, as well as true statements that are in contrast to what is frequently presented in the popular media. There are also a few items considered to have little intrinsic affective value. The purpose in including them is twofold: (1) expand the cluster to ten items and (2) provide an opportunity to include two items that one would expect anyone reading the question to agree with. This is certainly not a foolproof validity check, but the opportunity existed and the researcher took advantage of it.

The Importance cluster deals with the idea that athletics is important to universities for financial considerations and for affective (morale) reasons. The Benefit to Athletes set of questions includes some benefits that would be expected to accrue, regardless of the gender of the participant, and some where the benefit could be seen to vary, depending on the gender of the athlete.

Development of the Demographics Questionnaire

Although the reviewed studies did not yield a usable questionnaire, they contained a substantial number of demographic variables related to various limited representations of attitude. Sudman and Bradburn (1982) indicate that if the statements you are using have been used on groups similar to those you are testing, you get the advantage of comparative data from other time periods, or
other samples. Because of this and other reasons, a number of the questions on the demographics questionnaires are duplicates of some from the studies reviewed.

The inductive logic of grounded theory techniques (Glaser & Strauss, 1967; Strauss & Corbin, 1990) was used in the development of both questionnaires. The discovery and examination of relationships is the focus. Though time constraints do not permit a detailed examination of all these relationships, the opportunity to record raw data was taken.

Many journals, magazines, books, movies, and newspapers have been examined in order to form the conceptual categories. However, it is not possible to be absolutely certain that all aspects of attitude toward athletics are covered. No claim is made that these are the only aspects that can be considered; however, a large body of material was reviewed and it seems that a representative sample of the domain relating to attitude toward athletics is being presented.

Attitude studies are primarily correlational in nature (Borg & Gall, 1983). Causal relationships are, at best, difficult to prove; however, if sufficient correlation exists between reported attitudes and certain observable variables, one may assume some predictive validity. Glaser and Strauss (1967) see this as a goal of grounded theory. For this reason, when building the questionnaire, as many separate opportunities as possible were provided to find correlations that might facilitate prediction. Even though no analysis of all the parts is planned for this time, it is still considered important to
build them into the questionnaire. It is easier to ask questions while you have the subject's attention, but more importantly, the subject should see this as a gestalt, a whole, not just a few isolated questions. The purpose of this study is to assess attitudes toward athletics, where athletics is defined as a broad construct, not just football or Saturday afternoon or whether a person believes that alumni give more money to schools with successful athletic programs.

Sudman and Bradburn (1982) warn that some innocent-seeming demographic questions can be offensive to some individuals. Since such offense is difficult to predict, the variables analyzed are only a part of a group of other potentially useful variables. In order to minimize the importance of any single variable (other than Group), the intent is to ask questions that benignly form connections with each other to provide a narrative of the individuals' experiences across a moderately wide spectrum. Since the groups chosen for this study differ substantially in age and experience, independent variables that have previously been examined, do not duplicate each other across all groups. In order to look at various independent variables appropriate to the different groups, each group has a different demographics questionnaire.

Bradburn and Sudman (1988) and Sudman and Bradburn (1982) report that respondents can be differentially sensitized by being asked different questions on their demographics questionnaires (which is another reason for not analyzing all the data on the demographics questionnaires at this time). Therefore, the demographic variables to
be analyzed in this study are listed first, before any of the differing variables are encountered.

The primary independent variable, Group, is listed at the top of each demographics questionnaire. The literature was manifest with implications of gender differences. The literature (Beran, 1983; Enright, 1976; McGee, 1956; Snyder & Spreitzer, 1983) indicates that individuals from Iowa high schools might be more accepting of females in athletics than individuals who attended high school in some other part of the country. This is the final variable being compared across all the questionnaires. Gender (of the respondent) and whether or not she/he Graduated from High School in Iowa are the first two numbered demographic variables (71 and 72).

The Athletic Attitude Inventory is given first to prevent any contamination from any of the demographics questions (Sudman & Bradburn, 1982). It is assumed that all of the respondents will have an attitude (Counting no opinion as an attitude). Whether or not the demographic variables relate to different attitudes is a chief purpose of this study. The Athletic Attitude Inventory is the constant that provides the scores that form the dependent variable. Because of the differences already noted, the demographics questionnaires for different groups end on different numbers. Administering the questionnaires in this order also permits future users of this instrument, The Athletic Attitude Inventory, to use it with different groups for which additional appropriate demographics questionnaires can be developed.
It is possible that being an alumna/alumnus of Iowa State University can act as a confounding variable for the group, Faculty. For this group only, the fact of being or not being an alumnus/alumna, is picked up from a later position on the demographics questionnaire, so that the question, "Is there a difference in the attitudes of faculty who are also alumnae/alumni and of faculty who are not?", may be answered. Since this is a variable being used for within-group analysis rather than between-groups analysis, the fact that this item is not numbered the same or even asked at all, on the other demographics questionnaires, is not an issue.

Reliability and Validity

Nunally (1970; 1975, 1978) states that attitude studies are usually "long on reliability and short on validity." Test-retest reliability is not an appropriate test with attitude scales (Cunningham, 1986). Any shift between tests can indicate a true shift in attitude. Split-half reliability (Cunningham, 1986; Likert, 1932), however, is appropriate and is calculated at the end of the field testing of the attitude questionnaire.

Cronbach and Meehl (1955) indicate that one method of establishing construct validity can be seen in comparing groups which one would expect to differ according to the definition of the researcher's construct. They indicate that certain reliability formulas describe internal consistency and tend to speak to validity. The different aspects of attitude tend to be positively related to each other.
(Bagozzi, 1978; Bradburn & Sudman, 1988; Ostrom, 1969). Interitem reliability within the clusters is calculated as part of the factor analysis program (SPSSx, 1986). Cronbach and Meehl (1955) suggest that factor analysis may be useful in dividing the construct into more meaningful parts. In this case, the factor analysis is confirmatory in nature. Since the construct, attitude toward athletics, has been created out of parts, the test of the internal consistency of the clusters is important.

Face validity is a special type of construct validity (Cunningham, 1986). It refers to the degree to which a test appears to be testing what it intends to. Since the point is to find out what people think about athletics, it is important that they see the questions as relating to athletics; hence, the questionnaire must have face validity. This can be considered as another reason for using many direct quotes.

Following the suggestions of Sudman and Bradburn (1982), the questionnaire forms were given to individuals similar to those to whom the questionnaires are to be sent. Comments and suggestions about all aspects of the instrument were solicited.

The design of the study and the instruments to be used were approved by the Human Subjects Review Committee, Iowa State University.

Pilot-Testing

The test group consisted of members of a graduate level Research and Evaluation class in the College of Education and a group of unselected computer science undergraduate students who happened to visit
their advisor during the week that the test instrument was given to the graduate class. There were 18 graduate students and six undergraduate computer science students in the group selected.

The individuals were asked to indicate any items that seemed ambiguous or were in any other way unclear. They were asked to comment on any of the items or the appearance of the questionnaire.

The computer science students, one of whom had been a varsity letter winner at Iowa State University, spoke mostly about the length of the instrument, but also indicated that it made them "think about things a bit." The former athlete stated that he was pleased and thought "it was about time that something like this was done."

Several of the research and evaluation students also commented on the length of the questionnaire, indicating that it was too long to expect good results.

Sudman and Bradburn (1982) state that taking response-items already used by someone else tends to cut down on misunderstanding. Most of the items came either from research or from other questionnaires previously discussed. The rules for wording "good questions" (Payne, 1951; Sudman & Bradburn, 1982); such as, make sure only one thought is contained in the question, make them brief and to the point, etc., were followed closely in creating the questions totally new to this instrument. This may partially explain the reason for so few comments about specific questions.

The test for split-half reliability was computed. The obtained reliability was .9713.
Selection of the Samples

The groups being compared are alumni/alumnae, faculty, parents of student-athletes, students, and student-athletes of Iowa State University. There are 300 in each group. The number 300 seems the best compromise between getting enough responses for a meaningful sample and being too expensive in time and money.

Bradburn and Sudman (1988) indicate that one method of sampling is to use lists. They also indicate that the proportion of each group selected to the total population available is not as important as the size of the samples compared to each other. The samples are all the same size initially (300). The robustness of the analysis of variance (Elzey, 1985; Nunally, 1970) is counted on to deal with the comparison of differential return rates.

The alumni/alumnae were selected using the first individual on every eleventh column in the Alumni Directory (1989) not having an address outside the continental United States, not living in Story country Iowa, and not being employed by Iowa State University. Those living outside the continental United States were not considered, because of the length of time in mail transmittal and differential costs. The residents of Story County, Iowa, and employees of Iowa State University were excluded because of the possibility of introducing bias-producing extraneous variables. No attempt was made to duplicate the same proportions of males to females existing in the total population, since these figures were not available and the total of 300 is a very small portion of the total number of alumni in
the directory. No attempt was made to duplicate the proportions of alumni in all geographic areas; although, at least one individual from each of the 48 states in the continental United States was included. The group was comprised of 208 males and 92 females. The locations of the alumni were 166 living in Iowa, 74 in the surrounding states, and 60 who lived farther away.

The faculty group was selected by taking the name of the first faculty member in every sixth column from the Student-Faculty Directory (1985-86). The faculty from the College of Veterinary Medicine was excluded. Since it is a graduate-level program, these faculty members would not have the possibility of having current student-athletes in class. (One justification for asking faculty is because of their possible interaction with student-athletes in class). The group contained 230 males and 70 females.

The names of the student-athletes and their parents were taken from lists supplied by the Athletic Director. The lists (in sport order) were put together with all the males first and all the females second. The selection was made by eliminating every third name on the list (retaining 2 for every 3). This procedure guaranteed that the proportion of male athletes and female athletes in the sample was identical to the proportion of male to female athletes in the total athlete population at Iowa State University. This group was made up of 209 male and 91 female student-athletes. Matching parents were selected, except when the parents lived outside the continental United States. The reason for this exclusion is stated previously in
regard to alumni. An equal number of mothers and fathers were included (150 of each).

The students' names were provided by the Office of the Registrar. The proportion of males to females was the same as in the general population of the university. The names were compared with the names supplied by the Athletic Director. Anyone appearing on the Athletic Director's list was deleted and replaced by the next appearing, same-gender name in the Student-Faculty Directory (1985-86). Any students listed with addresses outside of the geographical area of Ames, Iowa were replaced with the next same-gender name in the Student-Faculty Directory (1985-86) because of the previously demonstrated potential for the commuter student variable to act as a confounding agent (Chickering, 1974).

Distribution of the Questionnaires

The questionnaires were mailed along with a postage paid return envelope and a letter of introduction and explanation (See Appendix A). Campus mail was used for students in the Residence Hall system and for faculty. The United States Postal Service was used for the remaining forms.

Approximately two weeks after the first mailing, follow-up letters were sent (See Appendix A).

Respondents were encouraged to write extra comments on the questionnaire. Examples of these comments appear in Appendix C.
Research Questions

The research questions are dictated by the relationships to be explored. The review of literature suggests the possibility of existing relationships, generally, it does not necessarily define the relationships.

1. The major research question to be answered is: Are there any significant differences in attitudes toward athletics held by university alumni, faculty, parents of student-athletes, students, and student-athletes? A corollary to this is: Is the Athletic Attitude Inventory able to discriminate among the groups as to their attitudes toward athletics?

Before the analysis across the groups could begin, the potential problem of whether or not alumni within the faculty group were acting more like alumni rather than faculty. The question asked is, Are there significant differences, across the clusters, in the responses of faculty who are also alumni as opposed to those who are not? The t-test is used.

The research conducted while developing the Athletic Attitude Inventory produced seven clusters of questions. The focus of this study is on relationships. The following additional questions are intended to examine the possibility that these clusters might show different patterns or might help explain other relationships.

a. Are there significant differences among the five groups in regard to the degree of identification with athletics and athletic symbols they record? Basking-In-Reflected-Glory

b. Are there any significant differences among the groups in regard to possession of positive beliefs about athletics as
a socializing agent? Belief

c. Are there significant differences among the five groups in regard to the sub-attitude competition? Competition

d. Are there any significant differences among the groups in regard to the accuracy of their information about athletics? Fact

e. Are there any significant differences among the groups in regard to their perception of athletics as being important to the university? Importance

f. Are there significant differences among the groups in regard to their perception of athletics as beneficial to the participant? Benefit to Female - Benefit to Male

The one-way analysis of variance is used to address the above questions. The results of the post hoc analysis for unequal sized samples using the Scheffe Method (alpha = .05) is used to determine the pattern of significant differences. The interitem reliability for each cluster (across all 544 questionnaires) is determined by using the SCALES subcommand on the FACTOR ANALYSIS command on the Statistical Package for Social Sciences (SPSSx, 1986).

Two additional (secondary) questions were asked at the outset of this investigation.

1. Do males and females have different attitudes toward athletics?

2. Do individuals who graduated from high school in Iowa have a different attitude toward athletics, especially athletics for females as compared to males, than do individuals who graduated from high school outside the state of Iowa? The t-test was used to answer the above two questions.
During the data collection phase of this study the two secondary questions were enlarged and combined. It appeared that the gender of the athlete benefiting from athletics (or not benefiting) could affect the way in which the subjects would respond to the statements about benefit to athletes. It also appeared that the location of the high school from which the subject graduated (from Iowa or non-Iowa) could make a difference. The following questions were generated:

1. Within each group, what are the relationships among female respondents, male respondents, Iowa high school graduates, non-Iowa high school graduates and their perceptions of the relative beneficence of athletics for males as compared to females?

2. What are the relationships among gender of parents of student-athletes, gender of their student-athletes, and their perception of the relative beneficence of athletics for males as compared to females?

These questions were answered by comparing each subject's score on the item-statements on the Benefit to Females cluster with the identical item-statements on the Benefit to Males cluster. The paired-samples t-test was used for these analyses. Both the correlation between the scores and the difference between them was examined. The .05 level of significance was used for both the t-tests and correlations.
CHAPTER IV. RESULTS AND ANALYSIS

Questionnaires Sent Out and Returned

Fifteen hundred questionnaires were mailed and 550 were returned, 544 of which were usable. The numbers and the percentages are shown in Table 1.

Where possible, gender balance within the groups was selected in

Table 1. Number of questionnaires sent out and number and percentage returned, by group and gender

<table>
<thead>
<tr>
<th></th>
<th>Sent Out</th>
<th>Returned</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni Males</td>
<td>208</td>
<td>77</td>
<td>37.70</td>
</tr>
<tr>
<td>Alumni Females</td>
<td>92</td>
<td>43</td>
<td>46.74</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>120</td>
<td>40.00</td>
</tr>
<tr>
<td>Faculty Males</td>
<td>230</td>
<td>103</td>
<td>44.79</td>
</tr>
<tr>
<td>Faculty Females</td>
<td>70</td>
<td>27</td>
<td>38.60</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>130</td>
<td>43.33</td>
</tr>
<tr>
<td>Parent Males</td>
<td>150</td>
<td>56</td>
<td>37.33</td>
</tr>
<tr>
<td>Parent Females</td>
<td>150</td>
<td>75</td>
<td>50.00</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>131</td>
<td>43.67</td>
</tr>
<tr>
<td>Student Males</td>
<td>173</td>
<td>44</td>
<td>25.43</td>
</tr>
<tr>
<td>Student Females</td>
<td>127</td>
<td>34</td>
<td>26.78</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>78</td>
<td>26.00</td>
</tr>
<tr>
<td>St-Ath Males</td>
<td>209</td>
<td>55</td>
<td>26.32</td>
</tr>
<tr>
<td>St-Ath Females</td>
<td>91</td>
<td>30</td>
<td>33.00</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>85</td>
<td>28.33</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1500</td>
<td>544</td>
<td>36.27</td>
</tr>
</tbody>
</table>
the same proportion as it occurred in the population sampled. The easiest group to estimate was the parent group. The proportion here was 150-150. The proportion of male to female athletes was a known quantity and was duplicated in the sample drawn. The proportion of male to female students was assured by the Registrar's Office. Random sampling was used for alumni/alumnae and faculty. No relative information on gender was available through the University Personnel Office or the Alumni Office.

The alumni (Table 2) were divided into three groups: those who lived in Iowa, those who lived in the contiguous states (Illinois, Minnesota, Missouri, Nebraska, South Dakota, and Wisconsin) and those who lived in the other 41 states in the continental United States. Though an attempt was made to obtain a representative sample of the populations being examined, the representativeness of the samples is not considered critical in grounded theory research (Glaser & Strauss, 1967).

The questionnaires along with a cover letter and a return-address postage-paid envelope were mailed to the 1500 individuals over a three day period. The mailing to students living on campus and to faculty went by "Campus Mail." These were mailed first. Persons with campus addresses were considered most important from the standpoint of timing, because they could be gone from the address, unless followed up quickly. The off-campus students came next, followed by the alumni and parents of student-athletes. The latter two groups were considered less crucial from the standpoint of timing, since they had permanent addresses.
Table 2. Alumni: Location of residence and return rate

<table>
<thead>
<tr>
<th></th>
<th>Iowa</th>
<th>Contiguous States(^a)</th>
<th>Remainder of Continental United States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male Subjects:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sent</td>
<td>115</td>
<td>55</td>
<td>38</td>
</tr>
<tr>
<td>Returned</td>
<td>55</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>%age Returned</td>
<td>47.83</td>
<td>36.36</td>
<td>28.95</td>
</tr>
<tr>
<td><strong>Female Subjects:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sent</td>
<td>51</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Returned</td>
<td>27</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>%age Returned</td>
<td>52.94</td>
<td>31.58</td>
<td>40.91</td>
</tr>
<tr>
<td><strong>Total Subjects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sent</td>
<td>166</td>
<td>74</td>
<td>60</td>
</tr>
<tr>
<td>Returned</td>
<td>82</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>%age Returned</td>
<td>49.40</td>
<td>35.14</td>
<td>33.33</td>
</tr>
</tbody>
</table>

\(^a\)Illinois, Minnesota, Missouri, Nebraska, South Dakota, Wisconsin

In all groups except Faculty, the return rate for females was higher than it was for males. The highest rate of response was from the mothers of student-athletes. Mothers of athletes have generally been found to have positive attitudes toward athletics (McCue, 1953; Pollock, 1983; 1985). One could hypothesize that this could also manifest itself in an eagerness to respond (Pearl, & Fairley, 1985).

The low response rate from the student groups could be explained
partly by the timing of the mailing. Because of a series of delays in printing, the questionnaires were sent shortly before the end of the semester. Any further assessments would do well to plan to mail shortly after the beginning of a term.

The return rates of 36.27% across the entire sample and a low of 25.43% for the male students to a high of 50% for the mothers of athletes are similar to the response rates of other studies, in this area, utilizing a mail-response format. A second mailing was sent out about two weeks after the first one. The researcher received about ten phone calls asking for "another questionnaire." Other than those, it was hard to tell how much good the second mailing did. The questionnaires continued to come in over a three month period.

McGee in 1956 received a 48% return rate for her highest group (members of the Iowa Girls High School Athletic Union) and a return rate of 27% for both her other groups (Iowa high schools who did not belong to the IGHSAU and a selected group of high schools in Illinois).

Of the other studies reviewed who used mail-response formats, the 1975 study by Snyder and Spreitzer had the highest response rate 54% (a sample drawn from the Toledo, Ohio phone book in 1972) with one repeat mailing. The same researchers in 1983 used their former data and added four new groups (Ohio general population in 1981, Iowa general population in 1981, Ohio runners in 1981, and Ohio racquetball players in 1981). The response rate with the new group was 30% with no repeat mailing. The Miller Lite (1985) report on women using a sample drawn from the Women's Sports Federation, drew 24%.
Scoring Correction

First examination of the questionnaires revealed a problem which required a decision before any analysis could be attempted. The forms used for the recording of answers by the respondents, commonly called "bubble-sheets" come in 5-bubble or 10-bubble forms. Since the decision had been made to use a 7-point response scale and a number of the items on the demographics questionnaire required more than five response options, it was necessary to use the form with ten response options (bubbles). Some individuals (15) used options eight, nine and ten, although the directions indicated only seven choices were to be used. It was difficult to tell whether the individuals were wanting to extend out beyond the most negative or whether they were just counting in from the right side. All responses greater than 7 were transformed to 7.

The pre-printed form forced the researcher to indicate that the number "1" was either the most positive or the most negative decreasing in strength to the number "4" then increasing again in strength toward the opposite extreme. This seemed arbitrary rather than logical; therefore, in creating tables, the responses were changed so that the midpoint became "0" (no opinion, don't care, don't know), and the positive responses became 1 (slightly agree), 2 (agree), and 3 (strongly agree). The negative responses became -1 (slightly disagree), -2 (disagree), and -3 (strongly disagree). It seemed it would be easier to associate negative numbers with disagreeing with the statement and positive numbers with agreeing,
and that strength of agreement or disagreement would logically increase from small to large (1 to 3).

Comparison of Faculty Alumni to Faculty Non-Alumni

One further concern needs to be addressed before the presentation of the results of the scores on the Athletic Attitude Inventory. A concern was noted in the selection of the Faculty Group. The selection process used to identify faculty, used the Student-Faculty Directory, which did not identify the school from which the individual graduated. Conceivably, faculty who were alumni might be reacting more as alumni than faculty. Though prior selection was not done, the demographics questionnaire permitted the researcher to divide the faculty group on the basis of those who were alumni and those who were not. The hypothesis was then tested: The "faculty-alum" group is equal to the "faculty-non-alum" group.

The results (Table 3) for all clusters failed to permit the rejection of the hypothesis that the two groups were equal. Therefore, it appears that being an alumnus of the university, in and of itself, does not influence the attitudes of faculty members.

The selection process for alumni barred the selection of any Iowa State faculty person (or any other Iowa State employee) as a part of the alumni group.
Table 3. T-test comparing alumni faculty group with the non-alumni faculty group across all clusters

<table>
<thead>
<tr>
<th>Cluster Name</th>
<th>Faculty-Alum Means (N=45)</th>
<th>Faculty-Non-Alum Means (N=82)</th>
<th>t</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief</td>
<td>-0.04</td>
<td>-0.21</td>
<td>-0.83</td>
<td>0.42</td>
</tr>
<tr>
<td>Basking-In Reflected-Glory</td>
<td>-0.50</td>
<td>-0.72</td>
<td>-1.08</td>
<td>0.30</td>
</tr>
<tr>
<td>Competition</td>
<td>0.10</td>
<td>0.20</td>
<td>0.61</td>
<td>0.54</td>
</tr>
<tr>
<td>Fact</td>
<td>0.85</td>
<td>0.89</td>
<td>0.31</td>
<td>0.76</td>
</tr>
<tr>
<td>Importance</td>
<td>0.62</td>
<td>0.63</td>
<td>0.08</td>
<td>0.94</td>
</tr>
<tr>
<td>Benefit to Females</td>
<td>-0.37</td>
<td>-0.20</td>
<td>1.12</td>
<td>0.30</td>
</tr>
<tr>
<td>Benefit to Males</td>
<td>-0.10</td>
<td>0.06</td>
<td>0.92</td>
<td>0.36</td>
</tr>
</tbody>
</table>

+3 Strongly Agree       -3 Strongly Disagree

Comparison of Mean Scores of Groups by Cluster

The mean score for each of the groups across the ten items making up each cluster, along with the F-ratio and the probability that the null hypothesis (all groups are equal) could be correct is recorded on Table 4.

The F-ratio is highest for the Basking-In-Reflected-Glory, Belief, Competition, and Importance clusters. The pattern shown by post hoc analysis is identical for these four clusters plus the Benefit to Males cluster. The student-athletes group and the parents of the student-athletes group differ significantly from the
Table 4. Group means by cluster, F-ratio, and probability.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Student-Athlete</th>
<th>Parent</th>
<th>Student</th>
<th>Alum</th>
<th>Faculty</th>
<th>F</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief</td>
<td>1.50</td>
<td>1.38</td>
<td>0.51</td>
<td>0.36</td>
<td>-0.14</td>
<td>68.66</td>
<td>0.01</td>
</tr>
<tr>
<td>Basking-In-Reflected-Glory</td>
<td>0.91</td>
<td>0.71</td>
<td>0.39</td>
<td>0.28</td>
<td>-0.64</td>
<td>49.64</td>
<td>0.01</td>
</tr>
<tr>
<td>Competition</td>
<td>1.36</td>
<td>1.40</td>
<td>0.82</td>
<td>0.79</td>
<td>0.17</td>
<td>52.65</td>
<td>0.01</td>
</tr>
<tr>
<td>Fact</td>
<td>1.52</td>
<td>1.25</td>
<td>0.97</td>
<td>0.96</td>
<td>0.87</td>
<td>17.15</td>
<td>0.01</td>
</tr>
<tr>
<td>Importance</td>
<td>1.85</td>
<td>1.75</td>
<td>1.30</td>
<td>1.19</td>
<td>0.64</td>
<td>37.40</td>
<td>0.01</td>
</tr>
<tr>
<td>Female Benefit</td>
<td>0.62</td>
<td>0.52</td>
<td>0.04</td>
<td>0.15</td>
<td>-0.25</td>
<td>24.09</td>
<td>0.01</td>
</tr>
<tr>
<td>Male Benefit</td>
<td>1.05</td>
<td>0.92</td>
<td>0.37</td>
<td>0.36</td>
<td>0.01</td>
<td>35.77</td>
<td>0.01</td>
</tr>
</tbody>
</table>

+3 strongly agree -3 strongly disagree

other three groups, but not from each other. The student and alumni groups differ significantly from the other three groups but not from each other, and the faculty group differs significantly from the other four. The pattern for these five groups is shown in Table 5.

There is no previous research from which to predict these differences. The similarity between the student-athletes and their parents is, intuitively predictable. The fact that the current students are more similar to the multi-aged alumni than they are to their fellow students who happen to be athletes, is not predictable.
Table 5. Post hoc analysis of the group means on 5 clusters: Basking-In-Reflected-Glory, Belief, Benefit to Males, Competition, and Importance

<table>
<thead>
<tr>
<th></th>
<th>Alumni</th>
<th>Faculty</th>
<th>Parents</th>
<th>Students</th>
<th>Student-Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Faculty</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Parents</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Student-Ath</td>
<td>*</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

*--indicates a significant difference

The faculty not being as positive as the other groups is in a way consistent with the literature and media representations. None of these sources compared the faculty to any of these four groups specifically, but the faculty is portrayed as being somewhat negative.

Some of the difference between the groups on the Basking-In-Reflected-Glory cluster might be ascribed to two areas. One could be the references in this cluster to t-shirts and wearing symbols of the school on one's person. This type of clothing is frequently worn by students, regardless of their feelings about athletics. One faculty member indicated that he owned no sweatshirts or t-shirts, and could see no reason to do so. He seemed to consider insulting the idea that he might.

Low (negative) scores in the areas of being depressed or embarrassed about an athletic team's performance could be considered socially unacceptable by some. Some individuals might, therefore,
not want to admit such feelings whether they experience them or not. Subjects who are more intellectually sophisticated might have especially strong feelings in this area. By means of selection, the only groups that could fail to have at least some college, would be the parents of the student-athletes. Although the majority of individuals in this study could be considered intellectually sophisticated, when compared to the majority of the population, the faculty must be considered the most intellectually sophisticated.

As stated before, the pattern for the Competition cluster is identical to the other four. The mean score for the parents is actually higher than the mean for the student-athletes (see Table 4); however, the difference is not significant. The researcher expected that the faculty might tend to be among those to look most favorably upon competition. The fact that the faculty as a group demonstrated very little indication of positive attitudes toward competition was not predicted.

Fact Cluster

This cluster is unique, in that all the statements are correct; therefore, the more positive scores are also the more accurate scores. The results of the post hoc analysis are shown in Table 6.

The slight change in the pattern of significant differences among groups for the Fact cluster is predictable. There is an objectively true answer to each of the questions and this tends to force some individuals to answer with agreement, giving a seemingly
Table 6. Post hoc analysis of the group means on the Fact cluster.

<table>
<thead>
<tr>
<th></th>
<th>Alumni</th>
<th>Faculty</th>
<th>Parents</th>
<th>Students</th>
<th>Student-Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni</td>
<td></td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Student-Ath</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*--indicates a significant difference

positive response, when they would have given a negative (false) response, were they able to consistent with fact (Likert, 1932; Scott, 1968). As with the first three clusters, the Faculty is the least positive and the Student-Athletes are the most positive. The difference in this pattern of significant differences comes primarily from the shift of the students toward the parents of student-athletes group. In this case the Student Group differs significantly only from the Student-Athlete Group.

This cluster adds another dimension to the questionnaire; the statements are all verifiably, objectively correct. This permits the researcher to view the perceptions of the subjects, compared to each other, relative to accuracy of information. In all cases, the groups registered a positive average score, indicating that on the average, they had recognized the statements as being correct. A listing of percentages of true, don't know, and false answers, by group, is found in Appendix E.
The purpose of this study is to determine whether or not there are differences in attitudes toward athletics held by five groups: alumni, faculty, parents of student-athletes, students, and student-athletes. The answer appears to be yes. The answer to the corollary to that question, 'Is the Athletic Attitude Inventory able to distinguish differences?' also appears to be yes.

The overall focus is on relationships. There is still one aspect of the construct attitude toward athletics yet to be examined. This is the perception of athletics as being beneficial to the participant. The review of literature indicates it is possible this perception can vary, depending on the gender of the athlete; therefore, a cluster of questions identifying the participant as male and an identically worded cluster of questions recognizing the participant as a female are included. These two clusters (Benefit to Females and Benefit to Males) are first examined in the same manner as the preceding clusters.

**Benefit to Females Cluster**

The results of the post hoc analysis (Table 7) show a slight change in the pattern of differences. The students have shifted to a position between the Faculty and the Alumni, which means that they do not differ significantly from the Faculty. This indicates a change to less positive from the student group rather than a shift to more positive from the faculty group. The Benefit to Males cluster was discussed earlier.
Table 7. Post hoc analysis of the group means on the Benefit to Females cluster.

<table>
<thead>
<tr>
<th></th>
<th>Alumni</th>
<th>Faculty</th>
<th>Parents</th>
<th>Students</th>
<th>Student-Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni</td>
<td></td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student-Ath</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*—indicates a significant difference

Composite Clusters

The Likert Scale is summative in nature. The clusters built with the techniques of grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990) are also related to the theoretical parts of attitude (Bagozzi, 1978; Herek, 1986; Krech, Crutchfield, & Ballachey, 1962; Ostrom, 1969; Scott, 1968; Secord & Bachman, 1984; Shaw & Wright, 1967; Sudman & Bradburn, 1982). Several sets of summations (adding all the responses across the labeled clusters for all the members of each group) are calculated. The results of the analysis of variance are found in Table 8. The pattern of significant differences, for all composites, is the same as shown in Table 5.

All Composite

The first composite cluster labeled All on Table 8 is formed by averaging all 70 responses on all the questionnaires in each group (Alumni, Faculty, Parents of Student-Athletes, Students, and Student-Athletes).
Table 8. Group means for composite clusters, F-ratio, and probability

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Student-Athlete</th>
<th>Parent</th>
<th>Student</th>
<th>Alum</th>
<th>Faculty</th>
<th>F</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1.26</td>
<td>1.13</td>
<td>0.63</td>
<td>0.59</td>
<td>0.10</td>
<td>62.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Total Benefit</td>
<td>1.33</td>
<td>1.20</td>
<td>0.70</td>
<td>0.64</td>
<td>0.13</td>
<td>64.43</td>
<td>0.01</td>
</tr>
<tr>
<td>No Fact</td>
<td>1.29</td>
<td>1.19</td>
<td>0.64</td>
<td>0.58</td>
<td>-0.01</td>
<td>67.17</td>
<td>0.01</td>
</tr>
<tr>
<td>Same Pattern</td>
<td>1.40</td>
<td>1.31</td>
<td>0.75</td>
<td>0.66</td>
<td>0.01</td>
<td>69.43</td>
<td>0.01</td>
</tr>
</tbody>
</table>

+3 strongly agree -3 strongly disagree

Total Benefit Composite

The Benefit to Females cluster and the Benefit to Males cluster use the same questions. The use of the scores of both could mean that this information could be more influential in determining the total score than any other single cluster. In order to avoid this problem of double weighting by using both the Benefit to Females and Benefit to Males, the Total Benefit Composite is calculated using “TBen” (Total Benefit), the average of Benefit to Females and Benefit to Males in place of the two clusters separately. All five groups show a slightly more positive mean score when the average across the Benefit to Females and Benefit to Males clusters is used, rather than using both scores (Table 8).
No Fact Composite

The Fact cluster differs from the others in that all the statements within that cluster are accurate. To agree is to be correct. Likert (1932) deals with this possibility, indicating that in such cases the resulting mean scores can be artificially raised in accurate response to questions of fact, even though their attitudes might be negative. In examining composite scores made from summatively combining the various clusters, it seems important to examine a composite that does not contain the scores from the Fact cluster.

Same Pattern Composite

The final composite combines the four clusters which show consistently similar patterns: Belief, Basking-In-Reflected-Glory, Competition, and Importance clusters. The composites show a predictable pattern (Table 8). Using the average of the two Benefit to Athlete clusters causes all five means to become slightly more positive. It appears that the negative effect of the Benefit to Females cluster is decreased. The removal of the ten items of the Fact cluster tends to have a slight negative effect (removal of the artificial positive), which was predicted by Likert (1932) and Scott (1968). For all groups except Faculty, the composite cluster made of Basking-In-Reflected-Glory, Belief, Competition, and Importance was noticeably more positive than the summative total across all 70 items.
The focus of this study is on relationships. In addition to the primary independent variable group, gender and location of high school (from which the subjects graduated) are examined.

**Gender Effects**

Beginning with Table 9 a number of comparisons based on gender differences are shown. Most of the gender comparisons in this study are generated by the differences between the responses on the Benefit to Males cluster matched to the like items on the Benefit to Females cluster. These comparisons utilize the paired-samples t-test. Examined relationships compare males and females within each group, males and females who graduated from high school.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Male-mean</th>
<th>Female-mean</th>
<th>t</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief</td>
<td>0.57</td>
<td>0.88</td>
<td>3.38</td>
<td>0.01</td>
</tr>
<tr>
<td>Basking-In-Reflected-Glory</td>
<td>0.21</td>
<td>0.39</td>
<td>2.00</td>
<td>0.05</td>
</tr>
<tr>
<td>Competition</td>
<td>0.88</td>
<td>0.88</td>
<td>-0.06</td>
<td>0.95</td>
</tr>
<tr>
<td>Fact</td>
<td>1.08</td>
<td>1.13</td>
<td>0.71</td>
<td>0.48</td>
</tr>
<tr>
<td>Importance</td>
<td>1.26</td>
<td>1.39</td>
<td>1.51</td>
<td>0.13</td>
</tr>
<tr>
<td>Benefit to Females</td>
<td>0.13</td>
<td>0.31</td>
<td>2.51</td>
<td>0.01</td>
</tr>
<tr>
<td>Benefit to Males</td>
<td>0.45</td>
<td>0.64</td>
<td>2.57</td>
<td>0.01</td>
</tr>
<tr>
<td>Total Benefit</td>
<td>0.29</td>
<td>0.48</td>
<td>2.64</td>
<td>0.01</td>
</tr>
</tbody>
</table>

+3 strongly agree -3 strongly disagree
school in Iowa and those who graduated from high school someplace else and finally the gender of the parents and the gender of their student-athletes.

Before the comparisons are made using the matched pairs, two t-tests are run comparing all males to all females, on each of the clusters (Table 9) and all Iowa high school graduates to all non-Iowa high school graduates on each of the clusters (Table 10). Each one of the clusters is examined to see what relationships, if any, might exist.

In all cases females tend to take a more positive view than the males. However, in the cases of Fact, Importance, and Competition, the differences are not statistically significant.

The stereotype expectation in regard to males and females and competition is that there would be a significant difference between the genders; however, many of the studies in the last ten years would support the findings here, that there is no significant difference between males and females in regard to competition.

The long-standing popularity and media treatment of the Iowa Girls' High School Basketball Tournament would lead to an expectation of higher acceptance of athletics for females by those who graduated from high school in Iowa, as opposed to those who graduated from high school someplace else. The entire group of subjects was collectively divided into two, those who graduated from high school in the state of Iowa and those who did not. The t-test was run. The results are shown in Table 10.
Table 10. T-test, all clusters, comparison of Iowa high school grads with non-Iowa high school grads

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Ia High School Grad-mean</th>
<th>Non-Ia High School Grad-mean</th>
<th>t</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief</td>
<td>0.72</td>
<td>0.63</td>
<td>-0.87</td>
<td>0.39</td>
</tr>
<tr>
<td>Basking-In-Reflected-Glory</td>
<td>0.44</td>
<td>0.05</td>
<td>-4.28</td>
<td>0.01</td>
</tr>
<tr>
<td>Competition</td>
<td>0.94</td>
<td>0.80</td>
<td>-1.74</td>
<td>0.08</td>
</tr>
<tr>
<td>Fact</td>
<td>1.11</td>
<td>1.09</td>
<td>-0.33</td>
<td>0.75</td>
</tr>
<tr>
<td>Importance</td>
<td>1.38</td>
<td>1.22</td>
<td>-1.83</td>
<td>0.07</td>
</tr>
<tr>
<td>Benefit to Females</td>
<td>0.24</td>
<td>0.17</td>
<td>-1.01</td>
<td>0.31</td>
</tr>
<tr>
<td>Benefit to Males</td>
<td>0.53</td>
<td>0.52</td>
<td>-0.17</td>
<td>0.87</td>
</tr>
<tr>
<td>Total Benefit</td>
<td>0.39</td>
<td>0.34</td>
<td>-0.62</td>
<td>0.54</td>
</tr>
</tbody>
</table>

+3 strongly agree   -3 strongly disagree

In all cases, the mean for the Iowa graduates was more positive than the mean for the non-Iowa graduates; however, in only one case, Basking-In-Reflected-Glory, did the difference between the two groups reach a high enough level of significance, to reject the hypothesis that the two groups are equal.

This study is a search for relationships. Therefore, it does not seem to be unreasonable to take a slightly higher risk (one in ten instead of one in twenty) of incorrectly accepting a difference as existing, when it actually does not. Had a significance level of .10 been selected in stead of .05, the clusters Competition and
Importance, .08 and .07 respectively, would have also been considered significant. In the case of Benefit to Females, the mean for those who graduated from high school in the state of Iowa is more positive than the mean of those who graduated from high school elsewhere; however, the difference is not significant.

It has been more than a generation since Iowa was one of only a few states that encouraged athletic competition for girls. It may be that other parts of the country have caught up with Iowa, so that Iowans no longer see competition more positively than those from other states. It may also be that only a particular subset of Iowans see athletics most positively (McGee, 1956; Snyder & Spreitzer, 1983).

This comparison (Table 10) is made across the entire spectrum of subjects and looks only at whether or not individuals who graduated from high school in Iowa had an overall more positive attitude toward athletics (cluster by cluster), than those who graduated from high school some place else. The idea that athletics is beneficial to females is just one of the clusters analyzed.

This study is about relationships. The questionnaire is set up to make it possible to compare each individual's attitude concerning the concept that athletics is beneficial to females with the concept that athletics is beneficial to males. This comparison is made using the paired-t test. This procedure yields two scores in regard to relationships. The correlation and degree of difference between each individual's scores on each of the Benefit to Females statements
Table 11. Comparison of benefit to females and benefit to males by group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Variable</th>
<th>Means</th>
<th>Corr</th>
<th>t</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni</td>
<td>120</td>
<td>FBen</td>
<td>0.15</td>
<td>0.84</td>
<td>-4.99</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBen</td>
<td>0.36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>130</td>
<td>FBen</td>
<td>-1.25</td>
<td>0.83</td>
<td>-5.88</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBen</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>130</td>
<td>FBen</td>
<td>0.52</td>
<td>0.62</td>
<td>-7.93</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBen</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>78</td>
<td>FBen</td>
<td>0.04</td>
<td>0.73</td>
<td>-4.98</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBen</td>
<td>0.37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St-Aths</td>
<td>85</td>
<td>FBen</td>
<td>0.62</td>
<td>0.74</td>
<td>-7.92</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBen</td>
<td>1.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FBen = Benefit to Females  MBen = Benefit to Males

is compared to the same item with respect to males.

In Table 11 the primary groups (alumni, faculty, parents of student-athletes, students, and student-athletes) are examined in regard to the comparison of Benefit to Females and Benefit to Males. Within all groups, individual responses about questions worded to consider Benefit to Male athletes are compared to those worded to consider Benefit to Female athletes. Those of the alumni and faculty show the highest degree of correlation, parents of student-athletes, the lowest. The relationship between the two
variables explains slightly less than 40% of the variance in the scores of parents, approximately 50% for student-athletes and students, and more than 60% for the alumni and faculty groups. This correlation, however, does not mean that individuals see athletics as being as beneficial to females as to males. In all groups, the mean for the Benefit to Males is significantly higher than the mean for Benefit to Females, indicating they feel that athletics are less beneficial to females than to males.

Table 12 shows the results of the comparison of Benefit to Females with Benefit to Males, by gender (male-female) within each major group: alumni, faculty, parents of student-athletes, students, and student-athletes.

For all groups, the correlations and the differences between the attitudes individuals hold toward Benefit to Males as compared to Benefit to Females, are significant at the .05 level.

There are gender differences within the groups. The female students and the female student-athletes see the least difference between Benefit to Females and Benefit to Males; however, the female student-athletes see more benefit to the competitors, male and female, than do the female students. The male student-athletes see the largest difference between the variables of any of the groups. The lowest correlations between groups are found in the mothers of student-athletes and male student-athletes.

In Table 13 the subjects, within their original groups, are further divided by gender and location (Iowa and non-Iowa) of the
Table 12. Comparison of benefit to females and benefit to males by group and gender

<table>
<thead>
<tr>
<th>Sex</th>
<th>Group</th>
<th>n</th>
<th>Variable</th>
<th>Means</th>
<th>Corr</th>
<th>t</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Alumni</td>
<td>43</td>
<td>FBen</td>
<td>0.06</td>
<td>0.81</td>
<td>-3.36</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>0.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Alumni</td>
<td>77</td>
<td>FBen</td>
<td>0.20</td>
<td>0.85</td>
<td>-3.69</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>0.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Faculty</td>
<td>27</td>
<td>FBen</td>
<td>-0.11</td>
<td>0.70</td>
<td>-4.00</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>0.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Faculty</td>
<td>102</td>
<td>FBen</td>
<td>-0.28</td>
<td>0.85</td>
<td>-4.55</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>-0.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Parents</td>
<td>74</td>
<td>FBen</td>
<td>0.51</td>
<td>0.55</td>
<td>-5.86</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Parents</td>
<td>56</td>
<td>FBen</td>
<td>0.52</td>
<td>0.71</td>
<td>5.47</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Student</td>
<td>34</td>
<td>FBen</td>
<td>-0.05</td>
<td>0.88</td>
<td>2.96</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>0.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Student</td>
<td>44</td>
<td>FBen</td>
<td>0.10</td>
<td>0.61</td>
<td>4.11</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>0.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>St-Aths</td>
<td>31</td>
<td>FBen</td>
<td>0.83</td>
<td>0.81</td>
<td>-2.70</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>1.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>St-Aths</td>
<td>45</td>
<td>FBen</td>
<td>0.43</td>
<td>0.74</td>
<td>-8.23</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MBen</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FBen = Benefit to Females  MBen = Benefit to Males
high school from which they graduated. One more attempt is made to
find an indication of whether or not having graduated from a high
school in Iowa makes a difference in how the subjects view athletics
for females.

In general, all groups tend to see athletics as being beneficial
or not being beneficial regardless of the gender. However, they tend
to see that athletics is significantly more beneficial to males than

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Alumni</th>
<th>Faculty</th>
<th>Parents</th>
<th>Students</th>
<th>Student-Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IA Females (N)</strong></td>
<td>34</td>
<td>8</td>
<td>37</td>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td>corr</td>
<td>0.88q</td>
<td>0.87q</td>
<td>0.66q</td>
<td>0.85q</td>
<td>0.88q</td>
</tr>
<tr>
<td>FBen mean</td>
<td>0.08</td>
<td>-0.11</td>
<td>0.54</td>
<td>0.08</td>
<td>1.07</td>
</tr>
<tr>
<td>MBAen mean</td>
<td>0.32</td>
<td>0.25</td>
<td>0.86</td>
<td>0.33</td>
<td>1.31</td>
</tr>
<tr>
<td>t</td>
<td>-3.39b</td>
<td>-2.34b</td>
<td>-3.45b</td>
<td>-3.26b</td>
<td>-2.28b</td>
</tr>
<tr>
<td><strong>Non-IA Females (N)</strong></td>
<td>9</td>
<td>19</td>
<td>34</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>corr</td>
<td>0.27</td>
<td>0.58q</td>
<td>0.40q</td>
<td>0.90</td>
<td>0.75q</td>
</tr>
<tr>
<td>FBen mean</td>
<td>-0.01</td>
<td>-0.11</td>
<td>0.55</td>
<td>-1.00</td>
<td>0.91</td>
</tr>
<tr>
<td>MBAen mean</td>
<td>0.27</td>
<td>0.33</td>
<td>1.07</td>
<td>-1.05</td>
<td>1.01</td>
</tr>
<tr>
<td>t</td>
<td>-1.15</td>
<td>-3.25b</td>
<td>-4.34b</td>
<td>0.24</td>
<td>-1.06</td>
</tr>
<tr>
<td><strong>Iowa Males (N)</strong></td>
<td>68</td>
<td>26</td>
<td>22</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>corr</td>
<td>0.85q</td>
<td>0.93q</td>
<td>0.87q</td>
<td>0.71q</td>
<td>0.79q</td>
</tr>
<tr>
<td>FBen mean</td>
<td>0.20</td>
<td>-0.46</td>
<td>0.65</td>
<td>0.04</td>
<td>0.48</td>
</tr>
<tr>
<td>MBAen mean</td>
<td>0.36</td>
<td>-0.28</td>
<td>0.97</td>
<td>0.65</td>
<td>1.08</td>
</tr>
<tr>
<td>t</td>
<td>-2.76b</td>
<td>-2.17b</td>
<td>-4.14b</td>
<td>-3.91b</td>
<td>-6.89b</td>
</tr>
<tr>
<td><strong>Non-IA Males (N)</strong></td>
<td>9</td>
<td>75</td>
<td>29</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>corr</td>
<td>0.95q</td>
<td>0.79q</td>
<td>0.58q</td>
<td>0.12</td>
<td>0.67q</td>
</tr>
<tr>
<td>FBen mean</td>
<td>0.20</td>
<td>-0.20</td>
<td>0.48</td>
<td>0.28</td>
<td>0.37</td>
</tr>
<tr>
<td>MBAen mean</td>
<td>0.78</td>
<td>0.03</td>
<td>0.88</td>
<td>0.71</td>
<td>0.87</td>
</tr>
<tr>
<td>t</td>
<td>-2.76b</td>
<td>-4.17b</td>
<td>-3.81b</td>
<td>-1.60</td>
<td>-4.74b</td>
</tr>
</tbody>
</table>

FBen = Benefit to Females  MBAen = Benefit to Males

q significant correlation (.05)  b significant difference (.05)
to females. Four of the groups contained fewer than ten individuals and cannot be considered valid: The Iowa female faculty (n=8), non-Iowa alumnae (females) (n=9), the non-IA female students (n=4), and the non-IA male alumni (n=9). However, the focus here is on possible relationships and ten of the groups contain 29 or more individuals and may provide useful information.

Iowa Females

The Iowa female groups, with the exception of the parents group, show significantly high levels of correlation. The difference between the Benefit to Males and Benefit to Females variables is significant for all groups. Though the correlation between the two for female parents is relatively low, the actual means are higher than for any group other than the female student-athletes.

Non-Iowa Females

The non-Iowa females show low correlations between the Benefit to Males compared to the Benefit to Females in the faculty and parent groups. They also show a significant difference between the variables. With the exception of the non-Iowa female student-athletes who show a .75 correlation, between Benefit to Females and Benefit to Males, none of the other comparisons for the non-Iowa female groups are significant at the .05 level.
**Iowa Males**

The adult Iowa males (alumni, faculty, and parents) show high levels of correlation that are statistically significant. The two student groups show correlations that are somewhat lower than the adult groups but still significant. All five groups show significant differences between the variables.

**Non-Iowa Males**

Neither the correlation nor difference between Benefit to Females and Benefit to Males are significant for the non-Iowa students. The correlations range from .95 for the non-Iowa alumni to .58 for the non-Iowa parents. The differences between Benefit to Females and Benefit to Males shown by the non-Iowa alumni, faculty, parents, and student-athletes are significant.

There is still another area of comparison using gender. Table 14 shows the relationship between the mothers of male and female athletes and the fathers of male and female athletes.

In all four cases the respondents see Benefit to Females and Benefit to Males as being significantly correlated at the .05 level. Both the mothers and fathers of male student-athletes indicate that athletics is significantly more beneficial to males than females. The mothers and fathers of female student-athletes do not see athletics as significantly more beneficial to males than females.

The mothers of female student-athletes show the highest mean score on the cluster Benefit to Females and the mothers of male
Table 14. Comparison of benefit to females to benefit to males by mothers and fathers of male and female athletes

<table>
<thead>
<tr>
<th></th>
<th>Male Student-Athletes</th>
<th>Female Student-Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 35</td>
<td>N = 21</td>
</tr>
<tr>
<td>Fathers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBen Mean</td>
<td>0.51</td>
<td>0.55</td>
</tr>
<tr>
<td>MBen Mean</td>
<td>1.01</td>
<td>0.67</td>
</tr>
<tr>
<td>Corr</td>
<td>0.71@</td>
<td>0.83@</td>
</tr>
<tr>
<td>t</td>
<td>-5.84@</td>
<td>-1.53</td>
</tr>
<tr>
<td></td>
<td>N = 45</td>
<td>N = 29</td>
</tr>
<tr>
<td>Mothers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBen Mean</td>
<td>0.32</td>
<td>0.82</td>
</tr>
<tr>
<td>MBen Mean</td>
<td>0.95</td>
<td>0.93</td>
</tr>
<tr>
<td>Corr</td>
<td>0.60@</td>
<td>0.64@</td>
</tr>
<tr>
<td>t</td>
<td>-7.31@</td>
<td>-1.04</td>
</tr>
</tbody>
</table>

FBen = Benefit to Females  MBen = Benefit to Males
@ correlations and differences significant at .05

Student-athletes record the lowest mean score on the Benefit to Females cluster. The mothers of male student-athletes record the largest difference between the means of the Benefit to Females and the Benefit to Males clusters.

The mean scores of the mothers of female student-athletes were higher than the mean scores of the fathers of female student-athletes for both the Benefit to Males and the Benefit to Females clusters.

Fathers of athletes of both genders tend to see about the same
degree of benefit accruing to female student-athletes but vary on the degree of benefit felt for male student-athletes. Mothers of both genders record similar mean scores on the Benefit to Males cluster, but vary markedly on the Benefit to Females cluster. The scores of the fathers of male student-athletes are higher than the mean scores of the mothers of male student-athletes on both the Benefit to Males and Benefit to Females clusters.

Factor Analysis

The results of the factor analysis using the Varimax Rotation (Table 15) are listed on the following pages. The factors, by number, the questions, by number, and the factor loadings are listed. A list of the item-statements that are contained in each factor is found in Appendix G.

Table 15. Factors extracted using varimax rotation

<table>
<thead>
<tr>
<th>FACTOR 1. ATHLETICS FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question #</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>49</td>
</tr>
<tr>
<td>62</td>
</tr>
<tr>
<td>63</td>
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<td>14</td>
</tr>
<tr>
<td>33</td>
</tr>
<tr>
<td>67</td>
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Table 15. continued

FACTOR 1. (continued)

<table>
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<th>Question #</th>
<th>Cluster</th>
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</thead>
<tbody>
<tr>
<td>11</td>
<td>Belief</td>
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</tr>
<tr>
<td>4</td>
<td>Belief</td>
<td>.62973</td>
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<tr>
<td>41</td>
<td>Benefit to Females</td>
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</tr>
<tr>
<td>17</td>
<td>Belief</td>
<td>.57572</td>
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<tr>
<td>68</td>
<td>Competition</td>
<td>.53212</td>
</tr>
<tr>
<td>57</td>
<td>Importance</td>
<td>.51363</td>
</tr>
<tr>
<td>43</td>
<td>Belief</td>
<td>.50215</td>
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<td>36</td>
<td>Importance</td>
<td>.49548</td>
</tr>
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<td>12</td>
<td>Benefit to Females</td>
<td>.45764</td>
</tr>
<tr>
<td>54</td>
<td>Basking-In-Reflected-Glory</td>
<td>.45382</td>
</tr>
<tr>
<td>25</td>
<td>Benefit to Males</td>
<td>.45046</td>
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FACTOR 2. FAN FACTOR

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<td>26</td>
<td>Basking-In-Reflected-Glory</td>
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<td>46</td>
<td>Basking-In-Reflected-Glory</td>
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<tr>
<td>59</td>
<td>Basking-In-Reflected-Glory</td>
<td>.49216</td>
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<tr>
<td>22</td>
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Table 15 continued

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<td>21</td>
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**FACTOR 4. CHEERLEADER FACTOR**

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<td>54</td>
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<td>7</td>
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**FACTOR 5. GOOD FOR MALES & FEMALES**

<table>
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<td>65</td>
<td>Benefit to Males</td>
<td>.60434</td>
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**FACTOR 6.**

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**FACTOR 7.**

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**FACTOR 9.**

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<tr>
<td>16</td>
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<th>Question #</th>
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</table>

<table>
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<th>FACTOR 14.</th>
<th>Question #</th>
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</thead>
<tbody>
<tr>
<td>13</td>
<td></td>
<td>Competition</td>
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</tbody>
</table>

Results of the Factor Analysis

In addition to the factor analysis, the internal reliability of each one of the clusters was determined using the SCALES subcommand on the FACTOR ANALYSIS program within the Statistical Package for Social Sciences (SPSSx, 1986). The internal consistency scores for the clusters are found in Table 16.

Internal consistency statistics of this magnitude speak favorably to the validity and reliability of the instrument and the
Table 16. Internal consistency scores for clusters.

<table>
<thead>
<tr>
<th></th>
<th>Fact</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Basking-In-Reflected-Glory</td>
<td>.86</td>
<td>Fact</td>
<td>.57</td>
</tr>
<tr>
<td>Belief</td>
<td>.91</td>
<td>Competition</td>
<td>.76</td>
</tr>
<tr>
<td>Benefit to Females</td>
<td>.78</td>
<td>Importance</td>
<td>.86</td>
</tr>
<tr>
<td>Benefit to Males</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

original clusters (Cronbach & Meehl, 1955).

Cronbach and Meehl (1955) indicate that the factor analysis can suggest additional groupings or combinations of statements. Researchers indicate that identified facets of an attitude tend to have varied and multiple linkages and individual parts of an attitude may fluctuate, and at times even seem contradictory (Bagozzi, 1978; Ostrom, 1969; Scott, 1978; Shaw & Wright, 1967). A number of studies have used a relatively small set of item-statements, but grouped them in different ways (Grove & Dodder, 1979; Jones & Williamson, 1979; Spreitzer & Snyder, 1975).

A relating of the first four factors from the factor analysis to personality types or to described belief systems, indicates that there is merit in recombining the item-statements into these factors and comparing the groups according to these new factors. This, however, would be in addition to the analysis according to the original clusters, not in place of it. The results of the factor analysis do not indicate a mandate to change any of the clusters.

Glaser and Strauss (1967) indicate that "once a category or
property is conceived, a change in the evidence that indicated it will not necessarily alter, clarify or destroy it" (p. 36). They indicate that much more data is necessary, and from different sources.

The factor analysis using the figures from the Varimax rotation shows one large first factor consisting of 18 statements. Of the first 14, nine are from the Belief cluster. The only one not included in this early grouping is question #22, "Athletics is the best way people can improve their status in life." The item is found on Factor 1, but the value is smaller than the minimum set, .45.

The reason that this item failed to load on Factor 1 within the minimum eigenvalue set, may be somewhat in response to a moderately intense campaign in the media against this idea. Individuals have been concerned that the big salaries of professional athletes, which will be available to only a few, are blinding student-athletes to the fact that they most likely will not be drafted as professionals, and they need to make some other kind of preparation (Edwards, 1983, 1984, 1985; Harris & Eitzen, 1978).

It would appear that Factor 1, called the Athletics Factor, is collectively what people think of when they think of athletics. E. Spreitzer and E. E. Snyder (1975) in their study, "The psychosocial functions of sport as perceived by the general population," separated their items into "social functions" and "psychological functions." This factor seems to correspond to their "social functions." These items deal mostly with athletics as a social entity, one showing interaction with society and the athlete, with the perception generally
being that both society and the athlete benefit from this interaction.

Though the majority of the items were from the Belief cluster, the highest loading item is from the competition cluster, "Winning and losing in athletics helps to prepare most individuals for the competition they meet in daily living." There is one other item from the Competition cluster, "The effort that goes into competitive activities should be respected." There are also two items from the Importance cluster: "Athletics provides a healthy outlet for student energies," and "Athletics provides good public relations for colleges and universities." "I feel proud when the team does well" comes from the Basking-In-Reflected-Glory cluster. There are two items each from the Benefit to Males and the Benefit to Females clusters. A complete list of the item-statements on each of the factors is found in Appendix G.

Factor 2, named the Fan Factor is a grouping which one would find in an intense and committed fan. This is the area that identifies the individual who responds emotionally as if he/she is actually an extension of the team. This is the type of attitude that the theorists say comes from early conditioning and is resistant to change (Herek, 1986; Ostrom, 1968, 1969; Scott, 1968; Sherif, Sherif, & Nebergall, 1965). There are four items from the Basking-In-Reflected-Glory cluster along with the item left from the Belief cluster.

Factor 3, named the Worth Factor, is made up of five statements from the Importance cluster. This factor is more closely related to the cognitive aspect of attitudes rather than the affective. Here,
the subject, or someone or something the subject cares about, is believed to benefit in some way because of the action, or supposed action, of the attitude referent (athletics). This has to do with the items that indicate that financial gain is to be had from athletics. However, financial gain is not the only theme in the Importance cluster. The belief also exists that athletics is good for morale and public relations.

Factor 4 could be called the Cheerleader Factor. The Basking-In-Reflected-Glory cluster was initially created out of two different types of emotional responses, one happy, proud and positive in outlook, and one that is sad, anxious and potentially negative. Examples of the second type are found in Factor 2. Examples of the first are found here in Factor 4. The two faces of this cluster, as broken down by the factor analysis are further characterized by the single item from another cluster found in each factor. The Fan Factor includes the item from the Belief cluster that indicates a belief that athletics is the best way to improve oneself. The additional item in the Cheerleader factor is the one from the Competition cluster that indicates that a winner is a winner.

Factor 5, the Good for Males and Females Factor is made up of three items from the Benefit to Males and two items from the Benefit to Females clusters. The idea of athletes being more popular than students who are not athletes and the idea that athletes are more outgoing were listed for both genders. The fifth item was of
a similar nature, suggesting that males involved in athletics are more popular with females.

The majority of the other factors are pairs of related items, three of them being the pairing of a Benefit to Females statement with the same statement from the Benefit to Males cluster. Three of the other factors contained only one statement.

One pair, Factor 6, contains two items from the Competition cluster. The two items are statements based on the two different ways in which Griffin-Pierson (1988) indicated that males and females viewed competition.

The Competition cluster failed to show substantial cohesion after the varimax rotation, although the interitem reliability on the original cluster was .76. One of the items is the one with the highest factor loading on the biggest factor. Another of the items is the one with the highest mean score when taking the average of all the respondents with regard to a single item. The two items intended to compare the two types of competitive feelings indicated by the research of Griffin-Pierson (1988) loaded on a two-variable factor.

This may be indicative of how complex attitudes toward competition are. It might also be indicative of the possibility of fluctuating attitudes toward competition. It does encourage curiosity.
CHAPTER V. DISCUSSION

The primary purpose of this investigation was to determine people's attitudes toward athletics. The major question guiding this study was: Are there any significant differences in attitudes toward athletics held by alumni, faculty, parents of student-athletes, students, and student-athletes? Based on this investigation, the answer to the primary research question appears to be yes. Differences were reported among alumni, faculty, parents of student-athletes, students, and student-athletes in their attitudes toward athletics.

There is no literature to return to for assessing the findings about the groups' attitudes toward athletics. Reports both scholarly and otherwise promote the idea that the faculty dislike athletics, that alumni are trying to use athletics as a vehicle for reliving their own college years, that parents are trying to live their lives through their children, and that fellow students are either envious of their supposed privileges granted athletes or are trying to bask in their reflected glory. Research by Robinson and Morris (1986) shows that a certain amount of social distance is felt even among athletes of such a nonaggressive sport as gymnastics. Generally these are gross rather than fine perceptions of behavior and the material is rarely comparative in nature. Although no assumptions as to the outcomes were formulated prior to the research, one could not completely ignore the messages of the media. One could intuitively expect to find that the faculty were the least positive. One could also expect that the students and the student-athletes differed in their attitudes. The close similarity
between the students and the multi-age alumni was not expected.

There was no literature to return to for assessing the current findings. There was also no instrument available to assess attitudes toward athletics. It became necessary to develop one. This was accomplished through the inductive logic of grounded theory. Consistent with the techniques of grounded theory, a large amount of material having to do with athletics was gathered. Material was selected from professional research, journals, magazines, newspapers, movies, books, and anecdotal research. Since the intent of this study was to look at feelings toward athletics in depth (attitudes), the basic building blocks of attitudes acted as a guide when organizing the material about athletics collected in the first phase of the study. Most of the researchers involved with attitude theory (Bagozzi, 1978; Herek, 1986; Krech, Crutchfield, & Ballachey, 1948, 1962; Lemon, 1973; Ostrom, 1968, 1969; Scott, 1968; Schuman, & Presser, 1981; Secord & Backman, 1964; Shaw & Wright, 1967; Sherif & Cantril, 1945; 1946) generally agree that attitudes have three parts: affective (emotional), cognitive (thinking) and a physical or intent to act aspect.

Grounded theory calls the groups of organized data conceptual categories (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Glaser and Strauss suggested giving the categories names that immediately remind the researcher of the items within the category. The analysis of the reviewed items suggested six conceptual categories: Basking-
In-Reflected Glory, Belief, Benefit to Athletes, Competition, Facts, and Importance. The categories are represented in the Athletic Attitude Inventory by ten individual item-statements. The one exception was in the Benefit to Athletes category, where evidence and previously formulated theory (Horner, 1972; McGee, 1956; Pollak & Gilligan, 1982; Snyder & Spreitzer, 1983) indicated a need to provide that subjects with an opportunity to distinguish between benefit to females and benefit to males. A more thorough analysis of the conceptual categories is found in Chapter II, pages 36-77.

With the completion of the Athletic Attitude Inventory, a corollary to the primary research question became: Is the developed attitude questionnaire, Athletic Attitude Inventory, capable of discriminating among the populations in regard to their attitudes toward athletics? As with the answer to the primary research question, the answer is yes, the instrument appears to be capable of discriminating among the populations.

The intent of the researcher was to analyze attitudes toward athletics as a broad construct. Some theorists believe that attitudes are closely related to personality. Credence is given to the conclusion that at least moderate success has been achieved in assessing feelings that extend beyond momentary happenstance. This was attested to by the fact that almost no comment was made about a number of widely publicized, unfortunate incidents involving individual student-athletes shortly before this questionnaire was mailed.

Since there was no body of literature from which to predict the
results of the primary research question, it might also be impossible
to accurately determine the answer to its corollary. If the results
had shown no differences, it would have been impossible to tell
whether there were no differences among the groups to find, or
whether the instrument was unable to discern the differences. For
this reason, the second variable, gender, was selected for analysis.
Substantial amounts of literature exist regarding gender, especially
in regard to competition. Competition is an integral part of
athletics and the attitude theorists indicate that attitudes already
held are significant in molding other attitudes. The comparison of
females and males concerning competition and their abilities or lack
of abilities in the area is a major topic for social scientists
(Cano, Solomon, & Holmes, 1984; Colker & Widom, 1980; Crown &
Heatherington, 1989; Croxton, Chiacchia, & Wagner, 1987; Fabian &
Ross, 1984; Greendorfer, 1987; Griffin-Pierson, 1988; Hall, 1990;
McElroy & Willis, 1979; Melnick, Vanfossen, & Sabo, 1988; Salisbury &
Passer, 1982; Snyder & Kivlin, 1977; Snyder & Spreitzer, 1977, 1983;
Spreitzer, Snyder, & Kivlin, 1978).

Although the idea that women did not have positive feelings toward
athletics was a part of a general belief system existing long before
1972, the study published in 1972 by Matina Horner made a large
contribution to the body of theory developing at that time. Ten years
later, Pollak and Gilligan published similar findings. The same year
Gilligan also published a book, In A Different Voice, a book in
which she introduced an "ethic of caring" which she contrasted with the
"ethic of justice" which is woven through Kohlberg's stages of moral development. Gilligan presents a strong case for the unfairness of judging moral development in women by the same standards used for men. In 1987, Friedman, Robinson, and Friedman tested Gilligan's theories. They report their study "fails to support Gilligan's (1977, 1979, 1982) claims for sex differences, it does provide preliminary evidence for the reality of a basis of moral judgments that is distinct from Kohlberg's" (p. 46).

The research done by Griffin-Pierson (1988) seems consistent with Gilligan's ethic of caring. However, the findings were less significant with the athlete group, than with the two academically and professionally competitive groups. Some of the studies that have tried to understand the competitive qualities of females have had females competing against males and find that in most cases, they perceive winning against a male to be threatening to their acceptance (Algren, 1983). This has little carryover into athletics. There are almost no athletic contests where men and women compete directly against each other. Most of the cases involving this type of competition are in informal pick up games or intramural activities that involve a minimum of rules. Women may play against men in sports like golf or tennis, however, one could ask for a clarification as to how much of this is social. Elite competitors (athletes) usually play tournaments or planned competitions against members of the same sex. Other studies have shown that females are comfortable in athletic competition as long as they perceive that their particular sport is considered acceptable.
(Colker & Widom, 1980; Fabian & Ross, 1984; Ho & Walker, 1982; Snyder & Kivlin, 1977; Snyder & Spreitzer, 1983).

The most direct test of Gilligan's theories was conducted by Crown and Heatherington (1989). In Study 2 by Crown and Heatherington (1989), "the majority of respondents anticipate conformity to the expectations of the athletic context, with women as well as men doing their best." They indicate that the total affiliative ending (where a player deliberately loses to a less able one) is judged the wrong thing to do. Crown and Heatherington (1989) hypothesize that the subjects interpret it as not being appropriate in an athletic setting, or that it may also be seen as "inauthentic or dishonest behavior." They also report that the more experienced the athlete, the less likely is she/he to see this as a moral question.

Although the genders seem agreed on the appropriate course for the athlete to take, gender is seen to play a role in interpreting the amount of role conflict seen by the player confronted with the decision. Both males and females see more potential for conflict for the female athlete than for the male. In Study 1 by Crown and Heatherington (1989), where the decision was yet to be made, more female respondents than males chose the total achievement decision for the female athlete. There is no differential between male and female respondents in regard to the male athlete.

Crown and Heatherington (1989) speculate "that women can accept either the female athlete who displays sex-role consistent behavior by sacrificing personal success for another or the female athlete who
displays qualities of the "true" (i.e., masculine) athlete by wholeheartedly pursuing individual achievement more easily than they can accept the female athlete who tries to do both."

McElroy and Willis (1979) failed to find evidence of "fear of success" in female athletes. They state: "Perhaps fear of success cannot be generalized to athletic achievement behavior. The sports setting may be one area where women's achievement is accepted by others (Harres, 1968). . . . Those results may also be indicative of the changing image of the female in today's society" (p. 243).

McElroy and Willis speak of the changing image in today's society. The study by Horner (1972), to which many of the other studies refer is 20 years old. The subjects in her study were assessed between 1964 and 1971. Horner, herself indicates that, "The incidence of fear of success is considered as a function of the age, sex, and educational and occupational level of subjects tested." Horner's study had nothing to do with athletics. She indicated that education had a definite effect on response. A large majority of the population assessed in this study has at least attended some college, most have graduated and many have advanced degrees.

One must be cautious when making attributions to women's motives. The time frame must be clearly defined. Many changes have taken place in the last 20-25 years in regard to women's issues. McElroy and Willis feel that athletics may be a unique situation in regard to women's behavior. Generally, it may be that athletics, where there are strict rules and control, is the safest, best defined area in which
women can compete, without worry about what is expected. This is also consistent with the suggestion by Melnick, Vanfossen, and Sabo that many of women's feelings about competition may be situationally specific.

The findings of this study seem to agree more with the studies that have been done most recently than with those twenty or more years ago. The females in this study appear to be identical to those of the males regarding their attitudes toward competition. They are significantly more positive than the males in some aspects of attitude toward athletics. Within all groups except Faculty, they responded with a higher percentage than did the males. They seem to agree with the female subjects in the "Miller Lite Report on American Attitudes Toward Sports" (Pollock, 1983) regarding the idea that athletics is a beneficial activity to the family and society in general.

The state of Iowa also has a historical position in the male vs. female issue; therefore, whether or not the subject graduated from high school in Iowa is the third and final independent variable analyzed as a part of this study. The history of athletics for females in Iowa goes back nearly 100 years. For three or four decades, Iowa was one of the few states that actively embraced the idea of competitive athletics for girls (Beran, 1983; Enright, 1976; McGee, 1956; Snyder & Spreitzer, 1983). The acceptance was not universal, but Iowa managed to hold a Girls' State Basketball Championship for 30 years when the majority of the physicians and female physical educators were publicly concerned about the evils of athletics for females. At that time, many of the
objections were of a medical nature (Lenskyj, 1986; Robicheaux, 1975).

Emotional and psychological reasons became more important as the physical reasons were disproved. During the decades of the 1920s, 30s, and 40s, the idea was building that females were not emotionally equipped to deal with competition and winning. Female physical educators of the time-period indicated that females were not morally suited to athletic competition (Beran, 1983; Enright, 1976; Lenskyj, 1986; Robicheaux, 1975).

It was hypothesized that individuals who graduated from high school in the state of Iowa might tend to see Benefit to Females in a more positive light, relative to Benefit to Males, however, the evidence did not support this hypothesis. It may be that this is no longer the case. It may also be that this would only hold true for those who graduated from rural high schools 30 years ago or more. Both McGee (1956) and Snyder and Spreitzer (1983) compared groups who were members of the Iowa Girls High School Athletic Union and those who were not. At the time their samples were drawn, most of the members of the Iowa Girls High School Athletic Union were primarily from high school in rural areas. With a finer breakdown of the demographic variables, this question could be examined again.

The relationships between gender of the athlete, gender of the parents, and their responses regarding the Benefit to Athlete questions provide interesting results. The studies by Horner (1972) and Pollak and Gilligan (1982) may not be relevant to considerations of the competitive athlete, however, Gilligan's "ethic of caring" might
have relevance in looking at mothers of athletes. Pollak and Gilligan (1982) suggest "that the differences in aggression in men and women may be due to whether they perceive relationships as dangerous or as safe" (p. 159). It is important to consider the parents of student-athletes and how they define their roles in regard to competition for their children. What was intuitively expected, the father feeling protectionistic toward his daughter may not have materialized because the men felt no danger, for daughters or sons. The male parents see a higher degree of correlation between the Benefit to Males and Benefit to Females cluster than do the mothers, regardless of the gender of their student-athlete. The fathers of females see the highest degree of correlation.

The mothers protectionistic responses toward their sons could be explained by the danger they saw in the situation relative to their sons. This could also explain why they recorded a less positive mean score on the Benefit to Females cluster than did any other parent or student-athlete group. The difference between the mean scores on the Benefit to Males and the Benefit to Females clusters was also greatest for the mothers of male student-athletes. The smallest difference between mean scores on the Benefit to Males and the Benefit to Females clusters was reported by the fathers of female student-athletes.

A possible explanation why Gilligan's theory does not seem to hold true for competitors, but might for parents, would deal with the fact that women with daughters can identify with the activities of their
daughters, hence feeling none or little more danger than their participant daughters. Female student-athletes tend to see more benefit accruing to themselves than do other groups; however, in the case of the mean scores of the mothers of female student-athletes and the female student-athletes themselves are nearly identical (.82 and .83 respectively) on the Benefit to Females cluster. While the mothers of males cannot identify as directly with their sons, denying them that ameliorating effect and leaving them open to all the fear that they might feel for a loved one in danger.

One interesting aspect of the analysis of the mean scores by parents groups by gender and by gender of their student-athlete indicates the need for further investigation. The mothers of male student-athletes showed the lowest (.32) mean score on the Benefit to Females cluster and the fathers of female student-athletes displayed the lowest mean score (.67) on the Benefit to Males cluster. This might hint at an area of misunderstanding or mistrust. Further indication of this can be seen in an anecdotal recitation and a report from the Supreme Court of the state of Washington.

Title IX (federal legislation guaranteeing equality of opportunity and gender equity for females at institutions receiving federal funding) has been misunderstood, some suspect deliberately. In one city in Iowa, the girls' high school softball team took a petition to parents and voters within the school's boundaries to refuse to let the school build them a softball diamond. This might have seemed peculiar
to those who did not know the reason. The area selected for this
diamond was a "beautiful hilly front yard" of the school that was much
admired by students and neighbors alike. The facts were that there
were three diamonds behind the school, at least one of which was
usually empty. The girls won. The school's front yard remained
untouched and the diamonds were shared.

More recently, several lawsuits have been won or settled that have
the media talking about "the return of Title IX." One of these
lawsuits was filed at Washington State University. In Blair vs.
Washington State University (1987), the court found that the
University discriminated against the women athletes and that it would
need to make adjustments. Newspaper articles spoke of a Title IX
decision with a requirement that football be included in the
calculation of funds. To quote directly from the majority opinion of
the Washington State Supreme Court:

Female student-athletes and coaches brought sex
discrimination action under state Equal Rights
Amendment against state university. . . . The Supreme
Court, Dolliver, J., held that: (1) trial court was
required to include football program in calculations
for participation opportunities, scholarships, and
distribution of nonrevenue funds in fashioning
injunction to remedy university's discriminatory
practices; (2) individual sports programs could use
revenue generated by particular programs for their
exclusive benefit . . . (p. 1379)

In reading the actual decision by the Washington Supreme Court,
one can see that the suit was filed under a state law, not the
federal Title IX, and though football needed to be included when
counting heads for calculating opportunities, football retained the
The relationships between males and females both as subjects and as part of the attitude questionnaire took up more of the discussion about the creation and analysis of the questionnaires, than was initially intended. Males versus females is not a primary consideration of this study. However, the only previous literature to relate back to comes from perceived differences between genders. This may give a mistaken impression that gender is the focus of the study. It is not. The focus is on relationships between as many variables as can be analyzed. For now, a practical limit must be set. The five primary groups (alumni, faculty, parents of student-athletes, students, and student-athletes) along with the two secondary variables (gender and location of high school) were combined in various ways in a search for relationships.

According to the proponents of grounded theory, the emphasis is on identifying relationships, but it is also possible to include explanation and prediction of these relationships. Grounded theory provides explanations by adding more and more data to the pool. The more relationships that can be documented, the better the predictive and explanatory possibilities.

This study was exploratory in nature. The purpose was to investigate relationships between groups associated with Iowa State University in regard to their attitudes toward athletics. The study includes an instrument developed for the purpose of assessing these attitudes. It appears that the instrument is capable of distinguishing
between the groups examined in the study, regarding their attitudes toward athletics. With the scores from this instrument along with the accompanying demographics questionnaire, it should be possible to further define groups who especially favor athletics and those who do not. Examination of these additional variables can permit the development of an information bank which can direct fund raising, ticket sales, and public relations campaigns which can promote an improved understanding of the needs of student-athletes, their fellow students, and the faculty. The needs of the off-campus alumni, parents of student-athletes, and general supporters of the university might also be better assessed.

Baird's (1979a) list of five reasons for developing an instrument for assessing any kind of campus attitudes is repeated here.

(1) they can serve as a general monitoring function, alerting the administration when things may be going wrong; (2) they can help the university deal with problems; (3) they can be useful tools in evaluating programs and innovations; (4) the information can be used to help decision makers understand the subtle and complex culture analyzed; (5) perceptual measures can help colleges understand the consequences of their emphases. (pp. 59-61)

Warning

Before any action can be planned, a strong warning must be issued regarding the danger inherent in assuming that all members of a group have the attitude shown by the group collectively. For example, the Faculty group collectively may have the least positive attitude, but some individuals are very supportive of athletics.
Monitoring Function

The monitoring function has begun. Although this is a preliminary study, individuals who have the power to act, should be alerted to the findings listed here, so that they may better "understand the subtle and complex culture analyzed."

Public Relations

It appears that student-athletes feel most positively about athletics. This is intuitively predictable, as is the finding that their parents do not differ from them significantly in their attitudes. The faculty whose attitudes can impact the academic standing of an athlete, hence the athlete's ability to compete, displayed significantly less positive attitudes toward athletics than do the student-athletes or their parents. This was true regardless of the aspect of attitude being considered. Additional variables from the demograhpics questionnaire need to be examined to attempt to find reasons for this phenomenon. In the meantime, however, there is something that can be done unilaterally to try to help the image of athletics by helping the images of the student-athletes.

Student-athletes are in the public eye. Everything they do is scrutinized. After a highly publicized second major confrontation with the law by her son, the mother of a former student-athlete was reported to have said, "It's just not fair that these young boys have to be so careful." Student-athletes need to understand that if they have had a substantial amount of success or the violation of the law
is a serious one, they are likely to see themselves on the front page of the newspaper.

Recommendation

A class in media public relations for student-athletes should be taught. They need to know that whatever they do is news. They need to accept this as part of the commitment to interscholastic athletics. If they hope to have a professional career in athletics, the situation becomes more profound. What might be a silly prank to an average student, such as shoplifting a small item, can be front-page news for an athlete. Such a class would not only instruct but could also act as a vehicle for the venting of frustrations that can develop from such situations. This could be done on a workshop basis with no credit involved, or if the administration were to see the need, it might be possible to modify a section of an existing course for credit.

Recommendation

The establishment of a joint committee of faculty, students, and student-athletes should be formed to discuss problems and look for solutions. It is not logical that a disparity of opinion or attitude can be closed exclusively by unilateral action. This is an institution of higher learning. Students are being prepared to enter the productive, adult world. Businesses like to find students who have had experience in dealing with people in the areas of communication and problem solving. It is possible that with enough stature, such a
committee could have some decision-making powers. However, even without such power, just getting issues out in the open, might help prevent unnecessary grief for any individual or group. Membership of this group, committee, council could vary. Individuals other than faculty, students, student-athletes might include coaches, alumni, administrators, or parents of student-athletes.

Recommendation

Establish a regular contact with the parents of student-athletes. The data of the mothers of student-athletes is too strong to ignore. Ender (1983) found that parents could be very helpful in dealing with student-athletes, especially those who were high-risk students. One would need to go about this cautiously. At least one other Big-Eight school (Missouri) did some work that involved parents in the scholastic-athletic lives of their student-athletes. This researcher is not aware of the outcome of their program. One would need to be mindful that strong feelings might exist. It would not be very good public relations to exclude the fathers, but it appears that dealing with the mothers might be a more difficult, but potentially more rewarding task.

Recommendation

Analyze current perceptions of women in regard to athletics, as competitors and as fans. Openly discuss issues regarding equal opportunity for participation by females and gender equity in
allocation of resources. Promote these issues in a positive light, one intended to forestall any mistrust on the part of participants or those related to them. Iowa has a strong tradition of supporting athletics for females. The research failed to support the hypothesis that individuals graduating from high school in the state of Iowa would tend to see the Benefit to Females in a more positive light than did those who graduated from high school outside of Iowa. However, earlier studies showed that individuals associated with schools who belonged to the Iowa Girls High School Athletic Union were more positive than those who did not, even if the school was located in Iowa. It might seem that the state of residence is not the sole factor. Now the majority of schools do belong to the Iowa Girls High School Athletic Union but this was not the case prior to 1960. Generally the perception has been that adherence to Title IX, the federal legislation that mandated that athletic programs provide equal opportunity for participation by females and gender equity in allocation of resources, was not a problem in Iowa. Such perceptions need to be nourished. In an attempt to economize, the Athletic Department may also have moved in a direction intended to show gender equity. In the minor sports they are considering having the men and women compete at the same time and location. This seems reasonable.

Fund Raising

With a more in-depth analysis of the data on the demographics questionnaire, it might be possible to build a profile of those most
favorably disposed to intercollegiate athletics. Examples of possibly useful variables available are: (1) whether or not the respondent participated in interscholastic athletics him/herself, (2) age, (3) size of high school from which he/she graduated, (4) whether or not the individual graduated from ISU, and numbers more. These variables can be compared with individuals who scored high and who scored low. It might then be possible to target a group with certain characteristics. Whether or not a given individual possesses certain characteristics might be easy or not easy to determine. The individual's alma mater, or his/her approximate age might be fairly easy to ascertain, but whether or not he/she participated in high school athletics might be more difficult to determine.

**Recommendation**

Determine the characteristics of those individuals most favorably disposed to athletics by first dividing the groups into positive (+3) and negative (-3) on the basis of their answers to the questions on the Athletic Attitude Inventory. They evaluate each one of the variables on the demographics questionnaire as to whether or not there are variables that distinguish between the positive and negative groups. This is little different than an ordinary marketing analysis, but this is the first time that a way of establishing positive attitudes has been available, other than by past giving records. This might possibly identify individuals who have not given before, or might highlight new methods of solicitation.
Marketing

The Athletic Attitude Inventory and its accompanying demographics questionnaire could be used for marketing in much the same way it could be used in fund raising. The variables might be slightly different, but the techniques would be similar. In this case the cluster Basking-In-Reflected-Glory might contain especially useful information.

Recommendation

Establish a profile from season ticket holders. This is important as a part of either a fund-raising or marketing analysis. It is generally believed that these are the most positive in their attitudes and are the best sources of revenue. This may prove to be true. Comparing the scores of a group of season-ticket holders with the current groups, or new groups of faculty, students, etc. seems to have the potential to be useful.

Recommendation

Find out how important winning is, and to whom by analyzing each of the questions in the Competition cluster.

Recommendation

Consider the targeting of women as possible prime buyers of certain products or services for themselves, their husbands, children, and other assorted relatives and friends. With the exception of the
Faculty group, a higher percentage of women than men responded to the questionnaire. Marketing research could verify whether or not women might be the prime buyer of many different products.

Recommendation

Investigate the possibility of women as a new resource, both as a buyer and as a part of the product. Women's basketball has a rich and a long history in Iowa. The front page of the capital city's newspaper carries stories about girls' basketball every March.

The University of Iowa has conducted major marketing and public relations campaigns in the area of women's basketball. One technique recruited highly visible men's coaches to campaign for women's games. Iowa State has signed some outstanding players from the Iowa high schools. A number of interesting human interest stories have been run, but winning was not forthcoming. The determination of how important that is, and to whom is suggested above.

In an Olympic year, it might be possible to draw some interest in women's events such as volleyball. However, something that might have a more long-lasting effect, is to make some direct appeals to draw in fans. Several references in the literature indicate that women believe that athletics is beneficial to society in general and promotes family unity. Selling low-cost family package tickets to women's events might create some interest, or perhaps, halftime entertainment could be directed at families.
comments on the Athletic Attitude Inventory

The previous recommendations are specific in how the results of this investigation could be used. To some degree their viability is dependent on the quality of the Athletic Attitude Inventory. Additional recommendations that deal more with checking and improving this instrument are:

1. Run a oneway analysis of variance on each non-fact item-statement. The percentages of true, don't know, and false responses for each Fact item-statement are shown in Appendix E. Borg and Gall (1983), and Sudman and Bradburn (1982) state that each of the individual items in a Likert scale can also stand on its own. Some individual items may be interesting. For example, one question has to do with the alumni returning for Homecoming. Do the alumni react to this more positively than the other groups?

2. Compare the groups across the factors identified by the Factor Analysis. Spreitzer and Snyder (1975) in comparing psychological and sociological implications of athletics, used one set of questions and combined and recombined them according to the results of a factor analysis. In this study the first analysis of the statements maintains its cohesion through the interitem reliability analysis. However, since attitude theorists indicate that attitudes and their components can combine and recombine in different, even conflicting ways, it would add to the body of knowledge developed from this study to compare the primary groups across the newly determined factors. This could be especially interesting in the two different aspects of the
3. Analyze the items from the demographics questionnaire. This would include searches for correlations between the independent variables on the questionnaire and the dependent variables from the Athletic Attitude Inventory. (Simple numeric counts are shown on the sample demographics questionnaires in Appendix B.) Some of these could be compared to earlier studies used in developing the questionnaires.

4. Analyze the items according to the number of different responses given. Did one group have a higher number of extreme responses (+3, -3) than the others? This could provide information in two areas. The question of whether or not any group has a significantly greater number of very positive or very negative feelings can indicate whether or not there might be a large number of deeply ingrained or crystallized attitudes in one group as opposed to another. This has implications in regard to the possibility for attitude change. In addition, a small number of strongly felt attitudes (+3 or -3) each balances three slightly felt attitudes (-1 or +1) in the opposite direction which could give an erroneous indication of the breadth of a group’s attitude.

5. This research can be made stronger by additional data. The survey should be repeated with the same groups and/or some additional groups: athletic season-ticket holders, local businesspersons, non-faculty university employees, broader student groups, etc.

6. The data exists to divide the student-athletes and their
parents on the basis of their sport. These relationships should be investigated. Some individuals maintain that those involved in revenue-producing sports hold different attitudes from those involved in nonrevenue-producing sports. Is this true?

7. Attitude as an "antecedent of behavior" is frequently difficult to assess. One of the few fairly assessable areas would be in the ownership of a t-shirt, sweatshirt, etc. with the school mascot on it. The wearing of these types of garments was calculated as part of the original "Basking-In-Reflected-Glory" study (Cialdini et al., 1986). It would be simple to add a question to the demographics questionnaire asking whether or not the individual owns and wears a t-shirt or sweat shirt with the school mascot on it. It must be remembered, however, that the possession of a t-shirt is not the issue in and of itself. Intuitively, one can see that it is a very different thing to acquire an old t-shirt (without taking cognizance of what is on it) to wear for gardening and purposefully acquiring and wearing the shirt for all to see.

8. Although gender is not the primary focus of this study, enough interesting relationships are exposed to generate some questions. One that seems especially intriguing is, Does athletics, with its established rules system provide a safe area for females to satisfy their needs to compete and achieve?

9. Although the instruments used in this study were intended to assess attitudes at Iowa State University, there is little in the Athletic Attitude Inventory that would prevent its use at another
institutions. Interinstitutional comparisons could provide some additional data for validating the instrument.

Only further use of this instrument, analysis of the data obtained, and definition of the groups will be able to assess its usefulness in fostering further understanding of and positive impact on athletic programs and those associated directly and indirectly with them.

Wolcott (1990) in writing about qualitative research warns about making an attempt to produce a neatly tied package. This research is a beginning. More evidence needs to be accumulated. Additional groups need to be surveyed and additional variables need to be analyzed. Proponents of grounded theory indicate that more information strengthens the theory. The findings to this point would permit a researcher to predict that similar findings would be found, were the same general groups to be surveyed again. However, at this time insufficient data has been analyzed to explain why these findings have been realized.
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I want to thank all the members of my Committee, those who started with me but retired before I finished, and those who came on board in mid-stream. You all helped me each at a time when I needed it the most: Roy Warman, Ruth Swenson, Dahlia Stockdale, Martin Miller, Tony Netusil, Max Urick, Larry Ebbers, and my Major Professor, Dan Robinson.

I want to thank my colleagues in the Department of Computer Science: Arthur Oldehoeft, Chair and all those others, too numerous to name, who kept abreast of my progress. Very special thanks to Gloria Cain, my officemate who helped with the editing and general support, and Becky and Hank Hartman who gave much needed support and advice.

Last but best, I want to thank my family: Karen and John Roltgen, who always had a pepper-upper; Diane and Terry Golubiewski, who helped with the mysteries of word-processor/printer interface, Sandy Kellenberger who was here from beginning to end, and to my husband Gene, who kept pace while working on his own dissertation, finishing before me, and then turning around to help with the last few printings of mine.

Thank you all!
APPENDIX A.

ATHLETIC ATTITUDE INVENTORY AND ACCOMPANYING LETTERS
Dear Faculty Member:

The enclosed questionnaire is a part of my doctoral dissertation assessing the attitudes toward athletics held by five different groups: alumni, faculty, parents of student-athletes and students, athletes and non-athletes.

There have been many assumptions made about how groups feel about athletics. This will provide an opportunity for you to record what your attitudes really are. The enclosed questionnaire has two parts: (1) a 70-item attitude questionnaire asking you to agree or disagree with statements made about athletics and (2) a demographic questionnaire asking details about your current and past experiences.

Please sit down, fill out the answer sheet, place in the return campus mail envelope and return within two weeks. There is a numeric code on the answer sheet. This is for the purpose of follow-up, should that be necessary. The results will be completely confidential. Should you wish to make a comment, please enclose a separate sheet of paper. The comments will be published in an appendix. Should you wish yours not included, please state "do not publish."

Should you have any questions, you may contact me at 232-7259. If you would like to have a summary of the findings of this study, please place an X beside the numeric code on the answer sheet.

Thank you for your help!

Rosemary Kellenberger
Doctoral Candidate

Daniel C. Robinson, PhD
Asst. Dean/Associate Professor
College of Education
ATHLETIC ATTITUDE INVENTORY

1. Athletics is important to the morale of the students.

2. It makes me feel good when I wear a shirt with the school mascot on it.

3. Participation in athletics gives most females the ability to be at ease before the public.

4. Participation in athletics teaches most individuals to profit from criticism.

5. Competition is the normal healthy need of human beings to succeed.

6. Males who participate in athletics develop an exaggerated idea of the value of their skills.

7. When I am away from Ames and see someone with a shirt or jacket with a cyclone on it, it makes me feel as if I'm not alone.

8. Fans watching athletic events can be seen to "participate" along with the players in the tensing and untensing of muscles or clenching and pounding of fists during a contest.

9. Students who participate in athletics are interviewed more often by the media than are students from any other group.

10. Employers like to hire males who have demonstrated they understand teamwork by playing on athletic teams.

11. Athletics develops leaders.

12. Females who participate in athletics act as role models for younger females.

13. Competition does not ruin a friendship.

14. Participation in athletics teaches most individuals to carry through in the face of hardship.

Turn over for next page.
15. Athletics provides a variety of different jobs for many different people.

16. Participation in athletics enhances a male's sexuality.

17. Participation in athletics trains most individuals to make quick decisions and respond when movement is required.

18. Being in the "Top 10" is important.

19. I am depressed the next day after the team loses.

20. Females who participate in athletics develop an exaggerated idea of the value of their skills.

21. Athletic events bring money into a region.

22. Athletics is the best way people can improve their status in life.

23. A school's mascot, often found on t-shirts, sweatshirts, caps, playing cards, etc., is usually associated with its athletic teams.

24. The Homecoming football game is a great chance for alumni to come back and visit the school.

25. Participation in athletics gives most males the ability to be at ease before the public.

26. After a close hard-fought game, I feel almost as tired and drained as if I had been playing myself.

27. Females who participate in athletics are more outgoing than those who don't.

28. Winning should be the ultimate goal of athletics.

29. Athletics is important to the morale of the alumni.

30. It is the duty of all good supporters to go to the game and cheer.

31. Participants in athletics can receive different kinds of scholarships; some receive payment of room, board, tuition, and textbooks; while others may receive only the no-cost loan of their textbooks.

32. Males who participate in athletics are more popular than those who don't.

33. Athletics builds character.

34. Participation in athletics enhances a female's sexuality.

35. A winner is a winner, whether it is on the playing field or in the classroom.
(1) strongly agree, (2) agree, (3) slightly agree, (4) neutral, don't know, (5) slightly disagree, (6) disagree, (7) strongly disagree.

36. Athletics provides a healthy outlet for student energies.

37. I feel especially proud when someone from our home town or home state does well in any kind of contest.

38. The Office of Financial Aid is more restricted in the amount of aid they can give a star athlete than they can to a star student.


40. Athletics teaches most individuals to respect the rights of others.

41. Participation in athletics helps females to form realistic goals.

42. Having a strong athletic program builds pride in a university.

43. Participating in athletics is a good way to be able to visit other areas and meet people from different schools, communities, and countries.

44. The academic rules governing whether or not an athlete remains eligible to participate in athletics are more strict than are the academic rules governing whether or not a non-athlete is eligible to continue in school.

45. Most males who participate in athletics are popular with females.

46. When the team does poorly I have a hard time "holding my head up."

47. Athletics brings money into the university.

48. Employers like to hire females who have demonstrated they understand teamwork by playing on an athletic team.

49. Winning and losing in athletics helps to prepare most individuals for the competition they meet in daily living.

50. If you have cheated to place first, you haven't really won.

51. Some aspects of athletic activity, despite periodic attempts at change, have existed for 6000 years.

52. Males who participate in athletics act as role models for young people.

53. Females who participate in athletics get preferential treatment.

54. I feel proud when the team does well.

55. It is better to feel even a few moments of the glory of winning than to never experience it at all.

56. The majority of college students attend schools that provide competition in intercollegiate athletics.

Turn over for next page.
(1) strongly agree, (2) agree, (3) slightly agree, (4) neutral, don't know, (5) slightly disagree, (6) disagree, (7) strongly disagree.

57. Athletics provides good public relations for colleges and universities.

58. Females who participate in athletics are more popular than those who don't.

59. When I go into the stadium, or arena, or sit in the bleachers, I feel as if I'm in a special, more exciting world.

60. Persons participating in athletics are only one of several groups who can receive free tutoring.

61. Most females who participate in athletics are popular with males.

62. Participation in athletics teaches most individuals to work for what they get.

63. Participation in athletics helps males to form realistic goals.

64. Defeating your opponents is the ultimate goal of competition.

65. Males who participate in athletics are more outgoing than those who don't.

66. The reputation of a university's athletic teams carries over to its academic reputation.

67. Participation in athletics helps teach respect for authority.

68. The effort that goes into competitive activities should be respected.

69. We should work harder to recruit the players from our own state.

70. Athletics is an indispensable part of college life.

(c) Rosemary Keilenberger 1989
HI

HOPE YOUR SUMMER IS GOING WELL

SO WELL THAT

YOU HAVE SOME EXTRA MINUTES

TO FILL OUT

THE ATHLETIC ATTITUDE QUESTIONNAIRE

YOU RECEIVED A FEW WEEKS AGO

PLEASE, PLEASE

TAKE THIS OPPORTUNITY TO EXPRESS YOUR OPINION

ABOUT ATHLETICS

BY

PLACING THE COMPLETED ANSWER SHEET IN THE RETURN ENVELOPE

AND MAIL BACK TO ME

SO THAT I CAN COMPLETE THE STUDY THIS SUMMER

THANK YOU FOR YOUR PARTICIPATION!


Rosemary Kellenberger
HAVE A GREAT SUMMER

BUT

FIRST

PLEASE..PLEASE

RETURN THE

"ATHLETIC ATTITUDE INVENTORY"

YOU RECEIVED IN THE MAIL

ABOUT THREE WEEKS AGO

I need to finish it over the summer. If you have any questions, please call 232-7259. If you have already sent yours in, thank you! For those of you who are about to return yours, thank you!

Rosemary Kellenberger
Doctoral Candidate
APPENDIX B.

DEMOGRAPHICS QUESTIONNAIRES
Please fill in the circle (0) that corresponds with your desired response.

71. (1) MALE 77 (2) FEMALE 43

72. DID YOU GRADUATE FROM AN IOWA HIGH SCHOOL?
   (1) YES 102 (2) NO 18

73. ETHNIC ORIGIN
   (Please select one)
   0 (1) BLACK
   0 (2) HISPANIC
   119 (3) WHITE
   01 (4) OTHER

74. ARE YOU AN UNITED STATES CITIZEN?
   (1) YES 120 (2) NO 0

75. AGE GROUP (Please select one)
   06 (1) 25 & UNDER
   41 (2) 26-35
   44 (3) 36-45
   21 (4) 46-55
   08 (5) 56-65
   (5) 66 & OVER

76. EDUCATION
   (check highest completed only)
   65 (1) BS/BA DEGREE
   19 (2) SOME GRADUATE WORK
   24 (3) MS/MA DEGREE
   03 (4) PhD
   09 (5) DVM/MD/JD/DD DEGREE

77. YEARS SINCE ISU GRADUATION
   (Select one only)
   17 (1) 5 YEARS or LESS
   19 (2) 6-10 YEARS
   17 (3) 11-15 YEARS
   19 (4) 16-20 YEARS
   48 (5) MORE THAN 20 YEARS

78. UNIVERSITY GRADES (Please select one only)
   51 (1) GPA = 3.00 to 4.00
   65 (2) GPA = 2.25 to 2.99
   04 (3) GPA = 2.24 or less

79. VARSITY SPORTS' LETTER and/or INTRAMURAL/VR VARSITY ATHLETICS
   (1) YES 51 (2) NO 69

80. MARCHING/PEP BAND and/or CHEERLEADING/ POM-POMS/TEAM MANAGER
   (1) YES 08 (2) NO 112

81. INSTRUMENTAL/VOCAL MUSIC and/or DEBATE/STUDENT GOVERNMENT DRAMA and/or DEPARTMENTAL CLUBS
   (1) YES 61 (2) NO 59

82. SERVICE/CHURCH ACTIVITIES
   (1) YES 66 (2) NO 54

83. FRATERNITY/SORORITY
   (1) YES 37 (2) NO 83

84. HIGH SCHOOL GRADES (Please select one only)
   90 (1) GPA = 1.00 to 4.00
   26 (2) GPA = 2.25 to 2.99
   04 (3) GPA = 2.24 or less

Questions 85-88 refer to your activities while in high school.

85. VARSITY SPORTS' LETTER and/or INTRAMURAL/VR VARSITY SPORTS
   (1) YES 76 (2) NO 44

86. MARCHING/PEP BAND and/or CHEERLEADING/ POM-POMS/TEAM MANAGER
   (1) YES 49 (2) NO 71

87. INSTRUMENTAL/VOCAL MUSIC and/or DEBATE/STUDENT GOVERNMENT and/or DRAMA and/or DEPARTMENTAL CLUBS and/or YEARBOOK/NEWSPAPER
   (1) YES 95 (2) NO 25

88. SERVICE (Scouts, YMCA, etc.)/CHURCH ACTIVITIES
   (1) YES 99 (2) NO 21

Turn over for next page.
Questions 89-93 refer to whether your relatives attended or graduated from ISU.

89. CHILDREN ATTEND/ALUM ISU
   (1) YES 24 (2) NO 94

90. GRANDCHILDREN ATTEND/ALUM ISU
   (1) YES 01 (2) NO 116

91. PARENT/PARENTS ISU ALUMNI
   (1) YES 20 (2) NO 98

92. GRANDPARENT/GRANDPARENTS ALUMNI
   (1) YES 03 (2) NO 115

93. OTHER RELATIVES ISU STUDENTS/ALUMNI
   (1) YES 77 (2) NO 41

Questions 94-99 refer to your current activities. Please indicate all in which you participate.

94. ATTEND ISU ATHLETIC EVENTS REGULARLY
   (1) YES 17 (2) NO 101

95. ATTEND ISU ATHLETIC EVENTS OCCASIONALLY
   (1) YES 48 (2) NO 69

96. PARTICIPATE IN ORGANIZED SPORT
   (softball, handball, tennis, etc.)
   (1) YES 43 (2) NO 75

97. PARTICIPATE IN INDIVIDUAL SPORT
   (running, golf, etc.)/EXERCISE ACTIVITY
   (1) YES 100 (2) NO 18

98. ATTEND NON-ISU ATHLETIC EVENTS
   (1) YES 78 (2) NO 40

99. READ ABOUT SPORTS, LISTEN TO SPORTS ON RADIO, OR WATCH SPORTS ON TELEVISION
   (1) YES 105 (2) NO 13

Questions 100-103 refer to whether or not you have had relatives participate in athletics for the following listed organizations.

100. ISU
    (1) YES 11 (2) NO 106

101. OTHER COLLEGE OR UNIVERSITY
    (1) YES 14 (2) NO 84

102. HIGH SCHOOL
    (1) YES 101 (2) NO 17

103. PROFESSIONAL/SEMI-PROFESSIONAL, and/or
     AAU, OLYMPICS, ETC.
     (1) YES 08 (2) NO 110

104. ALUMNI ACTIVITIES (Please select one)
    12 (1) ATTEND FREQUENTLY
    46 (2) ATTEND INFREQUENTLY
    46 (3) DON'T ATTEND
    14 (4) NO ORGANIZATION IN AREA

Questions 105-112 refer to possible reasons for your visiting ISU. Please indicate all that apply.

105. HOMECOMING
    (1) YES 57 (2) NO 59

106. PARENTS DAY
    (1) YES 12 (2) NO 104

107. ATHLETIC EVENTS
    (1) YES 72 (2) NO 44

108. VEISHEA
    (1) YES 75 (2) NO 41

109. PLAYS/CONCERTS
    (1) YES 61 (2) NO 55

110. NO SPECIAL TIME
    (1) YES 75 (2) NO 37

111. VISIT FRIENDS
    (1) YES 65 (2) NO 51

112. BUSINESS
    (1) YES 59 (2) NO 57
Please fill in the circle (O) that corresponds with your desired response.

71. (1) MALE 101 (2) FEMALE 27

72. DID YOU GRADUATE FROM AN IOWA HIGH SCHOOL?
   (1) YES 34 (2) NO 94

73. ETHNIC ORIGIN
   (Please select one)
   01 (1) BLACK
   01 (2) HISPANIC
   121 (3) WHITE
   04 (4) OTHER

74. ARE YOU AN UNITED STATES CITIZEN?
   (1) YES 122 (2) NO 06

75. AGE GROUP
   (Please select one)
   0 (1) 25 & UNDER
   20 (2) 26-35
   35 (3) 36-45
   42 (4) 46-55
   21 (5) 56-65
   10 (6) 66 & OVER

76. EDUCATION
   (check highest completed only)
   00 (1) BS/BA DEGREE
   01 (2) SOME GRADUATE WORK
   20 (3) MS/MA DEGREE
   106 (4) PhD
   01 (5) DVM/MD/JD/DD DEGREE

77. YEARS SINCE ISU GRADUATION
   (Select one only)
   07 (1) 5 YEARS OR LESS
   06 (2) 6-10 YEARS
   06 (3) 11-15 YEARS
   08 (4) 16-20 YEARS
   49 (5) MORE THAN 20 YEARS

78. UNIVERSITY GRADES (Select one only)
   108 (1) GPA = 3.00-4.00
   16 (2) GPA = 2.25-2.99
   01 (3) GPA = 2.24 OR LESS

Questions 79-83 refer to college activities. Please fill in the circle for yes or no based on whether or not you participated in any of the activities listed within the group.

79. VARSITY SPORTS' LETTER and/or INTRAMURAL/JR VARSITY ATHLETICS
   (1) YES 40 (2) NO 87

80. MARCHING/PEP BAND and/or CHEERLEADING/ POM-POMS/TEAM MANAGER
   (1) YES 12 (2) NO 115

81. INSTRUMENTAL/VOCAL MUSIC and/or DEBATE/STUDENT GOVERNMENT DRAMA and/or DEPARTMENTAL CLUBS
   (1) YES 72 (2) NO 55

82. SERVICE/CHURCH ACTIVITIES
   (1) YES 77 (2) NO 50

83. FRATERNITY/SORORITY
   (1) YES 37 (2) NO 90

84. HIGH SCHOOL GRADES (Please select one only)
   102 (1) GPA = 3.00-4.00
   22 (2) GPA = 2.25-2.99
   02 (3) GPA = 2.24 OR LESS

Questions 85-88 refer to your activities while in high school.

85. VARSITY SPORTS' LETTER and/or INTRAMURAL/JR VARSITY SPORTS
   (1) YES 70 (2) NO 58

86. MARCHING/PEP BAND and/or CHEERLEADING/ POM-POMS/TEAM MANAGER
   (1) YES 36 (2) NO 92

87. INSTRUMENTAL/VOCAL MUSIC and/or DEBATE/STUDENT GOVERNMENT and/or DRAMA and/or DEPARTMENTAL CLUBS and/or YEARBOOK/NEWSPAPER
   (1) YES 101 (2) NO 27

88. SERVICE (Scouts, YMCA, etc.)/CHURCH ACTIVITIES
   (1) YES 99 (2) NO 29

Turn over for next page.
Questions 89-94 refer to whether you or your relatives attended or graduated from ISU. Please indicate all that apply.

89. ISU ALUMNUS
   (1) YES 45 (2) NO 79

90. CHILDREN ATTEND/ALUM ISU
   (1) YES 41 (2) NO 82

91. GRANDCHILDREN ATTEND/ALUM ISU
   (1) YES 0 (2) NO 120

92. PARENT/PARENTS ISU ALUMNI
   (1) YES 10 (2) NO 114

93. GRANDPARENT/GRANDPARENTS ALUMNI
   (1) YES 04 (2) NO 120

94. OTHER RELATIVES ISU STUDENTS/ALUMNI
   (1) YES 45 (2) NO 79

Questions 95-100 refer to your current activities. Please indicate yes or no for each group in which you participate.

95. ATTEND ISU ATHLETIC EVENTS REGULARLY
   (1) YES 70 (2) NO 49

96. ATTEND ISU ATHLETIC EVENTS OCCASIONALLY
   (1) YES 07 (2) NO 118

97. PARTICIPATE IN ORGANIZED SPORT
    (softball, handball, tennis, etc.)
    (1) YES 98 (2) NO 27

98. PARTICIPATE IN INDIVIDUAL SPORT
    (running, golf, etc.)/EXERCISE ACTIVITY
    (1) YES 97 (2) NO 28

99. ATTEND NON-ISU ATHLETIC EVENTS
    (1) YES 66 (2) NO 59

100. READ ABOUT SPORTS, LISTEN TO SPORTS ON
      RADIO, OR WATCH SPORTS ON TELEVISION
      (1) YES 102 (2) NO 22

Questions 101-104 refer to whether or not you have had relatives participate in athletics for the following listed organizations.

101. ISU
    (1) YES 09 (2) NO 115

102. OTHER COLLEGE/UNIVERSITY
    (1) YES 41 (2) NO 83

103. HIGH SCHOOL
    (1) YES 95 (2) NO 29

104. PROFESSIONAL/SEMI-PROFESSIONAL, and/or
     AAU, OLYMPICS, ETC.
     (1) YES 16 (2) NO 108

105. AMOUNT OF CONTACT YOU HAVE WITH
     STUDENT-ATHLETES
     (Please select one only.)
     23 (1) SEE AND TALK WITH FREQUENTLY
     61 (2) SEE FREQUENTLY, BUT LITTLE TALK
     10 (3) SEE OCCASIONALLY
     22 (4) HAVE NO CONTACT
Parents of Student-Athletes

Please fill in the circle (0) that corresponds with your desired response.

71. (1) MALE 56 (2) FEMALE 75

72. DID YOU GRADUATE FROM AN IOWA HIGH SCHOOL?
   (1) YES 61 (2) NO 64

73. ETHNIC ORIGIN
   (Please select one)
   21 (1) BLACK
   00 (2) HISPANIC
   110 (3) WHITE
   00 (4) OTHER

74. ARE YOU AN UNITED STATES CITIZEN?
   (1) YES 131 (2) NO 0

75. AGE GROUP
   (Select one only)
   00 (1) 26-35
   32 (2) 36-45
   79 (3) 46-55
   16 (4) 56-65
   03 (5) 66 & OVER

76. EDUCATION
   (Select highest grade completed only)
   03 (1) 11th GRADE OR LESS
   23 (2) HIGH SCHOOL/GED
   07 (3) TRADE SCHOOL
   30 (4) SOME COLLEGE
   52 (5) BACHELOR'S DEGREE
   04 (6) PhD DEGREE
   12 (7) DVM/MD/JD/DD DEGREE

   If answer to 76 was 1, 2, or 3 please skip to 83.

77. UNIVERSITY GRADES (if applicable)
   40 (1) GPA = 3.00 to 4.00
   41 (2) GPA = 2.25 to 2.99
   11 (3) GPA = 2.24 or less

Questions 78-82 refer to college activities. Please fill in the circle for yes or no based on whether or not you participated in any of the activities listed within the group.

78. VARSITY/JUNIOR VARSITY/INTRAMURAL ATHLETICS
   00 (1) YES 46 (2) NO 51

79. MARCHING/PEP BAND and/or CHEERLEADING/ POM-PONS/TEAM MANAGER
   (1) YES 13 (2) NO 84

80 INSTRUMENTAL/VOCAL MUSIC and/or DEBATE/STUDENT GOVERNMENT and/or DRAMA and/or DEPARTMENTAL CLUBS.
   (1) YES 39 (2) NO 58

81. SERVICE OR CHURCH ACTIVITIES
   (1) YES 66 (2) NO 31

82. FRAZER/SORORITY
   (1) YES 29 (2) NO 68

83. HIGH SCHOOL GRADES
   (Please select one)
   70 (1) GPA = 3.00-4.00
   51 (2) GPA = 2.25-2.99
   08 (3) GPA = 2.24 OR LESS

Questions 84-87 refer to your activities while in high school.

84. VARSITY LETTER and/or INTRAMURAL/JUNIOR VARSITY ATHLETICS
   (1) YES 82 (2) NO 46

85. MARCHING/PEP BAND and/or CHEERLEADING/POM-PONS/TEAM MANAGER
   (1) YES 57 (2) NO 72

86. INSTRUMENTAL/VOCAL MUSIC and/or DEBATE STUDENT GOVERNMENT and/or DRAMA and/or YEARBOOK/NEWSPAPER
   (1) YES 84 (2) NO 46

87. SERVICE (Scout, YMCA)/CHURCH ACTIVITIES
   (1) YES 107 (2) NO 22

Turn over for next page.
Questions 88-93 refer to your current activities. Please indicate yes or no for each group in which you participate.

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>88. ATTEND ISU ATHLETIC EVENTS REGULARLY</td>
<td>46</td>
<td>89</td>
</tr>
<tr>
<td>89. ATTEND ISU ATHLETIC EVENTS OCCASIONALLY</td>
<td>69</td>
<td>58</td>
</tr>
<tr>
<td>90. PARTICIPATE IN ORGANIZED ATHLETICS (softball, handball, tennis, etc.)</td>
<td>37</td>
<td>88</td>
</tr>
<tr>
<td>91. PARTICIPATE IN INDIVIDUAL ATHLETIC (running, aerobics etc.)/ACTIVITY</td>
<td>81</td>
<td>44</td>
</tr>
<tr>
<td>92. ATTEND NON-ISU ATHLETIC EVENTS</td>
<td>84</td>
<td>40</td>
</tr>
</tbody>
</table>

Questions 94-97 ask whether or not you have had relatives participate in athletics for the following listed organizations.

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>94. HAVE/HAD A RELATIVE PARTICIPATE IN VARSITY ATHLETICS AT IOWA STATE UNIVERSITY</td>
<td>88</td>
<td>38</td>
</tr>
<tr>
<td>95. HAVE/HAD A RELATIVE PARTICIPATE IN VARSITY ATHLETICS AT SOME OTHER COLLEGE OR UNIVERSITY</td>
<td>77</td>
<td>48</td>
</tr>
<tr>
<td>96. HAVE/HAD RELATIVE PARTICIPATE IN VARSITY ATHLETICS IN HIGH SCHOOL</td>
<td>122</td>
<td>04</td>
</tr>
<tr>
<td>97. HAVE/HAD RELATIVE PARTICIPATE IN ATHLETICS FOR AN ORGANIZED GROUP OTHER THAN AN EDUCATIONAL INSTITUTION (AAU, professional, semi-professional)</td>
<td>64</td>
<td>42</td>
</tr>
</tbody>
</table>

Questions 98-105 refer to reasons for which you visit ISU. Please indicate Yes or No for each possible reason for which you visit.

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>98. HOMECOMING</td>
<td>33</td>
<td>93</td>
</tr>
<tr>
<td>99. PARENTS DAY</td>
<td>79</td>
<td>47</td>
</tr>
<tr>
<td>100. ATHLETIC EVENTS</td>
<td>115</td>
<td>11</td>
</tr>
<tr>
<td>101. VEISHEA</td>
<td>46</td>
<td>80</td>
</tr>
<tr>
<td>102. PLAYS/CONCERTS</td>
<td>31</td>
<td>95</td>
</tr>
<tr>
<td>103. NO SPECIAL TIME</td>
<td>87</td>
<td>37</td>
</tr>
<tr>
<td>104. BUSINESS</td>
<td>27</td>
<td>99</td>
</tr>
<tr>
<td>105. TO SEE FRIENDS</td>
<td>44</td>
<td>82</td>
</tr>
</tbody>
</table>

Questions 106-113 refer to the reasons why your son/daughter selected Iowa State. Please indicate yes or no for each possible reason.

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>106. ACADEMIC PROGRAM</td>
<td>108</td>
<td>19</td>
</tr>
<tr>
<td>107. OVERALL REPUTATION OF ISU</td>
<td>110</td>
<td>17</td>
</tr>
<tr>
<td>108. REPUTATION OF ATHLETIC TEAMS</td>
<td>108</td>
<td>19</td>
</tr>
<tr>
<td>109. CLOSE TO HOME</td>
<td>57</td>
<td>70</td>
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<tr>
<td>110. CLOSE FRIEND AT ISU</td>
<td>18</td>
<td>109</td>
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<tr>
<td>111. RELATIVE ATTENDING ISU</td>
<td>22</td>
<td>105</td>
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<tr>
<td>112. QUALITY OF COACHING</td>
<td>91</td>
<td>46</td>
</tr>
<tr>
<td>113. STRENGTH OF CONFERENCE</td>
<td>68</td>
<td>59</td>
</tr>
</tbody>
</table>
STUDENT QUESTIONNAIRE

Please fill in the circle (0) that corresponds with your desired response.

71. (1) MALE 44 (2) FEMALE 14

72. DID YOU GRADUATE FROM AN IOWA HIGH SCHOOL?
   (1) YES 63 (2) NO 15

73. ETHNIC ORIGIN (Please select one)
   01 (1) BLACK
   00 (2) HISPANIC
   74 (3) WHITE
   02 (4) OTHER

74. ARE YOU AN UNITED STATES CITIZEN?
   (1) YES 76 (2) NO 02

75. UNIVERSITY GRADES (Please select one)
   33 (1) GPA = 3.00 to 4.00
   31 (2) GPA = 2.25 to 2.99
   13 (3) GPA = 2.24 or less

Questions 76-80 refer to college activities. Please fill in the circle for yes or no based on whether or not you participated in any of the activities listed within the group.

76. VARSITY/JUNIOR VARSITY and/or INTRAMURAL ATHLETICS
   (1) YES 52 (2) NO 26

77. MARCHING/PEP BAND and/or CHEERLEADING/POM-PONS/TBAH MANAGER
   (1) YES 05 (2) NO 73

78. INSTRUMENTAL/VOCAL MUSIC and/or DEBATE, STUDENT GOVERNMENT and/or DRAMA and/or DEPARTMENTAL CLUBS
   (1) YES 33 (2) NO 45

79. SERVICE OR CHURCH ACTIVITIES
   (1) YES 41 (2) NO 37

80. FRATERNITY/SORORITY
   (1) YES 20 (2) NO 58

81. HIGH SCHOOL GRADES (Please select one)
   70 (1) GPA = 3.00 to 4.00
   08 (2) GPA = 2.25 to 2.99
   00 (3) GPA = 2.24 or less

Questions 82-85 refer to high school activities.

82. VARSITY SPORTS' LETTER and/or INTRAMURAL/JR VARSITY ATHLETICS
   (1) YES 55 (2) NO 23

83. MARCHING/PEP BAND and/or CHEERLEADING/POM-PONS/TBAH MANAGER
   (1) YES 38 (2) NO 40

84. INSTRUMENTAL/VOCAL MUSIC and/or DEBATE, STUDENT GOVERNMENT and/or DRAMA and/or DEPARTMENTAL CLUBS and/or YEARBOOK/NEWSPAPER
   (1) YES 67 (2) NO 11

85. SERVICE/CHURCH ACTIVITIES
   (1) YES 59 (2) NO 19

Questions 86-88 refer to whether your relatives attend/ed or graduated from ISU. Please fill in the circle indicating yes or no for each group in which you participate.

86. PARENT/PARENTS ISU ALUMNI
   (1) YES 18 (2) NO 60

87. GRANDPARENT/GRANDPARENTS ALUMNI
   (1) YES 02 (2) NO 76

88. OTHER RELATIVES ISU STUDENTS/ALUMNI
   (1) YES 43 (2) NO 35

Questions 89-94 refer to your current activities. Please indicate yes or no for each group in which you participate.

89. ATTEND ISU ATHLETIC EVENTS REGULARLY
   (1) YES 29 (2) NO 49

90. ATTEND ISU ATHLETIC EVENTS OCCASIONALLY
   (1) YES 36 (2) NO 42

91. PARTICIPATE IN ORGANIZED ATHLETICS (softball, handball, tennis, etc.)
   (1) YES 39 (2) NO 39

92. PARTICIPATE IN INDIVIDUAL ATHLETICS (running, aerobics)/EXERCISE ACTIVITIES
   (1) YES 54 (2) NO 24

93. ATTEND NON-ISU ATHLETIC EVENTS
   (1) YES 43 (2) NO 35

94. READ ABOUT SPORTS, LISTEN TO SPORTS ON OR WATCH ATHLETIC EVENTS ON TELEVISION.
   (1) YES 52 (2) NO 16

Questions 95-98 refer to whether or not you have had relatives participate in athletics for the following listed organizations.

95. ISU
   (1) YES 07 (2) NO 71

96. OTHER COLLEGE OR UNIVERSITY
   (1) YES 26 (2) NO 52

97. HIGH SCHOOL
   (1) YES 71 (2) NO 07

98. PROFESSIONAL/SEMI-PROFESSIONAL, and/or AAU, OLYMPICS, ETC.
   (1) YES 13 (2) NO 65

Turn over for next page.
99. CLASSIFICATION (Please select only one)
13 (1) FRESHMAN
14 (2) SOPHOMORE
17 (3) JUNIOR
31 (4) SENIOR

100. LIVE IN- (Select one only)
32 (1) RESIDENCE HALL
00 (2) WITH PARENTS
31 (3) APARTMENT OR HOUSE
12 (4) PRATERNITY/SORORITY HOUSE

101. NUMBER OF HIGH SCHOOLS IN HOMETOWN
(Please select one only)
50 (1) ONE
14 (2) TWO-FIVE
10 (3) MORE THAN FIVE

102. SIZE OF HOMETOWN (Please select one)
05 (1) RURAL (unincorporated)
22 (2) LESS THAN 5000 (incorporated)
14 (3) 5-20,000
15 (4) 20-50,000
07 (5) 50-100,000
12 (6) OVER 100,000

103. DISTANCE HOME TOWN IS FROM AMES
(Please select one only)
04 (1) HOME TOWN IS AMES
13 (2) LESS THAN 50 MILES
13 (3) 51-100 MILES
24 (4) 101-200 MILES
14 (5) 201-350 MILES
07 (6) 351 MILES

104. SIZE OF HIGH SCHOOL GRADUATING CLASS
(Please select one)
03 (1) 30 PERSONS OR LESS
16 (2) 31-75
17 (3) 76-150
19 (4) 151-350
20 (5) 351 OR MORE

105. HOMECOMING
(1) YES 12 (2) NO 63

106. ATHLETIC EVENTS
(1) YES 24 (2) NO 51

107. VEISHEA
(1) YES 23 (2) NO 52

108. NO SPECIAL TIME
(1) YES 60 (2) NO 15

109. TO SEE FRIENDS
(1) YES 13 (2) NO 62

Questions 110-111 refer to your parents' education; please select highest grade completed.

110. FATHER
02 (1) 11th GRADE OR LESS
24 (2) HIGH SCHOOL DIPLOMA/GED
16 (3) TRADE SCHOOL/SOME COLLEGE
18 (4) BACHELOR'S DEGREE
13 (6) GRADUATE/PROFESSIONAL

111. MOTHER
03 (1) 11th GRADE OR LESS
25 (2) HIGH SCHOOL DIPLOMA/GED
24 (3) TRADE SCHOOL/SOME COLLEGE
18 (4) BACHELOR'S DEGREE
04 (5) GRADUATE/PROFESSIONAL DEGREE

Questions 112-118 refer to the reason you selected ISU. Please indicate yes or no for each listed reason.

112. ACADEMIC PROGRAM
(1) YES 66 (2) NO 09

113. REPUTATION OF ISU
(1) YES 62 (2) NO 13

114. REPUTATION OF ATHLETIC TEAMS
(1) YES 06 (2) NO 69

115. CLOSE TO HOME
(1) YES 43 (2) NO 32

116. CLOSE FRIEND AT ISU
(1) YES 23 (2) NO 52

117. RELATIVE ATTENDING ISU
(1) YES 13 (2) NO 62

118. RELATIVE ALUM OF ISU
(1) YES 19 (2) NO 56
STUDENT-ATHLETE QUESTIONNAIRE

Please fill in the circle (O) that corresponds with your desired response.

71. (1) MALE 55 (2) FEMALE 30

72. DID YOU GRADUATE FROM AN IOWA HIGH SCHOOL?
   (1) YES 45 (2) NO 40

73. ETHNIC ORIGIN (Please select one)
   05 (1) BLACK
   01 (2) HISPANIC
   78 (3) WHITE
   01 (4) OTHER

74. ARE YOU A UNITED STATES CITIZEN?
   (1) YES 83 (2) NO 02

75. UNIVERSITY GRADES (Please select one)
   44 (1) GPA = 3.00-4.00
   29 (2) GPA = 2.25-2.99
   10 (3) GPA = 2.24 OR LESS

Questions 76-80 refer to college activities. Please fill in the circle for yes or no
based on whether or not you participated in any of the activities listed within the group.

76. VARSITY/JUNIOR VARSITY/INTRAMURAL ATHLETICS
   (1) YES 80 (2) NO 05

77. MARCHING/PEP BAND and/or CHEERLEADING
    POM-PONS/TEAM MANAGER
   (1) YES 03 (2) NO 02

78. INSTRUMENTAL/VOCAL MUSIC and/or DEBATE/
    STUDENT GOVERNMENT and/or DRAMA and/or
    DEPARTMENTAL CLUBS
   (1) YES 16 (2) NO 69

79. SERVICE OR CHURCH ACTIVITIES
   (1) YES 38 (2) NO 47

80. FRATERNITY/SORORITY
   (1) YES 14 (2) NO 70

81. HIGH SCHOOL GRADES (Please select one)
   62 (1) GPA = 3.00-4.00
   23 (2) GPA = 2.25-2.99
   00 (3) GPA = 2.24 OR LESS

Questions 82-85 refer to high school activities

82. VARSITY SPORTS' LETTER and/or
    INTRAMURAL/JR VARSITY ATHLETICS
   (1) YES 85 (2) NO 00

83. MARCHING/PEP BAND and/or
    CHEERLEADING/POM-PONS/TEAM MANAGER
   (1) YES 29 (2) NO 56

84. INSTRUMENTAL/VOCAL MUSIC and/or DEBATE/
    STUDENT GOVERNMENT and/or DRAMA and/or
    DEPARTMENTAL CLUBS and/or YEARBOOK/NEWSPAPER
   (1) YES 57 (2) NO 28

85. SERVICE/CHURCH ACTIVITIES
   (1) YES 54 (2) NO 31

Questions 86-88 refer to whether your relatives attend/ed or graduated from ISU; please
indicate by filling in the O for yes or no.

86. PARENT/PARENTS ISU ALUMNI
   (1) YES 14 (2) NO 71

87. GRANDPARENT/GRANDPARENTS ALUMNI
   (1) YES 03 (2) NO 82

88. OTHER RELATIVES ISU STUDENTS/ALUMNI
   (1) YES 32 (2) NO 53

Questions 89-94 refer to your current activities. Please indicate yes or no for
each group in which you participate.

89. ATTEND ISU ATHLETIC EVENTS REGULARLY
   (1) YES 59 (2) NO 26

90. ATTEND ISU ATHLETIC EVENTS OCCASIONALLY
   (1) YES 78 (2) NO 06

91. PARTICIPATE IN ORGANIZED ATHLETICS
    (softball, handball, tennis, etc.)
   (1) YES 78 (2) NO 07

92. PARTICIPATE IN INDIVIDUAL ATHLETICS
    (running, aerobics/exercise activities)
   (1) YES 71 (2) NO 14

93. ATTEND NON-ISU ATHLETIC EVENTS
   (1) YES 63 (2) NO 22

94. READ ABOUT SPORTS, LISTEN TO SPORTS ON
    OR WATCH ATHLETIC EVENTS ON TELEVISION...
   (1) YES 82 (2) NO 03

Questions 95-98 refer to whether or not you have had relatives participate in athletics for the
following listed organisations.

95. ISU
   (1) YES 18 (2) NO 67

96. OTHER COLLEGE OR UNIVERSITY
   (1) YES 44 (2) NO 41

97. HIGH SCHOOL
   (1) YES 80 (2) NO 05

98. PROFESSIONAL/SEMI-PROFESSIONAL, and/or
    AAU, OLYMPICS, ETC.
   (1) YES 23 (2) NO 62

Turn over for next page.
99. CLASSIFICATION (Please select only one)
   24 (1) FRESHMAN
   24 (2) SOPHOMORE
   18 (3) JUNIOR
   16 (4) SENIOR

100. LIVE IN- (Select one only)
   39 (1) RESIDENCE HALL
   00 (2) WITH PARENTS
   34 (3) APARTMENT OR HOUSE
   09 (4) FRATERNITY/SORORITY HOUSE

101. NUMBER OF HIGH SCHOOLS IN HOMETOWN
   (Please select one only)
   34 (1) ONE
   29 (2) TWO-FIVE
   19 (3) MORE THAN FIVE

102. SIZE OF HOMETOWN (Please select one)
   04 (1) RURAL (unincorporated)
   10 (2) LESS THAN 5000 (incorporated)
   11 (3) 5-20,000
   24 (4) 20-50,000
   14 (5) 50-100,000
   19 (6) OVER 100,000

103. DISTANCE HOME TOWN IS FROM AMES
   (Please select one only)
   03 (1) HOME TOWN IS AMES
   12 (2) LESS THAN 50 MILES
   07 (3) 51-100 MILES
   23 (4) 101-200 MILES
   14 (5) 201-350 MILES
   23 (6) 351 MILES

104. SIZE OF HIGH SCHOOL GRADUATING CLASS
   (Please select one)
   00 (1) 30 PERSONS OR LESS
   10 (2) 31-75
   11 (3) 76-150
   20 (4) 151-350
   39 (5) 351 OR MORE

105. HOMECOMING
   (1) YES 14 (2) NO 68

106. ATHLETIC EVENTS
   (1) YES 58 (2) NO 24

107. VEISHEA
   (1) YES 19 (2) NO 63

108. PLAYS/CONCERTS
   (1) YES 11 (2) NO 71

109. NO SPECIAL TIME
   (1) YES 55 (2) NO 27

110. FATHER
   02 (1) 11th GRADE OR LESS
   12 (2) HIGH SCHOOL DIPLOMA/GED
   18 (3) TRADE SCHOOL/SOME COLLEGE
   25 (4) BACHELOR'S DEGREE
   25 (6) GRADUATE/PROFESSIONAL

111. MOTHER
   01 (1) 11th GRADE OR LESS
   18 (2) HIGH SCHOOL DIPLOMA/GED
   23 (3) TRADE SCHOOL/SOME COLLEGE
   25 (4) BACHELOR'S DEGREE
   15 (5) GRADUATE/PROFESSIONAL DEGREE

112. ACADEMIC PROGRAM
   (1) YES 68 (2) NO 14

113. REPUTATION OF ISU
   (1) YES 57 (2) NO 25

114. REPUTATION OF ATHLETIC TEAMS
   (1) YES 43 (2) NO 39

115. CLOSE TO HOME
   (1) YES 33 (2) NO 49

116. CLOSE FRIEND AT ISU
   (1) YES 10 (2) NO 72

117. RELATIVE ATTENDING ISU
   (1) YES 07 (2) NO 75

118. RELATIVE ALUM OF ISU
   (1) YES 10 (2) NO 72

119. QUALITY OF COACHING
   (1) YES 42 (2) NO 42

120. STRENGTH OF CONFERENCE
   (1) YES 46 (2) NO 36
APPENDIX C. COMMENTS

Comment: The opportunity to comment on the questionnaire was offered as part of the instructions. The opportunity to have one's comments left out of this appendix was also offered. The following are the comments, as written, of those who offered them unreservedly.

Alumni:

1. College/University intercollegiate athletics are strongly over emphasized. There is far too much attention to winning in big name sports (football/basketball). I think Northwestern & Rice are closer to the mark but even they pay too much attention to college football & Basketball which are closer to occupations than sports. Intramural athletics should receive far more attention. I would seriously consider ending athletic scholarships unless the holder is truly an unusually well qualified scholar in a recognized field of academic study. Hope this response reaches you for your tabulation. Despite my age I run or play basketball 3 to 5 times a week am in excellent health with apparently very good physical condition. I believe that exercise (No athletics) strongly contributes to health & happiness. Best Wishes,

2. I couldn't fail to respond to this knowing how vital each reply is to your sampling. My husband did a survey for his MA so we have experienced some of the problems.

   My only question - before your #1 - was "Which athletics and which students?" It might have been helpful to provide that information. My interpretation was that you referred to interscholastic team sports and "most students."

   Perhaps I'm not a good subject for this - as the daughter of a former coach and the wife of another, you know I've lived with athletics and athletes all my life - and loved all of it and all of them.

   Good luck! It would be interesting to learn the results of your survey.

3. Comments following questions: #7 Stronger feeling for Purdue since farther away. #10 Would assume so. #18 It's nice but not the end of the world. #22 Selection Pressure ("Percentage that make it") is too small for athletics alone to improve the status in life for very many people. Other skills contribute more to improvement. #24 Not for me. I've been to 1 college football game in 10 years of undergrad & college. #28 Never, that understates the effort of the athletes. #33 Type depends on person. #36 Particulalrly Intramurals where more students can participate. #39 So do band members when they have to be excused from classes and other groups (Judging Teams, etc.). #46 If the team is being unsportsmanlike, yes then I am not proud. #48 Would assume so. #53 Same as #39. To participate in activities such as athletics, band, judging teams, etc. Requires at times that Prof. be flexible in exam taking etc. #70 Intercollegiate.

4. Received your reminder today. I have been unable to locate the
questionnaire you sent me a few weeks ago. I am very sorry I did not answer it immediately and that it is now misplaced.

If you would please send me another questionnaire, I promise to answer and return it the day I receive it. I don't want to contribute to any delay in completing the study.

5. Far too much emphasis has been placed on athletics. The problems it creates are far greater than the rewards. All students need to be held to the same academic admission standards, regardless of their athletic ability.

6. I feel your questions are somewhat idealized. I kept looking for questions about the graft and corruption that surfaces in college athletic programs all over the country. For example, #52 - males should act as role models for young people but too often they are using or selling drugs or accepting payoffs from alumni. I'm all in favor of college athletics, but not when anything goes, as long as your school has a winning team. Iowa State should be in a difference conference of smaller schools.

7. While I feel that athletics could play an important role in educational systems, I also think that too much emphasis is placed on athletics; especially at the high school level. I think that we have a system in place in most areas of this country, whereby those who are skilled in athletics can excel. Now it's time to do away with mandatory physical education at every level of our educational system. Physical education is an option, not a necessity.

Sometime, I think, we stress winning (meaning coming out ahead on a physical advantage) and we try to carry it over to everyday life. It doesn't work that way because "star athletes" tend to have inflated images of self worth. But, along with that, diminished abilities or dilutions of what actual skills are needed in society. Star Athletes do not, will not, and cannot fare well in business situations, down in the trenches, where they need to interact on a one to one level in the nitty-gritty problem solving situations. Also, male athletes, tend to be womanizers and are not quite as in step with the needs of business and social situations. I would never hire one.

Thank you for your time in listening to my views.

8. I am pleased to help you with your survey as our daughter obtained her doctorate in Middle School from the U of Wyoming two years ago. She had taught phys ed in the Junior High in Colo Springs for 13 years. She has recently taken a position of Asst Prof at Colorado Northern - Greeley. We understand the hard work you are applying to your doctorate dissertation. That seems to be the most difficult of the entire program. Good luck to you and hang in there - we need more people like you in our society. I have tried to portray my attitude toward athletics as strongly supportive, character building but universities and alumni should keep it in balance with other very important programs. Winning is not the only thing!
Faculty:

1. Your survey is intrinsically BIASED towards the view that athletics are [sic] desirable in our society. EXAMPLES:
   - athletics provide [sic] jobs
   - athletics enhance [sic] a University's image
   - athletics increases Alumni support
   - athletics enhances job opportunities (your questions on "team effort")
   - athletics provides an energy outlet" and so on.

All these are true statements. But the way you have written them this truth equates to "athletics are good." IN FACT, you have OMITTED an equally valid interpretation that this truth equates to a tremendously pervasive attitude that "athletics are good."

I contend that this attitude is misplaced, and is perpetrated at great cost, both socially and economically. Think of all the resources that Americans WASTE on athletics each year. Other than providing an outlet for pent up energies, athletics are irrelevant to academics. Universities should not even have athletic programs of significance. The fact that Alumni expect them (see Des Moines Register) only illuminates the absurd mindset which is so prevalent.

Competition is not all its cracked up to be - and it is a tragic mistake to believe that it is both good and desirable, A PRIORI. People need physical activity to remain healthy - but that activity need not be competitive.

2. I did not answer numbers 90 & 91 as I have no children & didn't consider questions applicable. In regard to numbers 95 and 96, I might mention that I have season tickets for football and basketball & also make financial contributions, but other obligations & scheduling priorities have caused me to stop attending for the past couple years. I'm not sure I'll resume attendance. I continue to be interested in athletics & follow them closely on television & by newspapers, but I don't miss the parking hassles, extensive time expenditures, etc.

3. I would personally like to see large intercollegiate sports like football and basketball dropped, but intramural and individual sports emphasized. With this bias of my own, your questions sure sound pro-athletics, even though we can disagree on the questionnaire.

In your last questions you seem to think we're all enthused about extracurricular activities of a certain type - fraternities, sports, churches, bands, etc. What happened to work? I went to an expensive private school, lived at home, rode the bus about an hour a day and had to pay half the tuition (now about $12,000) which required me to work about 25 hours/week and summers. With an average class load of 14-22 semester credit hours, that doesn't leave much time for other things [OK - this was before student loans were available. So we did have to work our way through school in the good old days.]
4. These questions call for opinions on topics that the person's [sic] answering can not have real knowledge. So what you are asking is that guesses be made that will indicate to what extent the respondent accepts conventional wisdom of the most unthinking sort. Since few respondents can have more than guesses to offer you are testing our ignorance and our willingness to pretend that that ignorance is understanding. I question the value of such opinions. I should like to see your analysis of the results to see to what extent I can accept your interpretation as useful.

I am going to give you some examples of what I mean. "1. Athletics is important to the morale of the students." How can we know if there is anything measurable in student morale? What I do know is that graduate students have a much different interest in athletics than undergraduates, and that women have a different interest than men, and foreign students than local ones. But wait. Are we talking about athletics that students participate in, like bowling and intramurals and jogging, or are we talking about those we pay to watch imported stars compete in? Every question here has a confusion about whose athletics the questions refer to. Are they "important?" They may be as important to the person who thinks that they waste our time and money as they are to the ones who love them. But then they are finding them "important" for quite different reasons and in quite different ways.

I personally am embarrassed by having gone to and continuing to work at institutions where young people from economically or emotionally deprived backgrounds are paid pittance and given a chance at temporary celebrity in order to entertain others who wouldn't think of having real friendships with them or living next door to them. ISU, is famous as a place where the tired gladiators feel desperately alienated from the people who cheer their exploits and keep their distance.

I can do this with nearly every question. I can't see how such a questioneer [sic] shows anything other than the good will and gullibility of those who willing to give solid guesses at what very ambiguous questions they can't actually understand the meaning of, much less have any real answers to.

My wife said not to bother you with this. But I want to be honest with you. And I want you to consider whether or not you are performing ritual with no genuinely controlable [sic] meaning.

5. There is some variety of interpretation (quibbling) that can go different direction for different readers. For example:

64. It is so for some few individuals, but should not be so.
67. Yes and No. It should be so, but it also teaches disrespect.
70. Practically nothing is indispensable, but athletics (aerobics) certainly helps balance physiological, physical and psychological needs and attitudes.

6. Many of the questions are ambiguous. Are you comparing with non-athletes? If so, then I'm afraid that the information will be used wrongly. You ought to have a similar questionnaire for history majors, etc.

7. Personally, I have close to zero interest in collegiate or in
professional athletics, with the occasional exception of baseball. I've always been able to find more satisfying ways to spend my time, and I get more exercise on a Saturday than I would get if I spent it sitting in the bleachers. In the 12 years I've been at ISU, I have not yet been to the stadium, and have only been in Hilton for graduation exercises and a couple of gymnastics meets. The organized athletic life of the university doesn't affect my personal life a bit.

As a faculty member, however, I find that I resent the amount of time, effort, and attention that is given to the athletic program --- particularly to varsity football and basketball. I think the university is being dishonest to itself, the public, and players by pretending that student athletes are here for an education. I feel especially strongly about the fate of black students, who are brought here with the promise of societal advancement and placed in a program with little opportunity to develop their minds. There simply aren't enough hours in the week to be a good student and a varsity athlete.

To my way of thinking, universities have no business in anything more than intramural sports (which should be a strong component of general education). If a university needs the prestige of an intercollegiate sports team, it should be free to hire professionals to represent it. Let students study. With particular reference to blacks, I think they would be much better served if the money now spent on athletic scholarships were given instead for academic scholarships. The university would be fulfilling a more honest societal role, and the students would be much better served. The alumni shouldn't care one way or the other. After all, their major interest is in seeing an ISU team win; they have relatively little concern for the academic life of the players anyway.

8. I am currently on Sabbatical leave. I hope this response arrives in time for inclusion in your data.

I don't wish to receive a copy of the results but I am concerned about the interpretation of responses to some of the questions; particularly those linking participation in athletics with personality and behavioral characteristics exhibited in later life.

Parents:

1. I found some of your questions very difficult to answer accurately. For example #26 - when I'm watching my child, I play right with him or her & later feel exhausted. When watching strangers, I[aic] feel little emotion. #89 - I attend the events in which my child participates. I have no interest in any others. #98 - 102 - My visits to campus are solely to visit my child or watch him play football. Parents' Day was a conflict for us this year. We may attend other years. #106 - 113 - Our son chose ISU primarily for the academic reputation it has in his chosen area. Sports appeal to him & he decided to see if he can handle both, but education is his first concern. He passed up athletic scholarships to some lesser schools in order to get the best possible education. A 2nd answer sheet would have been nice, so both parents could answer. All questions were about athletics in general & didn't take into
account someone who might be an avid football fan, but not care much for other sports.

2. Questions 106 - 113 My son fits none of these categories. Perhaps an addition of "offered scholarship" or Encouraged to walk on" would be informative.

3. Re: This "Test",
   1. Very obviously sexist questions! Is this a hang-up of yours? Seems so!!
   2. Many, many unexplored areas that should have been touched on, ie: Scholarships & what they mean to families; would student have attended a certain college if he/she hadn't rec'd one; & more!!
   3. Questions's like "Do you attend every game?" have qualifiers not listed ...our answer "No" is because of distance & cost NOT because we don't want to! When our sons played in (other named state), we DID attend every game, regardless of distance. Now, it is no longer feasible.
   4. What about parents feelings about the coaching staff, & all the politics connected w/coaches?
   etc etc etc

4. I feel because athletes are so visible the press relates (makes a big deal of bad things) and doesn't relate the positive. ex. basketball player Marc Urquardt who is going to medical school.
   I feel athletics have been good for my daughter. She is very self assured because she has one thing that she does well.

5. I hope this isn't too late to be helpful to you in your survey. It was delivered to a family a block away & I just received it.

6. Son at ISU chose school 1st & then athletics. I found my responses- think it is a positive for boy nothing great advantage wise for a girl. Interesting! I enjoyed doing this.

Students:

1. THE QUESTIONNAIRE WAS TOO DAMN LONG !!!!!!!

2. Some of the questions should differentiate between "athletics" and "varsity/intercollegiate athletics" because there is a possibility for different answers depending on interpretation.

3. 3 & 25. Some athletes never feel at ease in athletics. I believe that many students enter athletics because their parents expect it or that it is the only hope they have of continuing their education after high school. Being at ease depends strictly on the individual.

4. Maybe if you would word your letter better you would get a better response! "Sit down, fill out the answer sheet ....and mail within two
All athletes are important to a University such as Iowa State. However, the male athletes at Iowa State are treated like kings! They are served special food in a special room at meal times; They are given full-ride scholarships; They are let off easy in punishment situations. This gives them "big heads" and they think they are better than the rest of us non-athletes. That's what annoys me. I should mention that not all athletes are this way. I have a very good friend that is a football player.

**Student-athletes:**

1. I feel that athletes especially in the United States, are too privileged. Young Americans are the ones suffering from this, after all they will try to go to any extreme to excel in sports.

   I believe we need to keep sports in perspective. I love sports, but you need to do it for enjoyment and fulfillment for yourself.

2. I've been in swimming for over twelve years now. I swim ten months out of the year and I have no more difficulty finishing my coursework than a non-athlete. If anything, I have an advantage. Swimming gives me a release from stress and anxiety. It's fun, while at the same time hard work. When I stop having fun, I'll stop competing in swimming and try my hand at something else.

   I've never been given special treatment as a scholar-athlete at ISU, nor have I asked for it. I would be in favor of making it just as hard for athletes to enter ISU as it is for non-athletes. Let's not forget why we're here. It's up to the student-athlete to keep the balance between school and competition.

   As for all these attempts at "cleaning up" the athletic departments by prohibiting freshmen from competing. I think the idea is incredibly unnecessary (to be nice)) Mr. Rawlings must have been on drugs when he proposed it. I kept a 3.5 in high school and I had less time for homework than I do now. To "sit out" a year would put an end to my athletic career. That wouldn't be the end of the world, but it would make my college career much less fun and rewarding. I wouldn't trade my memories of swimming for anything.

   Athletics has taught me things you could never learn from a classroom. It has helped me accept failure as an opportunity to learn and improve, work each day for an ultimate goal, and help teammates achieve their goals by working together. As Mr. J. H. Riggs so eloquently said it "We come to college not alone to prepare to make a living, but to learn to live a life." (1983).

3. I feel it is necessary for students to understand that athletic events bring in an incredible amount of money to the universities. I hear so many comments from other students about scholarship & all the nice things that happen to athletes. They feel it is unfair, but like I said, they need to understand how much money is brought in each year.
4. About #1 I agree that athletics effects [sic] student morale, but I feel student athletes are more effected [sic] because they can relate more to the thrill of victory or agony of defeat. I think student athletes appreciate success of athletics more than other students.

#2 more so if the shirt is part of a team uniform

#31 vague - this is actually true but a far as being fair. I do not think the practice is very fair at all (among various sports & among individual sports).

#69 Other states are okay, but foreign athletes should be eliminated from American competitions!!

5. I think that it would have been helpful to you to know some other information such as
- what sport we participate in
- whether we are on traveling squad
- what our field of study is
- how many credits we usually carry.

I believe that there is a large variation in character between the different athletic teams. For instance, I think Cross Country Runners tend to be very ambitious (especially females) and participate to achieve self-betterment & self-discipline, whereas baseball, football, & basketball players participate for fun or expect athletics to be their future.

Anyway, I think that if you compared attitudes of athletes in different sports you would find big differences (regardless of race). I hope that you are able to get a good return on your questionnaire.

6. Athletic competition has given me great rewards. It has been a very important part of my education. The lessons that I have learned from athletics complement what I have learned in the classroom and in some ways may be even more applicable to my future. Aside from the organizational skills, dedication, and determination fostered by daily practices, competition at this level provides a door to the world. Not only at every meet but even within our team there are foreign athletes and athletes with backgrounds different from one’s own. Through experiences with them there is opportunity to improve communication and interpersonal skills.

My personal athletic experiences have literally shown me the pleasure of life and the pain of death. It has provided me with life long friends. Through injuries I have learned the values of patience and perseverance. Athletics has indeed been a key to my life and helped me form very strong and honorable values.
APPENDIX D.

CLUSTERS
Basking-In-Reflected-Glory Cluster--Item Means

2. It makes me feel good when I wear a shirt with the school mascot on it. 0.58
7. When I am away from Ames and see someone with a shirt or jacket with a cyclone on it, it makes me feel as if I'm not alone. 0.63
19. I am depressed the next day after the team loses. -1.08
26. After a close hard-fought game, I feel almost as tired and drained as if I had been playing myself. 0.02
30. It is the duty of all good supporters to go to the game and cheer. -0.44
37. I feel especially proud when someone from our home town or home state does well in any kind of contest. 1.69
46. When the team does poorly I have a hard time "holding my head up." -1.58
54. I feel proud when the team does well. 1.62
59. When I go into the stadium, or arena, or sit in the bleachers, I feel as if I'm in a special, more exciting world. 0.48
69. We should work harder to recruit the players from our own state. 0.91

Belief Cluster Item--Means

4. Participation in athletics teaches most individuals to profit from criticism. 0.72
11. Athletics develops leaders. 1.07
14. Participation in athletics teaches most individuals to carry through in the fact of hardship. 1.18
17. Participation in athletics trains most individuals to make quick decisions and respond when movement is required. 1.06
22. Athletics is the best way people can improve their status in life. -1.65
33. Athletics builds character. 1.14
40. Athletics teaches most individuals to respect the rights of others. -0.07
43. Participating in athletics is a good way to be able to visit other areas and meet people from different schools, communities, and countries. 1.76

62. Participation in athletics teaches most individuals to work for what they get. 1.11

67. Participation in athletics helps teach respect for authority. 0.56

**Competition Cluster Item—Means**

5. Competition is the normal healthy need of human beings to succeed. 1.38

13. Competition does not ruin a friendship. 0.93

18. Being in the "Top 10" is important. -0.24

28. Winning should be the ultimate goal of athletics. -1.36

35. A winner is a winner, whether it is on the playing field or in the classroom. 1.59

49. Winning and losing in athletics helps to prepare most individuals for the competition they meet in daily living. 1.24

50. If you have cheated to place first, you haven't really won. 2.62

55. It is better to feel even a few moments of the glory of winning than to never experience it at all. 1.55

64. Defeating your opponents is the ultimate goal of competition. -0.56

68. The effort that goes into competitive activities should be respected. 1.67

**Fact Cluster Item—Means**

8. Fans watching athletic events can be seen to "participate" along with the players in the tensing and untensing of muscles or clenching and pounding of fists during a contest. 1.59

9. Students who participate in athletics are interviewed more often by the media than are students from any other group. 1.91
15. Athletics provides a variety of different jobs for many different people. 1.07

23. A school's mascot, often found on t-shirts, sweatshirts, caps, playing cards, etc., is usually associated with its athletic teams. 1.97

31. Participants in athletics can receive different kinds of scholarships; some receive payment of room, board, tuition, and textbooks; while others may receive only the no-cost loan of their textbooks. 1.20

38. The Office of Financial Aid is more restricted in the amount of aid they can give to a star athlete than they can to a star student. -0.22

44. The academic rules governing whether or not an athlete remains eligible to participate in athletics are more strict than are the academic rules governing whether or not a non-athlete is eligible to continue in school. -0.06

51. Some aspects of athletic activity, despite periodic attempts at change, have existed for 6000 years. 1.31

56. The majority of college students attend schools that provide competition in intercollegiate athletics. 1.41

60. Persons participating in athletics are only one of several groups who can receive free tutoring. 0.82

Importance Cluster Item--Means

1. Athletics is important to the morale of the students. 1.31

21. Athletic events bring money into a region. 2.18

24. The Homecoming football game is a great chance for alumni to come back and visit the school. 1.32

29. Athletics is important to the morale of the alumni. 0.74

36. Athletics provides a healthy outlet for student energies. 1.95

42. Having a strong athletic program builds pride in a university. 1.60

47. Athletics brings money into the university. 2.08
57. Athletics provides good public relations for colleges and universities. 1.47

66. The reputation of a university's athletic teams carries over to its academic reputation. -0.18

70. Athletics is an indispensable part of college life. 0.46

Benefit to Females Cluster Item—Means

3. Participation in athletics gives most females the ability to be at ease before the public. 0.10

12. Females who participate in athletics act as role models for younger females. 1.17

20. Females who participate in athletics develop an exaggerated idea of the value of their skills. 0.59

27. Females who participate in athletics are more outgoing than those who don't. -0.10

34. Participation in athletics enhances a female's sexuality. -0.60

41. Participation in athletics helps females to form realistic goals. 0.30

48. Employers like to hire females who have demonstrated they understand teamwork by playing on an athletic team. 0.48

53. Females who participate in athletics get preferential treatment. 0.15

58. Females who participate in athletics are more popular than those who don't. -0.06

61. Most females who participate in athletics are popular with males. 1.10

Benefit to Males Cluster Item—Means

6. Males who participate in athletics develop an exaggerated idea of the value of their skills. -0.01

10. Employers like to hire males who have demonstrated they understand teamwork by playing on athletic teams. 0.76
16. Participation in athletics enhances a male's sexuality. -0.25

25. Participation in athletics gives most males the ability to be at ease before the public. 0.34

32. Males who participate in athletics are more popular than those who don't. 0.44

39. Males who participate in athletics get preferential treatment. 0.97

45. Most males who participate in athletics are popular with females. 0.89

52. Males who participate in athletics act as role models for young people. 1.67

63. Participation in athletics helps males to form realistic goals. 0.39

65. Males who participate in athletics are more outgoing than those who don't. 0.10
APPENDIX E.

CORRECT/INCORRECT PERCENTAGES ON FACT
Question 8  Fans watching athletic events can be seen to “participate” along with the players in the tensing and untensing of muscles or clenching and pounding of fists during a contest.

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Question #9, Students who participate in athletics are interviewed more often by the media than are students from any other group.

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Question 15, Athletics provides a variety of different jobs for many different people.

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Question 23, A school's mascot, often found on t-shirts, sweatshirts, caps, playing cards, etc., is usually associated with its athletic teams.

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Question 31, Participants in athletics can receive different kinds of scholarships; some receive payment of room, board, tuition, and textbooks; while others may receive only the no-cost loan of their textbooks.

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Question 38, The Office of Financial Aid is more restricted in the amount of aid they can give to a star athlete than they can to a star student.

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Question 44. The academic rules governing whether or not an athlete remains eligible to participate in athletics are more strict than are the academic rules governing whether or not a non-athlete is eligible to continue in school.

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Question 51. Some aspects of athletic activity, despite periodic attempts at change, have existed for 6000 years.

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Question 56. The majority of college students attend schools that provide competition in intercollegiate athletics.

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Question 60, Persons participating in athletics are only one of several groups who can receive free tutoring.

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APPENDIX F.

HISTORY OF ATHLETICS
History of Athletics

George E. Letchworth (1968) saw the interest in intercollegiate sports waning.

In conclusion, it appears that the era of the college athlete is coming to a close. On the horizon is a time when sports activity will attract better integrated and mature individuals, rather than the underdeveloped person represented by the present athlete (p. 59).

Rather than seeing an emphasis on athletics as something isolated in a brief period or a specific place, a review of history shows that athletics has been a part of society since before recorded time, sometimes with the encouragement of the leaders of the time, and sometimes against the leaders' wishes, even under threatened penalty of death.

Early History of Athletics

Athletic contests have been reported since the beginning of recorded time. They have been an integral part of many societies and many have their origins in religious practices and beliefs (Brasch, 1970; Dombrowski, 1980; Elias, 1986; Evans, 1963; Finley & Picket, 1976; Grant, 1967; Guttman, 1981; Hardy, 1977; Hawkes, 1963; Henderson, 1947; Loomis, 1967; Lucas & Smith, 1985; Malcolmson, 1984; Olivova, 1984; Poliakoff, 1987; Smith, 1985; Thompson, 1985; 1986; Umminger, 1963). Such contests appeared to be attempts to deal with the changing seasons and the fertility of land and animals. There were also myths that included the contests representing good and evil and the triumph of light over dark.

From the beginnings of man, as the hunters and the gatherers
developed more purposeful manners of getting food, and life had some time not solely taken up trying to stay alive, kinesthetic activity filled the void (Olivova, 1984). Much of this activity copied that which was necessary to protect and feed. Because of the copying of pursuits meant to protect, there has long been a connection between athletics and military activities.

The earliest recorded recurring athletic contests in the Mediterranean area, seem to be the Olympic Games of ancient Greece. The history of the Olympic Games traces to the eighth century B.C. where entire families attended and were welcome to watch all the activities (Olivova, 1984). The games also included music, poetry, and drama. However, archeological finds combined with myths and legends point to an earlier beginning. Some of the evidence indicates that the area around Olympus was inhabited as early as 3000 B.C.

The tales of Homer recited the story of games sponsored by Achilles at the walls of Troy (Olivova, 1984). This particular story gave some insight as to the nature of the games played during this period. The participants were generally political equals and men of position, though that did not prevent them from intense competition for the spoils of war that had been declared prizes for the contests. Achilles was the organizer, patron, and absolute referee. Some of the activities were chariot racing, wrestling, boxing, and spear throwing.

During the three millennia that preceded the birth of Christ, many of the athletic contests existed as part of funeral ceremonies, as in Homer's tale about the games Achilles sponsored in honor of his friend,
Patrocles, outside the gates of Troy (Poliakoff, 1987). There seemed to be some difference of opinion as to why these events were linked. Some felt it was a sacrifice to honor the dead. Some believed it was an effort to place and punish guilt, while others saw these contests merely as a practical way to settle disputes over the property of the slain.

During the sixth and seventh centuries B.C., the Greek aristocracy spent much time in training and caring for the body. They had trainers who traveled with them to watch their training and diet (Olivova, 1984; Poliakoff, 1987). During this period, Sparta developed the most highly trained population of the time, with training that included chariot racing, wrestling, boxing, running and spear throwing.

Other elaborate myths told of various gods in the Greek pantheon and the contests they held among themselves. Originally the contests were dedicated to Zeus and were of a religious nature. There were processions and sacrifices and the athletes offered themselves and their skills to the gods.

Eventually, Athens overtook Sparta as the leading city-state in athletic endeavors. In the pursuit of physical culture, the city-states permitted all citizens to participate in the training. At that time, only males were citizens and they were generally born to citizenship, though it was occasionally conferred on a man who had distinguished himself in some way.

History has recorded from 724 B.C. the regular inclusion of more and more events. The winners in the Olympics had statues erected in their honor along the path leading to the Games. Competition was considered to
be of an individual nature, but later on the name of the city was listed along with the name of the individual. Substantial city-state pride was involved with local heroes, and the citizens all saw themselves as sharing in the glory. There were also substantial prizes for the competitors.

Poliakoff (1987) wrote of criticism of athletics during this period of Greek dominance:

As early as the sixth century B.C.E. [sic] philosophers objected to the enormous rewards paid to athletes: they felt that the intellectual leaders of the cities deserved such honor and remuneration much more. . . it is crystal clear to everyone that the athletes have never had even a dream of intellectual virtues. . . Always gaining bulk in flesh and blood that keeps their intellect smothered as if in a mass of mire, unable to discern anything clearly, but instead devoid of understanding like that of the brainless beasts. (p.93)

Gardner (1984), researched the presence of various skills and talents in individuals. He listed seven different "intelligences":

(1) linguistic, (2) logical-mathematical, (3) bodily-kinesthetic,
(4) intrapersonal, (5) interpersonal, (6) musical, and (7) spatial. He discussed the differential value placed on them through the centuries. He pointed out that bodily-kinesthetic skill was highly valued when strength and physical skill were needed to protect the group from wild animals or other humans and provide food for the group. As man developed more control over his environment, it appears that some controversy grew as to what skill was most important.

In earlier days of Greek society, it was not unusual for two groups to each select a champion to compete so that differences of opinion could
be settled without causing bloodshed for the entire group.

The idea of a single protector for a group was also present six to eight hundred years later during the Middle Ages, the age of chivalry. In Central Europe and England, money and power went with owning land. Younger sons of noblemen, left landless by the laws of primogeniture, were forced to seek their fortune elsewhere. They either married daughters of families with no sons or they took the knightly skills taught to them as sons of noblemen and went to war, where they could share in the plunder. Sometimes they went about the country participating in jousts fought for the entertainment of the local people and were rewarded with various prizes. In some cases, they hired themselves out as the protector of a particular nobleman or area (Hardy, 1977).

One famed champion and protector of ancient Greece was Milo or Milon of Crotona, "King of the Wrestlers." He first won in the Olympics at age 14. His last recorded victory came in 516 B.C., when he was 40 (Olivova, 1984; Poliakoff, 1987; Umminger, 1963). Many stories attributed a series of gargantuan feats to this man, believed to have been the son-in-law of Pythagoras, who had himself appeared in the Olympic Games as a wrestler (Umminger, 1963). According to one of the stories, Milo donned a lion skin and pulling the head over his own, grasped a huge club and led his fellow men to a victory over an alien army that was reported to have been three times larger.

Another story tells how he saved friends and family when visiting the home of Pythagoras and the roof began to fall. He is reported to have
grasped the roof supports, delaying the falling of the roof, while all the others left. He then simply stood there uninjured as the roof fell about him.

During various time-periods, sport or athletics has been restricted to those of high-born status. At the earliest of the Olympic Games, whole families were welcomed. It was considered family entertainment. During the later games attendance was restricted to males and certain events were restricted to those of the upper class (Brasch, 1970; Hawkes, 1983; Olivova, 1984; Umminger, 1963).

In a society with little chance for upward mobility, athletics provided one opportunity. Though some events were restricted to the upper classes, the low-born or captives from various battles or raids could take part in certain events and were then, should they be victorious, accorded a measure of the privilege that was generally reserved for those favored by birth.

Some historians saw early gladiatorial contests as simple ways to settle arguments over property (Poliakoff, 1987). As Rome came to be the power in the European region, these eventually evolved to a point where the purpose was to provide entertainment. Many of the participants were forced into the Arena against their wills; however, some gladiators actually contracted with managers to market them in the Arena (Gardiner, 1965; Grant, 1967).

The amphitheater served for the performance of . . . gladiatorial shows. The performers were professionals recruited from the ranks of prisoners of war, criminals, slaves, freedmen and citizens of the lowest social order. Their social status was low, although successful gladiators could acquire tremendous popularity, especially
with the women of upper-class Roman society. From the late second century onwards, there is evidence of associations of gladiators, distinguished according to the weapons used. (Olivova, p. 177)

By the end of the fifth century A. D., the gladiatorial schools and the games and arena activities were banned.

Many early governments encouraged athletic contests because the skills used there were frequently those used on the battlefield. In Greece, athletes and warriors slain in battle were accorded the same state funeral (Poliakoff, 1987). As instruments of war became more sophisticated, the parallels became less strong; however, the Duke of Wellington, following his victory over Napoleon at Waterloo, was purported to have said "the battle of Waterloo was won on the playing fields of Eton" (Bartlett's Famous Quotations, p. 420).

W. L. Umphlett (1985) quoted two more modern individuals to the same point:

[the] grand do-or-die spirit that holds the attack on the one-yard line was what made Chateau-Thierry (Walter Camp).

Upon the fields of friendly strife are sown the seeds which, on other days, on other fields, will bear the fruits of victory (General Douglas MacArthur). (p. 59)

History of Ball Games

A number of stories attribute the beginnings of soccer, football, and polo to western Europeans bringing the custom home from the Crusades or after visits to the Far East where they had watched soldiers playing a game in which they were kicking a somewhat spherical object with
considerable glee. The stories often mention the viewers' revulsion upon realizing that the object was a human head. This practice went back beyond the beginning of recorded time. Many of the earliest legends concerning good and evil, fertility and infertility have some inclusion of a ball. A part of the myth was that the blood from the severed head of an enemy would encourage fertility in the crops and the people.

Another legend that was much less violent dealt with two children playing with a ball. It continued in much the same way as other legends intended to explain the changing of the seasons. The ball disappeared for a time, but then was returned as good triumphed over evil (Brasch, 1970). Bits of pottery from different periods in history and different cultures showed children or women playing with a ball.

As cultures became more civilized, people ceased to kick sacrificial heads about, and at some time, lost in history, they switched to a pig bladder or some other item that would give them a type of ball to play with. As already discussed, governments encouraged citizens to participate in athletic feats that kept fighting skills in top form. They encouraged archery or other activities thought to enhance the defensive power of the community. Games that had pleasure as their only purpose were discouraged, especially when there was a chance that participants would be injured and would no longer be able to participate in the defense of the community.

What appears to have been the earliest recording of a football game in England dates back to, around 1175. This was recorded by William Fitzstephen as quoted by Brasch (1970).
to a local piece of ground and just outside the city for the famous game of ball. The students of every branch of study have their own ball and those who practise the different trades of the city have theirs too. The older men, the fathers and the men of property, come on horseback to watch the contests of their juniors, and in their own way share the sport of the young men; and these elders seem to have aroused in them a natural excitement, at seeing so much vigorous exercise and participating in the pleasure of unrestrained youth. (p. 147)

Football and other sports seem to have been popular with the common people in England for many centuries (Malcolmson, 1984). Records of the popularity of football came partly from threats against those who persisted in playing, even against the will of the government. Elias and Dunning (1984) report that the threats even extended to assigning the death penalty. Brasch (1970) adds two more quotes from early England.

Every able-bodied man of the...city on feast days when he has leisure shall in his sports use bows and arrows or pellets and bolts, forbidding them under pain of imprisonment to meddle in football and other vain games of no value. (p. 148)

Footeballe, where is nothing but beastlie furie and extreme violence, wherefore it is to be put in perpetuall silence. (p. 149)

"One of the earliest prohibitions of the game occurred in London in a proclamation of 1314 issued in the name of King Edward II by the Lord Mayor" (Elias & Dunning, 1986, p. 175-176).

Proclamation issued for the Preservation of the Peace . . . Whereas our Lord the King is going towards the parts of Scotland, in his war against his enemies, and has especially commanded us strictly to keep his peace . . . And whereas there is great uproar in the city, through certain tumult arising from great footballs in the fields of the public, from which many evils perchance may arise - which may God forbid - we do command and do forbid, on the King's behalf, upon pain of imprisonment, that such game shall be practised henceforth within the city.
History of Intercollegiate Athletics

In regard to the relationship between higher education and sport or athletics or competition, it is necessary to examine the origins of our system of higher education. In the early days of our country, the model of education was taken from the classical style of England, which was generally designed for the wealthy and titled—the elite. Toward the end of the 18th century, the German model of education was transplanted into the United States. This model was centered on research and science.

By the 1850s, Americans recognized the need for educating large numbers of the population. The Industrial Revolution created a great demand for trained workers as well as the growing recognition that an educated populace was a generally desirable thing.

In 1862, Justin Morrill introduced a bill in the Congress to provide funds for the chartering of colleges that would be dedicated to the education of the common man. Some of his contemporaries called such institutions, "people's colleges." The Iowa legislature was the first to take advantage of this offer of federal lands, thus chartering the Iowa Agricultural College. According to Chu (1982), these institutions intended to provide an opportunity for a student to pursue any course of study he wished. They also felt the responsibility to fulfill the needs of the community.

Chu quotes President Welch of I.A.C. "that knowledge should be taught for its own uses; that culture is an incidental result."

Leland Stanford Junior University (the school where the first women's basketball game was held) transferred this ideal to a private college as
well. The Reverend Theodore M. Hesburgh, as President of Notre Dame, a private university with a strong religious affiliation, (one, therefore, assuming a strong commitment to moral behavior) and a high won-lost ratio stated (Keating, 1963):

My primary conviction has been, and is, that whatever else a university may be, it must first of all be a place dedicated to excellence. As long as we are engaged in intercollegiate athletics, we will strive for excellence of performance in this area too, but never, at the expense of the primary order of academic excellence. How, it might be asked, are we to determine the attainment of excellence? Through victory in accordance with the rules? No. The won-lost record is no ultimate criterion for a reasonable and thinking man. It is not victory, but excellence of performance, spirit and the will to win which are to serve as criteria for judging excellence in intercollegiate football. (p. 201)

The controversy about the proper behavior of the "true sports amateur" and his position in regard to intercollegiate athletics was clearly demonstrated by the controversy between Harvard and Yale at the beginning of intercollegiate competition in football in America.

Smith (1985) listed eight acts that disqualified a participant as an amateur at the end of the nineteenth century:

1. Competition for valuable, noncash prizes
2. Competition for money prizes
3. Competition against professionals
4. Charging money at the gate
5. Costs of a training table not borne by the athlete
6. Payment of athletic tutors by others than the athlete
7. Recruitment and payment of athletes
8. Payment of a professional coach

The differences between Harvard and its president, Charles Eliot, and Yale and its football coach, Walter Camp, showed clear disagreement. Westby and Sack (1976) compared their attitudes toward football. They
indicated that President Eliot of Harvard was adamantly opposed to athletics as compared to sport. As earlier defined, athletics has, as a definitional and historical component, the purpose of winning; while sport is played for its own purpose. Walter Camp, the coach at Yale, was a historical advocate of athletics.

Westby and Sack (1976) indicated that the influence of "new money" at Yale was partly responsible for the vast differences found between the two schools at the beginning of the twentieth century. At the time, it appeared that the students at Harvard were born into moneyed families, while those at Yale often had fathers who had started life without money and had made a fortune by their own efforts. The differences between the viewpoints regarding college sports vs. athletics seemed to epitomize the differences between the two groups. Illustrative of the opposing points of view held by Eliot and Camp, Westby and Sack (1976) offered the following comments:

Eliot, a member of one of Boston's most patrician families, clearly endorsed an aristocratic ideal of sport deriving from English practice. Throughout his term as Harvard's president, he was a leader among those who wanted to return college sport to a truly amateur level. (p. 642)

Walter Camp stands in sharp contrast with Eliot in almost every respect. Coming from a middle-class background, Camp worked his way to the top of a large manufacturing concern. Given that they were the products of extremely different social environments, it is not surprising to find that Camp and Eliot differed considerably in world view. (p. 643)

Considering his espoused views about amateurism, it was interesting that as a young man Charles Eliot, the future Harvard President and a partner rowed for a prize of $75, enough to pay for the cost of their
boat (Smith, 1985). Smith went on to explain that, in the 1870s, the
winners at a fashionable intercollegiate regatta on Lake Saratoga won
silver goblets valued at $500 each. The average salary for a laborer in
that time-period was $300 per year. Apparently Eliot saw no
inconsistency in accepting valuable prizes in rowing and track, while he
found the hiring and paying of a professional football coach as being
unacceptable professionalism.

During the 19th century, a number of sports were introduced at the
collegiate level. In the beginning, they were controlled totally by
students. The rules, coaching, recruiting, and funding, were handled by
students (Betts, 1974; Smith, 1983).

Since America was settled primarily from east to west, at the
beginning of the 19th century, the majority of the people and colleges
were located in the East. By the 1850s, schools of some repute were also
found in the Midwest. Wisconsin developed a very competitive program in
the last quarter of the century.

John Bascom, 1874 to 1887, believed it was his duty to
safeguard the moral standards of the students. He
considered competitive sport to compromise these standards
as well as being injurious to health and detrimental to
studies. In a vitriolic address delivered to students and
faculty, entitled "The Seat of Sin," Bascom decried
athletics as "... ill-balanced, ill-directed,
ill-sustained effort ..." suggesting, if organized
sports were really necessary, the hiring of "a few persons,
as we do clowns, to set themselves apart to do this work."
(Smith, 1971 p. 62)

Charles Adams, president of the University of Wisconsin from 1892 to
1901, took the opposite position and Wisconsin became known as the "Yale
of the West" (Smith, 1971). In the 1890s, stadia were built, admission
fees were charged and alumni groups began to take control of the scheduling and management activities that the students could no longer handle. Because of a variety of ill-controlled activities, the Western Conference (now the Big Ten) was formed for the purpose of bringing order to chaos.

During the years between the playing of the first football game and the 1905-06 football season, many negative voices were raised against intercollegiate athletics, particularly football (Lewis, 1969; Smith, 1981; Watterson, 1981). A number of colleges considered banning football for what they considered to be unacceptable levels of commercialization and professionalism, brutality and questionable ethics. Columbia voted to abolish football and Harvard came within a few votes of doing the same. New York University, Northwestern, California, and Stanford also dropped football during the 1905-06 season.

Supporters of football, who saw reform as the answer, rather than abolition, called on President Theodore Roosevelt for help. Roosevelt called the presidents of Harvard, Yale, and Princeton to the White House for a conference. Rules were discussed and promises made, but further glaring examples of brutality occurred during the 1905-06 season. More meetings were held and the National Collegiate Athletic Association was born. Minimization of injuries was the number one priority of many people, but it was not the only problem. Walter Camp of Yale had dominated the rules committee since its inception and representatives from Harvard were still skeptical. Major changes included abolition of the wedge formation, legalization of the forward pass, changing the
distance for a first down to ten yards, and the adoption of a neutral zone. Progress was made. However, the unwillingness of Yale, Harvard, and Princeton to participate prevented this from being an outstanding victory.

In the fall of 1909, another rage of well-publicized serious injuries and deaths brought another attempt to reform football. A number of presidents wanted to abolish football. Others wanted to retain the game if the dangers could be reduced. Yale, which had compiled a record of 345-21 over a 30-year period, found it too rewarding to not try to retain it. Woodrow Wilson, president of Princeton, was quoted (as cited in Watterson, 1981) as saying "football is too fine a game to abolish offhand." Charles Eliot, president of Harvard, despised football so much that he was unwilling to discuss reform. In 1909, he retired and was succeeded by A. Lawrence Lowell, a man with more moderate views.

It appeared that Princeton, Harvard, and Yale might actually be able to influence the necessary changes, but it never came to pass. The three presidents never functioned as a unified force. Some reforms were passed, the NCAA was founded, and schools accepted the fact that they would have to agree to abide by certain rules; rules that were intended for the protection of the players and, ultimately, the sport itself. According to Watterson (1981), the event that broke the hold of the Ivy League schools on football was the use of the forward pass by Notre Dame against Army in 1913.

For a variety of reasons, football seems to be the first sport that comes to mind when individuals talk of college athletics. It costs the
most money and it brings in the most money. Stadia across the country are filled each fall with more people than populate any except the very largest cities of many states. The National Collegiate Athletic Association was established in response to public outcry about problems in football.

Men's basketball has grown rapidly in popularity and has begun to draw as much attention from the NCAA as has football. Though basketball may be a force at more schools than is football, football has the longest history and, therefore, takes up the majority of any discussion in a history of intercollegiate athletics.

Ronald A. Smith (1985) commented on the development of athletics at American colleges and universities:

Freedom of opportunity was a pervasive element in the development of the American college and its athletics. Oxford and Cambridge, for instance, had no equivalent to the American intercollegiate experience in crew in the 1870s. In America, small colleges with freedom of opportunity could develop crews as Yale and Harvard had done before them. Thus the farmers from Massachusetts Agricultural College or the mechanics from outback Cornell, or the Methodists from Wesleyan could produce crews and challenge the established colleges from the colonial era, and garner victories at the intercollegiate regatta. The egalitarian principles were more dominant than any elitist desires that might have existed at Harvard or Yale, the closest equivalent to Oxford and Cambridge which America had to offer. Separate dual competition between Harvard and Yale in an attempt to keep themselves socially and athletically above the fray as Oxford and Cambridge did for generations, was to mean that both Harvard and Yale would eventually lose athletic esteem and prestige. Harvard and Yale could not long remain athletically superior to, and separate from, the newer and less prestigious institutions in an America, which had such strong egalitarian principles and belief in freedom of opportunity.

In a similar way, the upper-class amateur ideal of participating for the enjoyment of the contest and for no
other motive, including financial considerations, could not easily exist in a society whose freedom of opportunity ideology allowed all to seek excellence through ability and hard work. Intercollegiate athletics fit well into that ideological model and a meritocracy based upon effort and talent resulted in college athletics from an early time. Achieved status in colleges and in athletics became the American way rather than an ascribed status as seen in England's elitist universities and their athletics.

The English amateur system, based upon participation by the social and economic elite and rejection of those beneath them from participating, would never gain a foothold in American college athletics. There was too much competition, too strong a belief in merit over heredity, too abundant an ideology in freedom of opportunity, for the amateur ideal to succeed. It may be that amateurism can never succeed in a society which has egalitarian beliefs. It may be that amateur athletics at a high level of expertise can only exist in a society dominated by upper-class elitists.

I would like to conclude by saying that the historic amateur-professional dilemma, which has existed for over a century, still exists. American colleges practice a type of professionalism, and yet claim amateurism. The dilemma is founded on the need to protect college sport from outside criticism by using acceptable amateur language while at the same time wanting the prestige and status which comes from a highly professionalism model that produces excellence and winning. The amateur name which we give intercollegiate athletics is likely to remain until society sees no value in the use of the term. We may await the twenty-first century when amateurism is no longer used to describe college sport. (pp. 228-229)

**History of Athletics for Females**

During the early 20th century, many individuals, including medical "experts" stated that the female body was not suited to the exercise of competitive sports (Harris, 1973; Lenskyj, 1986). In terms of history, this was a somewhat recent conclusion.

Bits of pottery and cave and tomb paintings indicate that since the earliest of recorded time, women's kinesthetic skill was valued along with men's (Olivova, 1984). Evidence of one of the earliest recorded
athletic events was found on the island of Crete. The Minoan civilization occupied this island in a time that is still recorded mostly on bits of pottery and in legends passed on by the Greek poets. Some of this evidence dates back to the sixth and seventh millennia B.C. At this time, the bits of writing left by these people has yet to be translated, but pictures on pottery and other artifacts clearly show females participating as well as males. The legend of the minotaur is well known and what is recognized as the sport of "bull-jumping" has been the subject of substantial speculation (Evans, 1963; Hawkes, 1963; Miller, 1985; Olivova, 1984; Thompson, 1986).

Many sports historians have been interested in bull-jumping. Questions have been asked about its location, and the status of the bull-jumpers. Were they slaves, captives, or professionals? Gardiner (1965) indicated that most Egyptian and Greek acrobats were female.

Ancient Egyptian tombs contain paintings of women playing a game of catch with a ball (Henderson, 1974). Centuries later, in Egypt, Herodotus told of a custom among the women of a local tribe. First a beauty contest was held, then the winner and a band of followers played against the remaining women where sticks and stones were passed out to both sides. Any maiden who died as a result of this contest was to be declared a "false virgin."

In 1800, John Turnbull (cited in Umminger, 1963) wrote of his surprise when visiting Tahiti and Hawaii to see women in "feats of pugilism." He was amazed to see husbands and children cheering and then contestants hugging each other after the match was over. No one really
knew how long this custom had existed.

The Greek city-state Sparta required athletic and military training for their girls as well as their boys. The Spartans thought that the military and athletic training made their females better child-bearers (Olivova, 1984).

Early in the history of the Greek athletic festivals, entire families came to view proceedings that included competition in music, and verse as well as athletics. However, as they evolved, the Olympics and other Greek games barred women from attendance as spectators as well as participants. Eventually the Heraea, or Greek Women’s Games, were held in honor of Hera, the wife of Zeus and the queen of heaven (Brasch, 1970; Gardiner, 1965; Harris, 1965; Miller, 1985).

During the period of Roman domination of Europe, women fought as gladiators, as did men (Grant, 1967). Grant tells of the example of a relief in the British Museum, from Halicarnassus (Bodrum) in the eastern Agean, showing two women gladiators fighting; inscriptions from the same area record female combatants named Achillia and Amazon.

During the Middle ages, most of the festivals of Greece and Rome were discarded as pagan.

During the age of chivalry and the Crusades, most women were content to be protected by their strong warrior knights; however, not all. In 1146, Eleanor of Acquitaine, Queen of France, took the cross along with her husband and led a group of women to the Second Crusade. She scandalized a number of individuals by actually riding astride (Kelly, 1978; Wiles, 1967), an activity that was to again horrify some
individuals over 700 years later. Some historians indicate that she and her ladies only handicapped the crusade (Wiles, 1967), but Kelly (1978) reports that a story was told of Eleanor and her ladies dressed as Amazons riding among the warriors encouraging them and giving them strength.

Eleanor, who later became Queen of England, was not the first English Queen to take to the battlefield. Slightly more than eleven centuries before, Boudicca, an early queen of the Iceni on the island of Britain, led a bitter and bloody revolt against the Roman legions and their tyranny (Dudley & Webster, 1962; Fry, 1984; Vos, 1977/1902).

The legend of the Amazons that Eleanor and her ladies impersonated goes back to pre-Christian days. Legends first appeared in Homer when Penthesilea, Queen of the Amazons, fought on the side of Troy against Achilles (Sobol, 1972; Tyrrell, 1984).

The geographical origin of the Amazons is unknown, but it appears the culture may be traceable to one of mounted nomadic people who moved to the area near the Mediterranean and then north and west to the area of the Norsemen. Early Teutonic legends tell of the gifts to the bride of oxen, a horse with reins, and a shield, spear, and sword (Sobol, 1972). Others tell of tribes where a woman had to slay an enemy in battle before she could marry. This society not only recognized skill and strength in women, but actually insisted that a woman could not marry until she had killed in battle. After marriage, she was to retire. This practice may be related to the Norse legends of the Valkyries.

Eighteen hundred years later, families from the same middle and
northern European ancestry settled the rural areas of the Midwest, including Iowa. Modern history tells us that these girls from the rural areas of Iowa competed in athletics, not just because they enjoyed it, but because their families and friends wanted to see them compete.

At the turn of the century and slightly before, colleges and high schools had athletic contests for females. Girls' schools such as Wellesley, Smith, and Vassar (Armitage, 1976) were competing in basketball, volleyball, and field hockey. Schools such as the Iowa Agricultural College also introduced basketball for women in 1893 and the first intercollegiate basketball game for women was played between Stanford and Berkeley in 1896 (Beran, 1983).

By 1899, basketball was being played by high school girls in Iowa. The girls' game was different from the boys and has drawn a great deal of criticism from activists in the last 20 years. However, between the 1920s and the 1950s, in the rural Iowa high schools, the game of basketball for girls was as popular as was the game for boys (Enright, 1976).

In 1920, a girls' high school state championship tournament was held. Shortly thereafter leaders in physical education for females, such as Agnes Wayman attempted to do away with competitive athletics for females (Robicheaux, 1975). In 1923, the Women's Division of the National Amateur Athletic Federation was organized. Agnes Wayman claimed the abandonment of girls' state basketball tournaments as one of the accomplishments of the organization (Robicheaux, 1975).

[The girl] is not or should not be interested primarily in making or breaking records. . . Young women should engage
in activities which make for grace, poise, suppleness, quickness, agility, dexterity, beauty, general strength and endurance. (Wayman (as cited in Lenskyj), 1986, p. 38)

The Iowa High School Athletic Association, also established in 1923, supported play for both boys and girls. However, in 1925 they gave in to the criticism and fears and eliminated interscholastic competition in girls' basketball.

Beran (1983) quoted from the third annual meeting of the Iowa High School Athletic Association in 1925:

I coached girls' basketball once, and my conscience has bothered me ever since for the harm I might have done the girls.

Gentlemen, if you attempt to do away with girls' basketball, you'll be standing in the center of the track when the train runs over you! (p. 1)

In 1923, Iowans were referring to girls who played basketball as "sensational--fast and accurate", "as nearly perfect as possible . . . many boys cannot play better." In 1923 a Ladies' Home Journal writer observed, as cited by Twin (1979):

Disapproval was almost unanimous among physicians, physical educators, and national organizations involved in women's sports. (p. 31)

Lenskyj quotes Dr. Arthur Lamb from the August 1, 1938 issue of MacLean's Magazine:

There are numerous activities suitable for girls and women, but let these be of the type that will be suitable to their physical and mental natures. The tendency for girls to ape the activities of boys is regrettable. In most cases, it is physiologically and psychologically unsound and may be definitely harmful. (p. 36)
Beran (1983) writes about what the Iowa high school girls' basketball players had to say about their experiences.

Former players surveyed indicated that basketball provided an opportunity to develop and demonstrate strength and physical fitness. It also increased self-reliance and self-confidence. It served to enhance popularity with teachers, female peers, and to a lesser extent male peers. While the players recalled positive feelings about their participation they were not so certain that the play increased their feminine qualities. However, they felt positive feedback about their play in the school setting. A yearbook of the period noted in a caption alongside a basketball playing senior that she was a feminine athlete of no mean ability...she had all the attributes that make a woman womanly. Seventy-five percent of those surveyed reported that they had married men who had played basketball. It appears that women athletes were acceptable and their attraction to the opposite sex was not jeopardized by their athleticism. (Beran, p. 13)

The smaller Iowa communities wanted the girls' tournament reestablished. Local newspapers published articles telling of the desires of the public and players. After the vote in 1925 by the Iowa High School Athletic Association to abandon girls' basketball, four superintendents banded together to start the Iowa High School Girls Athletic Union, which still administers athletics for Iowa high school girls. The one concession made to the gender of the players was that if the coach were male, there had to be an official female chaperone in attendance.

Between 1956 and 1970 the Iowa Girls High School Athletic Union, which was formed for the purpose of sponsoring continued athletic opportunities for females, sponsored championships in golf, gymnastics, track and field, softball, swimming, tennis, and volleyball (Enright, 1976).
In the 1920s, the small towns and the larger cities in Iowa disagreed on athletics for girls. The larger cities went with the disapproving experts of the day and refused to permit athletic events for girls. The small towns, members of the Iowa High School Girls' Athletic Union, sanctioned competitive play among members, culminating in a championship game the first weekend in March each year. In Iowa, at that time of the year, the weather is very unpredictable, frequently cold, and snowy. For many years, this weather was referred to as Girls' Tournament Weather.

Through the 1950s, girls' basketball was exceptionally popular in the rural areas, but most of the large cities eschewed it. As late as the 1950s, schools in Des Moines, the Iowa capital and most populous city, not only forbade basketball for girls, but even refused to permit female cheerleaders. This was especially ironic because Des Moines was the site for the annual tournament.

The schism has not been completely resolved. The original girls' game in Iowa was different from the boys' game. The girls' game had 6 players on the floor at one time, as opposed to the five-player style used by the boys. When the cities took up the game again, they insisted that it had to be the same as the boys' game. Still into the 1990s, a championship is held in both 5-player and 6-player games.

Substantial amounts of history have been presented. In order to look at history through the eye of the beholder, a quote is presented from a book written in 1897 by the members of the class of '97 at I. A. C. (Iowa Agricultural College later to become Iowa State University).
The idea of athletics has prevailed throughout an almost indefinite space of time. At certain periods during the earlier history of this enormous world, nearly everything else in certain parts, was apparently submerged by this great factor in college and general life, athletics. Thus we can see that this almost necessity of life involves certain vaccination that tend to place it in precedence to those things when it should only rightfully claim a secondary position.

Notwithstanding these adverse possibilities, although in some instances they materialized, we cannot foreclose our opinions here and say athletics are a detriment and should be avoided.

As the different progressive ages have come and gone, we notice that everything with which educated man is connected has been constantly on the decline.

In this progression we notice the subject of our theme well in the advance. So rapid and continued has been its progress that today there lies no comparison between the athletics of the present and those of earlier times.

This athletic popularity has been an item in college life nearly as long as college life itself has been in existence. It was not until about thirty years ago that they were in an organized condition and systematically pursued. Previous to this time we find them used simply as a sport or recreation for the school boy. Today it is much different; the student makes it a daily pursuit, studies it from a scientific standpoint in order that he may possess the greatest skill attainable in this one of his highest aspiration.

The credit of organizing the plan of college athletics is attributed to our eastern universities and colleges, for there it was that the mass of students and money were concentrated; the two latter being natural requisites of successful athletics.

As the adoption of systematic athletics was going its role our own college fell heir to a goodly portion of the substance, but it was not until 1892 that they became organized. Thus here starts the history proper of athletics at I. A. C., although previous to this time they existed, but entirely through individual work.

(pp. 192-195)
APPENDIX G.

FACTOR ANALYSIS RESULTS
The following is a list of the items identified by the FACTOR ANALYSIS command of the Statistical Package for Social Sciences. The Varimax Rotation was used and the minimum eigenvalue was set at .4500.

Factor 1. Belief in Social Benefit of Athletics

49. Winning and losing in athletics helps to prepare most individuals for the competition they meet in daily living.

62. Participation in athletics teaches most individuals to work for what they get.

63. Participation in athletics helps males to form realistic goals.

14. Participation in athletics teaches most individuals to carry through in the face of hardship.

33. Athletics builds character.

67. Participation in athletics helps teach respect for authority.

40. Athletics teaches most individuals to respect the rights of others.

11. Athletics develops leaders.

4. Participation in athletics teaches most individuals to profit from criticism.

41. Participation in athletics helps females to form realistic goals.

17. Participation in athletics trains most individuals to make quick decisions and respond when movement is required.

68. The effort that goes into competitive activities should be respected.

57. Athletics provides good public relations for colleges and universities.

43. Participating in athletics is a good way to be able to visit other areas and meet people from different schools, communities, and countries.
36. Athletics provides a healthy outlet for student energies.

12. Females who participate in athletics act as role models for younger females.

54. I feel proud when the team does well.

25. Participation in athletics gives most males the ability to be at ease before the public.

   Factor 2. Intense Fan

19. I am depressed the next day after the team loses.

26. After a close hard-fought game, I feel almost as tired and drained as if I had been playing myself.

46. When the team does poorly I have a hard time "holding my head up."

59. When I go into the stadium, or arena, or sit in the bleachers, I feel as if I'm in a special, more exciting world.

22. Athletics is the best way people can improve their status in life.

   Factor 3. Importance

47. Athletics brings money into the university.

42. Having a strong athletic program builds pride in a university.

21. Athletic events bring money into a region.

29. Athletics is important to the morale of the alumni.

57. Athletics provides good public relations for colleges and universities.

   Factor 4. Cheerleader

2. It makes me feel good when I wear a shirt with the school mascot on it.

54. I feel proud when the team does well.

37. I feel especially proud when someone from our home town or home state does well in any kind of contest.
35. A winner is a winner, whether it is on the playing field or in the classroom.

7. When I am away from Ames and see someone with a shirt or jacket with a cyclone on it, it makes me feel as if I'm not alone.

Factor 5. Female/Male Benefit

32. Males who participate in athletics are more popular than those who don't.

65. Males who participate in athletics are more outgoing than those who don't.

27. Females who participate in athletics are more outgoing than those who don't.

45. Most males who participate in athletics are popular with females.

58. Females who participate in athletics are more popular than those who don't

Factor 6.

28. Winning should be the ultimate goal of athletics.

64. Defeating your opponents is the ultimate goal of competition.

Factor 7.

58. Females who participate in athletics are more popular than those who don't

61. Most females who participate in athletics are popular with males.

53. Females who participate in athletics get preferential treatment.

Factor 8.

6. Males who participate in athletics develop an exaggerated idea of the value of their skills.

20. Females who participate in athletics develop an exaggerated idea of the value of their skills.
Factor 9.

9. Students who participate in athletics are interviewed more often by the media than are students from any other group.

23. A school's mascot, often found on t-shirts, sweatshirts, caps, playing cards, etc., is usually associated with its athletic teams.

Factor 10.

38. The office of Financial Aid is more restricted in the amount of aid they can give to a star athlete than they can to a star student.

Factor 11.

34. Participation in athletics enhances a female's sexuality.

16. Participation in athletics enhances a male's sexuality.

Factor 12.

60. Persons participating in athletics are only one of several groups who can receive free tutoring.

Factor 13.

3. Participation in athletics gives most females the ability to be at ease before the public.

25. Participation in athletics gives most males the ability to be at ease before the public.

Factor 14.

13. Competition does not ruin a friendship.
APPENDIX H.

PERMISSION TO PRINT CARTOON
DEAR ROSEMARY,

SORRY FOR THE DELAY IN GETTING BACK TO YOU. I SEE NO PROBLEM IN USING THE CARTOON AS LONG A CREDIT LINE IS GIVEN TO THE DES MOINES REGISTER.

IF YOU NEED A BETTER COPY THAN WHAT YOU HAVE, LET ME KNOW.

SINCERELY,

BRIAN DUFFY