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MEASUREMENT OF ATTITUDES TOWARD THE CONDUCT
OF INTERCOLLEGIATE BASKETBALL FOR WOMEN

by

Jill Hutchison

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

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It was the purpose of this study to explore the feasibility of constructing an instrument which can be utilized to identify the attitudes of coaches of women's intercollegiate basketball teams and female intercollegiate basketball players toward the conduct of intercollegiate basketball programs for women. The construction of the instrument included:

1. Revision of Sisley's situation-response scale for use with coaches of women's intercollegiate basketball teams and female intercollegiate basketball players projected into a coaching role.
2. Content evaluation and revision of the basketball situation-response scale by a group of five judges.
3. Rating the scale items (content validity) and ranking of responses (for scoring) by a jury of nine expert judges.
4. Administration of the scale to coaches and players to determine scale reliability.

The 50 situation response items in the Sisley scale and ten additional items were revised to apply to only women's intercollegiate basketball. The 60 items were evaluated by a jury of five judges, resulting in the elimination of six items and the revision of several other items. Ratings and evaluations by the jury of nine experts eliminated an additional 24 items, resulting in a final scale consisting of 30 items. The 30-item situation response scale was administered to 134 female intercollegiate basketball players and 14 coaches of women's intercollegiate teams. The scale reliability for the given sample was .374.

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Education is more than courses, papers, projects, and grades. Education is also learning about people and learning about oneself. I feel fortunate to have had an opportunity to learn and share with others all of the joys and frustrations of learning. I have personally found learning to be a form of sharing--sharing ideas, emotions, and knowledge.

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CHAPTER I
INTRODUCTION

Contrary to contemporary thought, competitive intercollegiate basketball for women dates back as far as the 1890's. Women's participation in basketball began after the invention of the game by James Naismith at Springfield College in the fall of 1891. (Naismith, 1941) In 1891 Dr. Luther Gulick, Director of Physical Training at Springfield College, assigned Naismith the difficult task of creating a game which would stimulate the interest and physical development of men during the winter months. After unsuccessfully attempting to modify several outdoor sports, Naismith combined aspects of lacrosse, soccer, football, rugby, hockey and a childhood game, "duck on the rock," which resulted in the creation of the game of "basket ball." The game derived its name from the original goals which were peach baskets nailed to a ten foot balcony at either end of the gymnasium. Naismith began with a set of 13 rules, a soccer ball, and two teams of nine players each (there were 18 men in class).

Women's introduction to basketball was quite accidental. Young women teachers from Buckingham Grade School passing by Naismith's gym on their way to lunch heard the noise and stopped to watch. They soon asked to participate and in March, 1892, the first women competed in an organized game. The original participants were stenographers and faculty wives from Springfield. (Naismith, 1941) In 1893 at a physical education convention at Yale, Miss Senda Berensen, Director of Physical

Training at Smith College, became interested in Naismith's new game. Smith College held its first basketball game sometime in 1893 between the freshmen and sophomore classes. Male spectators were prohibited from viewing the spectacle as the young ladies were clad in bloomers! Bryn Mawr College soon took up the game. In 1893 Mrs. H. L. Carver of Greenville, Texas, wrote to Naismith requesting a copy of the rules. The game of basketball was on its way to becoming the most popular school sport for girls and women.

Even in the formative years of women's basketball there was a concern for the strenuousness and roughness inherent in men's rules. According to Naismith,

While basket ball was being adopted by many of the girls' colleges, Miss Clara Baer, of Newcomb College, was experimenting with the game in an effort to eliminate some of the most strenuous parts. Miss Baer modified the game so much that the only things left were the ball and the goals. From her work were developed the nine court game, captain ball, and several other variations. (1941, p. 165)

In 1895 Baer published a set of modified rules for women. One characteristic of Baer's rules was the division of the court into three sections, a quality which was destined to be a part of women's rules for over 40 years.

This division came about in an interesting way. On one of the diagrams of the court there appeared a dotted line running across the court in two places. This line was meant to describe the positions of players, but it was taken as a restraining line and was introduced, therefore, into the girls' game. (Naismith, 1941, pp. 165-66)

Gerber (1974) noted that the first intercollegiate contests were held in 1896 when the University of California at Berkeley vs. Stanford and the University of Washington vs. Ellensburg Normal School competed in intercollegiate basketball events. Unfortunately, early

intercollegiate basketball competition was handicapped by the numerous sets of rules in effect.

At the Conference of Physical Training at Springfield, in June 14-28, 1899, a committee was appointed to study the various modifications of basketball rules for women. (Berensen, 1901) The Conference delegates approved the publication of the first set of modified basketball rules for women and appointed Miss Senda Berensen editor.

The editorial by Berensen (1901) which prefaced the first women's basketball rules stated, "It is by far the most popular game that women play." She went on to say that its one great fault was roughness and modifications of men's rules were necessary. Berensen's article, "The Significance of Basket Ball for Women," which accompanied the 1901 rules, expressed concerns which have plagued women's intercollegiate athletics to the present.

One will either abandon one's self to instinct and impulse in the quickness of action and intense desire for victory, and hence develop rough and vicious play; or by eliminating brute and unfair play, one's powers are put into developing expert playing, quickness of judgment and action, and physical and moral self control. . . . The greatest element of evil in the spirit of athletics in this country is the idea that one must win at all costs--that defeat is an unspeakable disgrace. . . . Since athletics for women are still in their infancy, it is well to bring up the large and significant question: shall women blindly imitate the athletics of men without reference to their different organizations and purpose in life; or shall their athletics be such as shall develop those physical and moral elements that are particularly necessary for them? (Berensen, 1901, p. 20)

A more official National Women's Basket Ball Rules Committee was appointed in 1905 by the American Physical Education Association (APEA). (Berensen, 1905) This committee was to become the forerunner of the National Association for Girls and Women's Sports (NAGWS). The early basketball rules for women were published by the A. G. Spalding

Company and were accompanied by numerous articles dealing with physiological, psychological, and philosophical aspects of women's athletics in general. Articles of this nature continue to accompany women's rule guides today.

In 1898 Harriet Ballentine (1898, p. 38) aptly expressed many women's acceptance of intercollegiate sports.

Competitive sports are of much aid in stimulating interest and effort, and where women are so fortunately situated as to be able to play basket ball out-of-doors, there is no form of exercise more desirable for them.

Alice Bertha Foster (1897) noted that at Bryn Mawr basketball was the athletic feature. Ballentine (1901) stated that athletics were begun at Vassar due to student demand. Women practiced three hours a week for four or five weeks and held to a stringent training regime requiring no food between meals.

However, by the turn of the century there appeared marked opposition to women's participation in competitive athletics. Early physical education leader Dudley Sargent (1906) expressed the concern that basketball for women was too rough and would make participants more masculine. He spoke in favor of modified rules which would be more adaptable to the female capabilities. Elma Warner (1906) criticized extensive 20-game schedules, male coaches, lack of training rules, absence of female chaperones, poor travel arrangements, admission charges, poor officiating, and the use of men's rules in competitive basketball for New York girls. Warner voiced an early concern for the entertainment aspects in athletics.

The more we try to establish the spirit of hospitality and to make our audiences feel that they are our guests, the less liable we will be to a vulgar display of partisanship, shown by cheers, hisses, mechanical noises, audible comments on players and officials, coaching from the sidelines and general

rudeness. There is absolutely no reason for our contests for girls partaking of the same character as those for boys and men. (1906, p. 185)

Warner expressed an emergent view of many women that competition between schools was not beneficial for women, but rather women should strive for activity for the masses rather than a select few. Florence Burell (1917) echoed Warner's sentiments.

It seems unwise to encourage the so-called varsity competition for women when the interclass intercollegiate sports offer such opportunity for sportsmanship and keen competition. (1917, p. 18)

However, even in the early 1920's there was a faction of women who were supportive of competitive varsity athletics for women. Helen Kirk (1920) contended that the problem with roughness in women's basketball was a direct result of archaic rules which divided the court thus restricting movement. She also stated that women's rules were boring to spectators, players and coaches alike!

Although Berensen and her colleagues were publishing special rules for women, a study by Stewart (1914) revealed that a large percentage of women's teams were either playing men's rules or modifications of men's or women's rules. Florence Summers (1916) represented the view of many physical educators that athletics for women must not follow the path of commercialization found in men's athletics. There was a growing need for controls in women's sports. In 1917 the American Physical Education Association answered this need with the formation of the Committee on Women's Athletics and the basketball committee became its subcommittee. (News Notes, 1919) The National Athletic Conference of American College Women (ACACW) was also organized in 1917 when the University of Wisconsin at Madison Women's Athletic Association invited schools to attend the first conference on women's athletics. (Swift,

1921) The purpose of the ACACW was "to promote and better women's athletics throughout the country and to foster the upbuilding of good, strong women's athletic associations in all universities and colleges." (Swift, 1921, p. 305) One highlight of the 1920 Conference was a debate between student representatives of Ohio State University and Oberlin College on the merits of the women's basketball rules or modified men's rules. Following the debate the Conference resolved to adopt Spalding's Official Basket Ball Guide for Women. By 1922 the Committee on Women's Athletics of the APEA had expanded to five subcommittees including basketball, hockey, swimming, track and field, and soccer. (News Notes, 1922)

The year 1922 also marked the formation of the National Amateur Athletic Federation (NAAF) which was organized by the War Department to promote national standards of physical training. Although the NAAF was organized primarily out of a concern for the fitness of America's fighting men, there was also a concern for women. Mrs. Herbert Hoover was asked to lead the Women's Division of the NAAF in 1923. (Sefton, 1941) The Women's Division of the NAAF became very influential in the direction of women's athletics for the next 16 years. Mrs. Hoover appointed prominent women physical educators to lead the Division. (News Notes, 1923) Miss Blanche Trilling, originator of the ACACW and Chairman of the Women's Athletic Committee of the APEA, became Chairman of the Women's Division of the NAAF.

The infamous Platform of the Women's Division was adopted April 6-7, 1923. (News Notes, 1923) Among the resolutions adopted was a definite stand against competitive athletics for women, support for adequate preparation of women physical educators, opposition to

international competition, opposition to elaborate awards, and a strong support of "play for play's sake." The Platform was enthusiastically endorsed by the Women's Athletic Committee of the APEA. Both groups were disturbed by the action of the AAU to take a group of women athletes to the Women's International Athletic Games held in Paris in July, 1922. (News Notes, 1923) Women physical educators were rapidly gaining strength and influence across the nation. For the first time there appeared a degree of unity and agreement on set standards. Agnes Wayman (1924, p. 517) aptly expressed the position of women leaders. "We are setting forth under our sail with women at the helm and women manning the whole craft." Wayman went on to comment on the problem of men attempting to control women's athletics.

And this brings the problem down to you and me, for, after all, it's a question of the right sort of leadership. . . . There never was a time in history of physical education and sport when the right sort of leaders were as necessary as now. We need leaders--leaders with education, leaders with ideals, leaders with vision, leaders with courage of their convictions, leaders who know the right and have the will to do it. Only thus can we be sure that our athletics will be "all uses--no abuses." (1924, p. 19)

And thus was the crux of the entire issue!

Ohio followed quickly on the heels of national leadership and in 1926 abolished girls' basketball tournaments, agreed to use only girls' rules, and emphasized intramural play rather than intercollegiate competition. (News Notes, 1926) In 1927, the state directors of physical and health education of state departments of education of the APEA went on record as opposed to national and state interscholastic basketball tournaments for girls. (News Notes, 1927) This action followed a National Girls' Basketball tournament held at Wichita Falls, Kansas. Interestingly enough, action directed at curtailing competitive athletics for females dealt almost entirely with basketball.

In 1923 Mabel Lee conducted a study of intercollegiate athletics at the request of the Women's Committee of the NAAF. (Lee, 1924) Lee's results showed that intercollegiate athletics for women did not exist except in a small number of institutions, primarily on the east coast. Interclass competition and telegraphic meets characterized intercollegiate competition in 1923. The majority of physical educators and athletic directors were opposed to varsity-type competition with few exceptions.

In 1929 the Women's Section (previously the Women's Athletic Committee) of the APEA not only published rules in six sports, but also the Official Handbook of Athletic Activities for Women and Girls. (Bowers, 1929) The Handbook included the types of activities deemed acceptable by the Women's Section. Also in 1929, Agnes Wayman clearly stated the position of the Women's Division of NAAF toward competition.

The Women's Division does believe wholeheartedly in competition. . . . What it disapproves of is the highly intense specialized competition such as exists when we have programs of interschool competition, intergroup track meets, or open swimming meets, with important championships at stake. The evil in connection with these events lies not so much in the competition itself as in the emphasis which is placed upon winning and which makes that the paramount issue. (Wayman, 1929, p. 469)

Wayman's examples of poor practice in varsity competition, used to illustrate her argument, involved none other than basketball!

If women were to provide competition for the masses, a new form of sporting activity other than varsity competition had to be found. Smith (1927) was one of the first to suggest the new endeavor, the playday. The playday consisted of girls from a number of institutions gathering together for a day of sport activities. Individual schools

would not compete against one another; rather, teams composed of players from a number of schools would play. This meant a de-emphasis on winning prevailed for at least a generation.

A follow-up study by Lee in 1931 reflected a decrease in inter-collegiate competition since 1923 from 22 per cent to 12 per cent. However, there was also a decrease in playday participation. The primary type of competition in 1931 was intramural in form. Lee attributed the decline in competition to the rising tide of condemnation of men's inter-collegiate athletics.

. . . how determined also are the women college students of today, not to permit women's athletics to follow in the footsteps of men's athletics. They are determined to keep them free of all taint of professionalism and commercialization--to keep them quite informal, entirely sane, and absolutely wholesome. (Lee, 1931, p. 127)

In 1937 the National Section on Women's Athletics (previously the Women's Section) of the APEA published the first Standards in Athletics for Girls and Women. (News Notes, 1937) These standards were the predecessors of the Philosophy and Standards published by NAGWS. (Atwood, 1971) The first standards included the role of leadership, scope of the program, health safeguards, degree and type of competition, awards, financing, public relations, and personal and professional qualifications for leaders in women's sports.

Although the status of competitive basketball remained rather stagnant for the next 25 years, women physical educators continued to assess attitudes toward athletic programs. Montgomery (1942) selected a jury of 33 individuals representing all possible organizations involved with girls' and women's sport to determine World War II attitudes toward competition. The jury approved unanimously of intramural,

county, state or national competition in basketball as well as several other sports. The jury also noted its disapproval of the use of boys' basketball rules for women.

In 1945 Scott reported on the findings of a study by the Committee on Competition of the National Association of Physical Education for College Women (NAPECW). (Scott, 1945) The questionnaire represented responses from 227 colleges and universities across the country, only 16 per cent of which participated in intercollegiate competition. Of this 16 per cent the majority were found on the east coast, a finding similar to Lee's study of 1931. Approximately 49 per cent of the schools participated in playdays and sportsdays and 48 per cent in telegraphic meets. Scott noted that college teachers in all districts except the Eastern believed there was a tendency away from extramural competition. The study reflected approximately two to every one college teachers were against organized district, state or national tournaments. Scott attributed much of the curtailment of interschool competition to travel difficulties existing during World War II.

Nine years later White (1954) conducted a similar study to compare the results of post-war attitudes to those of 1945. White's results indicated an increase in extramural competition (including playdays, sportsdays, and varsity competition). Sportsdays, in which school teams competed as a unit, were by far the most popular form of competition, and basketball was the most popular sportsday event. Of the 64 schools competing in varsity sports, basketball was again the most popular activity. White's study showed an increase in varsity competition from 16 per cent in 1943 to 28 per cent in 1954. The greatest interest and number of games and practices were found in

basketball. In addition, 63 per cent of the schools indicated that students were also participating in non-college sponsored activities in several sports including basketball. The trend toward more competitive basketball was becoming apparent.

It was not until 1963 that the Division for Girls' and Women's Sports (DGWS, formerly the CWA, NWSA, and NSGWS) began to recognize intercollegiate competition as an acceptable and viable form of extramural competition. (DGWS, 1963) In 1965 the National Joint Committee on Extramural Sports for College Women (appointed by the NAPECW and DGWS) was disbanded. In 1966 DGWS appointed the Commission on Intercollegiate Sports for Women to provide a framework and organization pattern for Women's sports which differed from the men's. (Scott and Ulrich, 1966) The Commission was empowered to develop guidelines, sanction intercollegiate events and sponsor national championships. The DGWS and NAPECW were taking steps to provide leadership to intercollegiate sports programs for women.

By 1967 the Commission for Intercollegiate Athletics for Women (CIAW) was activated with Katherine Ley at the helm and the organization began to sponsor national collegiate championships in golf and tennis. In 1970 the list included swimming, badminton, and volleyball. Basketball was added in 1972 with the first official championship held at Illinois State University. National Invitational Tournaments preceded the first official event beginning in 1969 at West Chester State College in Pennsylvania, (Eckman, 1970) followed by Northeastern University in 1970 and Western Carolina University in 1971. Gerber's (1974) summary of activities in which varsity programs have been conducted reflects an interesting point. Surveys conducted over the years

between 1923 and 1971 reveal that basketball has consistently been the most popular sport among colleges responding to the surveys. However, basketball was the last national championship to be included! It can also be seen that basketball has historically been a controversial sport among female physical educators. To many, basketball undoubtedly typifies all of the inherent evils in women's competitive sports and thus basketball is frequently the sport which is most carefully scrutinized and criticized.

The 1960's saw not only a change from the playday and sportsday toward greater intercollegiate competition, but also rules changes in basketball which once again made the women's game resemble men's basketball. By the 1960's DGWS had formed a joint rules committee with the AAU in an attempt to publish one set of rules for all females. (Smith, 1970) Three rules had typically differentiated women's rules from men's rules. The court was divided into thirds (1899) and then halves (1914). Players were allowed only three dribbles (1892), then one dribble (1914), then three dribbles again (1961). Third, women were prohibited from taking the ball from the hands of an opponent (1899). In 1962 two players (rovers) were allowed to cross the center division line. In 1969 Women's rules returned to the five-player game allowing all players to play the entire court. In 1966 the continuous dribble was accepted. In 1962 DGWS rules allowed a player to take or tap the ball away from an opponent. (Smith, 1970) In 1974 the NAGWS-AAU Joint Women's Basketball Committee initiated further changes dealing with fouls which resulted in rules which were almost identical to men's rules. (DGWS, 1974)

Although the 1960's had seen great changes in women's basketball, they have been equally paralleled by activities of the 1970's. In 1972 the CIAW was transformed into an institutional membership organization-- The Association for Intercollegiate Athletics for Women (AIAW).

It became apparent that there was a need for a more structured governing body which would provide leadership and initiate and maintain standards of excellence in intercollegiate competition for all college women. The Association for Intercollegiate Athletics for Women, an institutional membership organization, is designed to fill this need. . . . It will have its most direct control through national championships. . . . AIAW will continue to have its relationship with the DGWS and the AAHPER as CIAW had had. (Magnusson, 1972)

The first AIAW Delegate Assembly was held in Kansas City, November 4-6, 1973. In 1972, 205 colleges became charter members of AIAW. By 1975 over 600 institutions had joined AIAW. (Hult, 1974) The most crucial issues discussed at the first Delegate Assembly were scholarships and separate teams for men and women. This is a far cry from the concerns of the early leaders in women's athletics.

Collegiate basketball players have entered new arenas which would appall early leaders. In 1973 the women's basketball team of John F. Kennedy College of Wahoo, Nebraska, toured Communist China. (The Sports-woman, September-October, 1973) Also in 1973 the United States women's basketball team placed second in the FISU World University Games in Moscow. In 1974 the performance of teams at the AIAW National Championship at Manhattan, Kansas, surpassed that of teams in the AAU National Tournament for the first time ever. (Brune, 1974) Also in 1974, the Iowa Girls' Basketball Tournament attracted a record 86,000 spectators over the three-day event. (Klemesrud, 1974) The AIAW sponsored its first foreign touring team in 1975. The National Champion, Immaculata College, toured Australia in the summer of 1974. The Australians returned

the opportunity by sending a national team to play 20 of the top United States teams on a whirlwind tour of our country in January and February of 1975. In February of 1975 the first women's intercollegiate basketball game was played in Madison Square Garden between national powers Queens College of New York and Immaculata College of Pennsylvania before over 12,000 spectators. (Rounds, 1975) And finally, the 1975 AIAW National Basketball Championship held at Madison College in Harrisonburg, Virginia, received national television coverage. Women have come a long way since the first basketball game at Smith College behind closed doors!

Leadership in Women's Sport

It is apparent, from the preceding discussion, that sound leadership both individually and organizationally has long been an issue in the development of women's collegiate sport. Aspects of leadership have been intricately tied with the conduct of intercollegiate sports. Even at the inception of the game of basketball Gulick cautioned Naismith.

When a point comes up which is not covered by the rules, the spirit of the game must be taken into consideration, it being taken for granted that every man plays according to this spirit and not merely to avoid the eye of the umpire and referee. (Gulick, 1894, p. 1)

However, basketball rules for both men and women have experienced innumerable revisions to cope with undesirable practices found in the game. In 1928 the Section of Women's Athletics also formed the National Officials' Rating Committee to help control competitive basketball. (News Notes, 1929)

Although men's competitive athletics were yet in their infancy, there was much criticism directed at intercollegiate sport at the turn of the century. Meylan (1905) noted the two major concerns which have

plagued athletics to this day. First was the inordinate desire to win, resulting in high coaching salaries, cheating to win, playing injured athletes, recruiting athletes without educational concern, and advertisement for the institution. The second major evil, according to Meylan, was commercialization which resulted in large crowds seeking only entertainment without a true interest in the sport, extravagance in expenditures, unhealthy newspaper notoriety, and gambling. One of Meylan's proposed solutions was to employ qualified coaches and athletic directors.

Commercialization and the "win-at-all-costs" attitude in men's athletics have probably had as much influence on women's athletics as they have on men's. Kellor (1906) expressed the concern of most women that men's athletics should not serve as a model for women.

The qualities which games develop are not essentially masculine but they are human qualities needed for human fellowship. . . . Organized sports for women, when put on a proper basis and under intelligent directors, will go a longer way toward training the faculties and moral instincts than many of the courses of instruction which are now given credit for doing this. . . . The development of these individual and social qualities depends not so much upon the game played as upon the teachers who train. . . . Such results as I have outlined can be achieved only when the instructors know these ideals, believe in them, and live them. . . . Some of the teachers who are acting as coaches came to one of our summer schools last year and did not know games had an ethical value; and there are women in charge of our young girls in basket ball who have never played an organized game! (Kellor, 1906, p. 169)

Kellor criticized the tendency of educators to assign coaches and teachers to women's sport without any professional training in these fields. She listed several qualifications as necessary for leaders in women's sports including knowledge of physiology, anatomy, psychology and dietetics; love of the game; playing experience; knowledge of rules; desire to work with people; and a sense of fairness. "Until they have (these qualities), no fair test of games can be made from the ethical standpoint." (1906, p. 169)

Warner (1906) mentioned that most coaches in the early 1900's were merely interested faculty. If there were no faculty interested, students or even professional players were utilized. Student managers were responsible for scheduling and there was a general lack of adult leadership.

By 1915 there was some concern that men, under the auspices of the AAU, would attempt to gain control of women's sports. (Summers, 1916) Women were seeking stronger leadership than their own local Women's Athletic Association. Shortly after, in 1917, the APEA formed the Committee on Women's Athletics which had previously been the Women's Basket Ball Rules Committee (1899) and the National Women's Basket Ball Committee (1905). (Gerber, 1971) Elizabeth Burchenal, credited with the development of folk dance in America, was one of the first members of the Committee. In 1919 Burchenal set forth policies based upon her experiences. There has been a consistent belief in these basic concepts from then until the 1960's.

1. Athletics for girls should be developed only on the bases of play, wholesome pleasure, health, and character building--"Sport for sport's sake."
2. Athletics should be for all girls. Any form of athletics is a failure which does not include, and is not suitable for and interesting to, at least 80% of all girls.
3. Eliminate all the disadvantages and mistakes of boys' athletics. . . .
4. Athletics carried on within the school and no inter-school competition.
5. Athletic events and games in which teams (not individual girls) compete.
6. Athletics chosen and practiced with regard to their suitability for girls and not merely in imitation of boys' athletics.
7. Girls' athletics directed by competent women instructors and leaders. (Burchenal, 1919, p. 273)

By the 1930's, the concept of educational sport was emerging.

Among the functional aims for educational athletics was the importance

of suitable leadership. (News Notes, 1932) This general concern for leadership was also emphasized by the National Section on Women's Athletics.

Upon the leader depends the development of the potential good in any endeavor or the growth of subtle evils inherent or allied with it. ... the question of adequate, skilled and trained leadership which considers the health, education and the general well-being of the individual girl rather than the publicity to the community, the ability to draw big gate receipts, or win championships, is not being attacked whole-heartedly in some communities. (LaSalle, 1932, p. 95)

As a result of the clamour about leadership in sport, some states began to state specific qualifications for athletic coaches. Ohio required that all coaches hold at least a minor in physical education and California stated that all coaches must be physical educators. However, it was not until 1957 that Minnesota required a physical education minor of all coaches and only then following a study of high-school coaches. (Neal, 1957) Many other states have yet to establish any coaching competencies for employment.

The sociological/psychological investigation of leadership has undergone a variety of approaches during the twentieth century, ranging from innate qualities of leaders to situational leaders, and finally to a study of followers. However, sound leadership in women's sports has always hinged upon coaches' acceptance of stated organizational policies. Women's athletic organizations associated with the physical education profession grew from the Women's Basketball Committee (1899), to the National Women's Basketball Committee (1905), to the Committee on Women's Athletics (1917), to the Section of Women's Athletics (1927), to the National Section on Women's Athletics (1932), to the National Section on Girls' and Women's Sports (1953), to the Division for Girls' and Women's

Sports (1957) and finally to the National Association for Girls' and Women's Sports (1974). According to Gerber (1971), the title changes were indicative of the status of women's sports as it progressed from a committee, to a section, to a division, and finally an association. It is also interesting that the concept of "girls" was added to women's competition. It has also been seen that the Women's Division of the NAAF (1923) and the Association for Intercollegiate Athletics (1967) have also been very instrumental in shaping the attitudes of women toward intercollegiate sport.

Organizational philosophies were first expressed in articles in professional literature or presentations at professional meetings. The publication of the Platform of the Women's Division of the NAAF (1923) was perhaps the first publicized organizational policies. These policies were endorsed by all groups most concerned with women's collegiate sport including the Committee on Women's Athletics of the APEA, Association of Directors of Physical Education for Women in Colleges and Universities, Athletic Conference of American College Women, American Association of University Women, and the National Association of Deans of Women. (Gerber, 1975) Although there were always small groups of dissenters, the large majority of women have continued to support organizational policies.

According to Atwood (1971), the first policies published by NAGWS (or its predecessor) came in 1937. These became the forerunners of today's Philosophy and Standards area of NAGWS, whose stated purpose is "to foster the development of sports programs for the enrichment of the life of the participant." This committee of NAGWS periodically examines and revises its philosophy and standards to meet the needs of those it serves.

However, the task of this committee has become more complex as women's competitive sports opportunities have expanded in the past decade.

There is an increasing concern for the educational value of sport including problems of crowd control, racial equality, finances, and drug control. There is a cry for accountability stating "athletics are for athletes and any other rationale for their being becomes superfluous." (Cruse, 1972, p. 41) According to Sheehan and Alsop (1972) we are beyond the stage when we can assume positive attitudes will be developed through sport, but we must teach these attitudes specifically. The crux of the issue is the leadership displayed by those working directly with female athletes. The approach by Sheehan and Alsop is not a new one. Montgomery (1941) stated, "The attitude and behavior of adult leaders and spectators readily influence feelings and actions of adolescent girls." (1941, p. 66) Williams also noted the important role of leaders in physical activity.

Leadership of any educational activity is important always, but the leadership of a vital activity is momentous . . . The teacher of games in a school has the opportunity to get closer to pupils and students, to be more influential in shaping their likes and dislikes, and in forming the standards of sportsmanship and ethical conduct, than any other teacher in the institution. (1930, p. 36)

National coaching conferences are being held by NAGWS to promote advanced skills and strategies as well as high standards in women's sports. National coaching associations were also being formed by NAGWS in 1975. However, if physical educators and others concerned with women's intercollegiate athletics are to have any influence on the future direction of programs, it is imperative that they determine the current attitudes of coaches and participants toward present programs. This study is an attempt to develop an instrument to identify the attitudes of

coaches of women's intercollegiate basketball and female intercollegiate basketball players toward the conduct of intercollegiate basketball programs for women.

Statement of the Problem

The purpose of this study is to explore the feasibility of constructing an instrument which can be utilized to identify the attitudes of coaches of women's intercollegiate basketball teams and female intercollegiate basketball programs for women. The construction of the instrument will include:

1. Revision of Sisley's situation-response scale for use with coaches of women's intercollegiate basketball teams and female intercollegiate basketball players projected into a coaching role.
2. Content evaluation and revision of the basketball situation-response scale by a group of five judges.
3. Rating of scale items (content validity) and ranking of responses (for scoring) by a jury of nine expert judges.
4. Administration of the scale to coaches and players to determine scale reliability.

Definition of Terms

Attitude is a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner. (Rokeach, 1968, p. 112)

Coach is a person (male or female) directly responsible for instructing and guiding an intercollegiate basketball team.

Intercollegiate or varsity basketball is competitive basketball which involves college and university teams which are trained and coached, and which compete in a series of scheduled games with other colleges and universities.

Player or participant is any undergraduate college female who is listed on a team roster with the possibility of entering a game situation.

Situation-response is a type of attitude scale item in which a situation is briefly described and five alternative responses are given. The responses represent different degrees of attitude toward the situation. The subject is to select the response which best indicates what she would do if she were faced with the situation. (Sisley, 1972)

Assumptions

The investigation assumes five basic concepts:

1. Attitudes reflect internalized values. They are action-oriented and ultimately determine behavior.
2. Attitudes can be measured.
3. The subjects will respond as they would behave in the situation described.
4. A situation-response scale related to women's intercollegiate basketball will provide data indicating a general view toward the conduct of intercollegiate basketball.
5. Undergraduate female basketball players can project themselves into the role of a coach and respond to situations as they would while coaching a team.

Scope

The content of the situation-response scale included most aspects involved in the conduct of intercollegiate basketball for women as reviewed in the literature, discussed by active coaches and players, and found in personal experience. The major sub-categories include athletics in education, leadership, financing, public relations, general philosophy, ethics, methods of coaching, team selection, scheduling of events, standards and eligibility, rules and officials, health and safety and equipment.

Five qualified judges were used to screen the preliminary categories and to evaluate the items and responses which had been constructed. A jury of nine experts representing each of the nine AIAW regions, currently coaching basketball, and representing a variety of age groups and backgrounds, ranked the scale items.

The study is limited to 14 coaches and 134 players participating in the 1974 AIAW National Basketball Championship, as well as the coaches and participants at the 1974 United States Collegiate Sports Council (USCSC) women's basketball training camp preparing for the 1975 World University Games. These subjects were utilized to determine scale reliability.

Significance of the Study

A revitalization in the realm of women's intercollegiate sport has been witnessed in the past decade. The proliferation of opportunities for competitive sport experiences by college women not only reflects the interest of female undergraduate students, but the support of coaches and some physical educators as well. In 1903 Lucille Eaton Hill,

Director of Physical Training at Wellesley College, warned that, "Fiercely competitive athletics have their dangers for men, but they develop manly strength. For women their dangers are greater, and the qualities they tend to develop are not womanly." (Gerber, 1974, p. 69) This is a far cry from the position of many contemporary leaders as exemplified by Harris. "Stereotypes, prejudices, and misconceptions have served to curtail the participation of females in vigorous, competitive physical activities for too many years." (1971, p. 1) Empirical evidence suggests that the changing role of women in sports is a result of the changing role of women in our society, as well as documented research related to the anatomical, physiological, psychological and sociological effects of competitive athletics on women. The effects of Title IX of the Educational Amendments Act of 1972 will undoubtedly bring even greater changes to women's intercollegiate athletics in the near future.

Women coaches are facing a major transition from the sportsday concept of "a girl for every sport and a sport for every girl" to a full-blown intercollegiate program. Many coaches lack the professional preparation and know-how to cope with problems such as scholarships, recruitment, team selection, scheduling, and the desire to win. Where once women physical educators took a somewhat united stand on procedures for conducting a program, current attitudes toward the conduct of intercollegiate programs may be as numerous and varied as the number of individuals coaching these programs. Neal recently stated:

We as women coaches are fast reaching the point now where we must decide just what it is that we expect from our women's competitive programs, and what type of psychological outlook we would like from our players . . . as well as from our fellow coaches. Whether we follow the same pattern set by the men or not will depend on whether we can define our goals, and whether we are willing to work toward these goals without being swayed by the men's program. (1973, p. 1)

According to Ley (1972, p. 12), "The educational outcomes of participation in competitive events are directly proportional to the quality of leadership." She further notes that there are two main elements which affect the quality of leadership: (1) professional preparation and experience, and (2) the value system of coaches. (1972) "Nothing is inherently good or bad . . . the leadership makes it that way." (Ley, 1962, p. 39)

Thus, it is apparent that the future of women's intercollegiate basketball is dependent upon the leadership of individual coaches. Neal (1973) noted that a coach's philosophy greatly influences the participation of the athlete. This becomes even more critical when today's players become tomorrow's coaches or even mothers of tomorrow's players. Therefore, the attitudes prevalent among contemporary coaches and participants may indicate directions of future intercollegiate programs. These attitudes can be determined if an adequate tool is available. It is hoped that the present study will contribute a valid and reliable instrument to utilize in identifying attitudes toward women's intercollegiate basketball. Intercollegiate basketball was specifically selected for study because of personal interest and because it has been a controversial activity for women for over 70 years in spite of its obvious popularity. If criticism is leveled against intercollegiate sports for women, basketball will undoubtedly be a prime recipient.

CHAPTER II

REVIEW OF LITERATURE

This review is not intended as a complete review of the published literature regarding attitudes, although a variety of issues have been investigated. The first portion of the chapter addresses the nature of attitudes including definitions of attitudes; dimensions of attitudes; the relationship of attitudes to opinions, beliefs, and values; the development of attitudes; and the relationship of attitudes to behavior. The second portion of the chapter reviews written quantitative techniques utilized in the measurement of attitudes including the Thurstone or equal-appearing intervals technique; Likert's summated ratings; Guttman's scalogram analysis; Edwards' and Kilpatrick's scale discrimination; Osgood's semantic differential; and the situation-response technique. The final section of the chapter reviews recent studies of attitude measurement in athletics.

The Nature of Attitudes

Definitions of Attitude

In spite of its wide use, the concept attitude is not defined uniformly by sociological or psychological writers. Fortunately the concept has shed many of its diverse meanings which accompanied its infancy, but the concept of "attitude" still has not reached the pinnacle of its understanding by behavioral scientists. A view of the historical use of the term attitude may perhaps increase the understanding of the term in current literature.

DeFleur and Westie (1963) and Allport (1968) have noted that the term attitude probably originated in the seventeenth century referring to the body position of an artist's subject with respect to the background. As the meaning of the term extended, it began to include mental positioning on an issue, general motivational response, or modes of thought of a group. During the mid-nineteenth century attitude came to refer to "mental processes" of the individual. The studies of reaction time conducted by Wilhelm Wundt added impetus to attitude research in an effort to explain the "state of readiness" of some subjects.

The early work of the behaviorism movement showed little concern for the concept of attitude. However, the emergence of social psychology in the early 1900's initiated intense investigation into the nature of attitudes. Today social psychologists credit Thomas and Znaniecki's Polish Peasant in Europe and America as the first work emphasizing attitude as a key concept. Thomas and Znaniecki (1927) identified attitudes as the mental processes which determine both the actual and potential responses of a person in the social world. Their emphasis on attitude as a viable concept to be investigated by social psychologists led to a plethora of writings during the 1920's and 1930's.

Among the early contributors to the attitude concept was L. L. Thurstone, considered the originator of attitude measurement. Thurstone (1928) labeled attitude as the sum total of a man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats, and convictions about any specific topic. Because Thurstone associated attitudes with mental abstractions which could not themselves be measured, he utilized opinions, which were the verbalization of

attitudes, as his object of measurement. Thus, to Thurstone, an opinion symbolized an attitude.

Thurstone's concept of attitude and attitude measurement was quickly followed by Rensis Likert proposing alternate methods of measurement, as well as definitions. Likert (1932) viewed attitude as a disposition toward overt action which exhibits a range within which responses may fluctuate. Likert also noted that attitudes are found in clusters and thus have somewhat general qualities. These ideas have been incorporated into Likert's technique of attitude measurement.

Droba (1933) attempted to summarize the early definitions of attitudes and succeeded in consolidating the then expressed ideas into four general categories. Cook and Seltiz (1964) also agreed with Droba's following categorical definitions.

1. The "organic set" or the physiological preparation for action. This concept is typified by G. W. Allport's (1935, p. 810) definition of attitude as a "mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related."
2. The general preparation for action, both physical and mental. Sherif and Cantril (1945) characterize this approach to attitude as they state that attitudes are among various psychological factors which determine the individual's selective reaction to his environment. They also consider "drives" to be an influencing factor.

3. Overt behavior as the attitude itself. This concept generally views overt behavior as a direct result of an attitude or the attitude itself. This will be discussed at length later in this review.
4. The mental preparation for any action. This seems to be Droba's "catch-all" for those concepts which consider attitudes as a "tendency to act," a "motive" for activity, the "affective" portion of a response, etc.

After his extensive work to categorize the existing definitions of attitude, Droba could not resist contributing yet another definition to the literature. Thus, Droba (1933, p. 451) identified attitude as a "mental disposition to act for or against a definite object." He further noted that attitudes are acquired, and that they require a point of reference to act toward something.

Krech and Crutchfield (1948, p. 152) incorporated several ideas into their definition of attitude as "an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of the individual's world." Thus, attitudes may be regarded as a subclass of motive since they embody both an affective component and an action tendency.

With the increased emphasis on measuring and operationalizing social-psychological concepts came some new definitions of attitude. Sherif and Sherif (1967, p. 137) operationally define attitude as "the individual's set of categories for evaluating a stimulus domain, which he has established as he learns about that domain in interaction with other persons and which relate him to various subsets within the domain with varying degrees of positive or negative affect." Rokeach (1968,

p. 112) defined attitude as "a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner."

According to DeFleur and Westie (1963), though there are as many specific definitions of attitude as there are writers on the subject, most contemporary definitions fit into one or the other of two basic categories. DeFleur and Westie (1963, p. 20) referred to these categories as (1) probability conceptions and (2) latent process conceptions. "While both of these conceptions of attitudes have certain elements in common (i.e. both assume a stimulus-response framework), they differ in the kind of inferences their proponents would derive from the behavioral referent (observable attitudinal responses)."

The primary inference implied in probability conceptions is that attitudinal responses are more or less consistent. That is, a series of responses toward a given attitudinal stimulus is likely to show some degree of organization, structure, or predictability. . . . Attitude is equated with the probability of recurrence behavior forms of a given type or direction.

The latent process view, begins with the fact of response consistency, but goes a step beyond this and postulates the operation of some hidden or hypothetical variable, functioning within the behaving individual, which shapes, acts upon, or "mediates" the observable behavior. . . . The attitude, then, is not the manifest responses themselves, or their probability, but an intervening variable operating between stimulus and response and inferred from the overt behavior. (DeFleur and Westie, 1963, p. 20)

DeFleur and Westie (1963, p. 24) noted that "the latent process conception of attitude must be entertained as most tentative because it is quite unobservable and thus becomes a somewhat hypothetical variable." Blumer (1969), representing the symbolic interaction perspective of social psychology, was in complete agreement with DeFleur and Westie.

Blumer perceived an attitude as empirically ambiguous because it must be pieced together through a process of inference. Thus, the latent process conception of attitude seems to have lost some degree of acceptance on the basis that its ambiguity prevents fruitful research or the development of a body of knowledge. Perhaps DeFleur and Westie's conceptualization of attitude has some merit. They state that attitudes may be specific, in the sense that they may be viewed as probabilities of specific forms of response to specific social objects, or specific classes of social objects.

Dimensions of Attitudes

In spite of numerous and divergent definitions associated with the concept of attitude, several authors have indicated areas of substantial agreement. Sherif and Sherif (1967) identified five common characteristics of attitudes:

1. Attitudes are not innate, but are assumed to be dependent upon learning.
2. Attitudes are not temporary states, but are more or less enduring once they are formed. This does not imply that attitudes do not change, but that they are relatively stable.
3. Attitudes always imply a relationship between a person and an object. They are formed and learned in relation to identifiable referents.
4. The relation between the person and the object is not neutral, but has motivational-affective properties. These properties are derived from the context of highly

significant social interaction in which many attitudes are formed, from the fact that the objects are not neutral for other participants, and from the fact that the self, as it develops, acquires positive value for the person. Therefore, the linkage between the self and the social environment is seldom neutral.

5. The subject-object relationship is accomplished through the formation of categories both differentiating between the object and between the person's positive or negative relation to the object in the various categories.

The approach taken by Sherif and Sherif represents a behavioral approach because they stated that the only possible data from which attitudes can be inferred are behaviors (verbal or non-verbal).

Remmers and Gage (1955) identified six dimensions of attitudes which are reflected in attitudinal measurement: favorableness, intensity, generality or range consistency, public and private, and common and individual qualities.

Summers' publication, Attitude Measurement, (1970) reflects one of the most comprehensive contemporary accumulations of significant writings about attitude. Summers' analysis of the many articles included in his book reflected the following areas of agreement concerning attitudes:

1. Attitude is a predisposition to respond to an object rather than the actual behavior toward such object.
2. Attitude is persistent over time. It is not immutable, but requires substantial pressure to change. This contributes to consistency in behavior.

3. Attitude produces consistency in behavioral outcroppings.

4. Attitude has a directional quality.

Summers' categories reflect several points of correlation with those suggested by Sherif and Sherif. However, Summers also noted that the most popular contemporary view of attitude is that proposed by Katz and Stotland (1959). This seems to provide a general summary including three components of attitudes: (1) cognitive, (2) emotional, and (3) action tendency. The authors suggested that the cognitive element reflects a deep penetration of the normative order in society. The action tendency incorporates behavior readiness to respond to an object. There appears to be a linkage between the cognitive elements and the readiness to respond. The linkage with the emotional factor is suggested to be more physiologically oriented.

Fishbein (1967) concurred with Katz and Stotland in that most current literature conceptualizes attitude as having three components (affective, cognitive, and conative); however, he prefers Thurstone's unidimensional view regarding attitude as primarily an affective quality. Thus, the cognitive (beliefs) and conative (behavioral intentions) components would be viewed independently of attitudes.

Katz (1960) more precisely stated the dimensions of attitudes in relation to the previously mentioned components.

1. The intensity of an attitude refers to the strength of the affective component.
2. The cognitive, or belief component, incorporates the generality-specificity dimensions and the dimension of degree of differentiation. This may also include the centrality of an attitude as part of an individual's value system.

3. The action component of attitudes still remains a somewhat nebulous concept.

Relationship of Attitudes to Beliefs, Opinions and Values

Throughout time, attitude research has been closely intertwined with concepts such as beliefs, opinions, and values. Thurstone (1920) was one of the first to associate attitudes and opinions. As previously mentioned, Thurstone identified opinions as the verbal expression of an attitude. Thus, Thurstone viewed his scales as a direct measurement of opinions and an indirect measurement of attitudes. Cooper and McGaugh (1968) more specifically identified opinions as tentative cognitive appraisals of a stimulus object. This view of opinions discriminates an opinion from an attitude in the strength of the response. An attitude is considered to be a more stable response than an opinion. However, the authors noted that the term opinion is frequently used colloquially to mean an attitudinal consensus at a given time which, it is supposed, may shift at a later time (e.g., public opinion polling).

A more popular concept associated with attitudes is beliefs. Rokeach (1968, p. 112) specifically defined an attitude as a "relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner." He further noted that a belief is

. . . any simple proposition, conscious or unconscious, inferred from what a person says or does. . . . All beliefs are pre-dispositions to action and an attitude is thus a set of inter-related predispositions to actions organized around an object or situation. . . . An attitude is one type of subsystem of beliefs, organized around an object or situation which is, in turn, embedded within a larger subsystem. (Rokeach, 1968, p. 112)

Scheibe (1970) was in basic agreement with Rokeach in that beliefs are guides to action. An individual develops a set of functional

dispositions, or a belief system, which is an implicit expectation concerning what leads to what. However, Scheibe considered beliefs to be probabilistic due to the individual's experiences in the world and the relativity of reality. Fishbein (1967) and Cooper and McGaugh (1968) noted that a belief is the cognitive component of an attitude. Cooper and McGaugh elaborated this viewpoint by stating that

. . . operationally, one has an attitude toward and a belief in or about a stimulus object . . . Belief connotes an attitude which involves or identifies the subject deeply with the object. The individual uses his belief as a basis for predicting what will happen in the future.

In contrast, Oppenheim (1966) summarized the distinction made by social psychologists between beliefs, attitudes, and values by placing them on a continuum. He stated that some attitudes are more enduring than others. Those which are most superficial are called beliefs, below these are attitudes, followed by values or basic attitudes. As one moves from beliefs to values, attitudes become more stable. Although there exists some disagreement regarding the relationship between attitudes and beliefs and/or opinions, the role of values as related to attitudes represents somewhat more of a consensus in the literature.

Rokeach (1973) defined a value as an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. A value system then is the organization of such beliefs along a continuum of relative importance. Rokeach further identified instrumental values, referring to those values dealing with morality with a personal focus, and terminal values, referring to an end-state of existence which may have either a personal or social focus.

The values that people hold are conceived to be the explanations of the attitudes they hold (and the behavior they engage in), but which values underlie which attitudes (and behaviors) is yet a mystery.

The relationship between values and attitudes is not a new concept in social psychology, as evidenced by the writings of Thomas and Znaniecki (1927). They defined attitude as a "state of mind of the individual toward a value." Values were considered social in nature and numerous attitudes were hypothesized to correspond to every social value. This viewpoint was reiterated by Allport (1935, p. 803): "Attitudes depend upon pre-existing social values."

Droba (1933) stated that attitudes must have a point of reference to act toward something and the object of reference may be called a value. Woodruff and DiVesta (1948) conducted a study of students' reactions to sororities and fraternities to determine the relationships among values, concepts, and attitudes. The results of the study indicated that individuals develop values based upon experience. If an experience is positive, the person develops a positive value toward the object or situation. Thus, the authors stated that values play an integral role in the determination of expressed attitudes. Because values are considered relatively stable personal characteristics, the individual's perception of the concept involved is responsible for changes in attitude. Thus, Woodruff and DiVesta suggested that attitudes reflect how one conceives an object in relation to cherished values.

Vernon (1973) argued for the cultural basis of values and value definitions, indicating the value definitions are a result of consensus in decision-making which when accepted become incorporated into the culture and mores and become very difficult to change. Such value

definitions, according to Vernon, are associated with certain plans for action. Vernon's position supports the relative stability of values as compared to attitudes, as well as a continuum ranging from high to low intensity.

In general, it appears that attitudes are considered to focus upon a given specific referent, while values transcend specific objects or situations. Thus values occupy a more central position to a person, and may therefore be determinants of attitudes and behavior. Beliefs and opinions, on the other hand, appeared to be viewed as expressions of attitudes and/or values rather than determinants of either.

Development of Attitudes

It is commonly agreed in the literature that attitudes are learned or acquired. They are not, in fact, innate qualities within the individual. In defense of their position regarding the probability process conception of attitudes, DeFleur and Westie (1958) noted that the analysis of attitudes may rest with an individual's past experiences, normative systems, peer groups, or the types of social systems from which individuals with different response probabilities have come. Rokeach (1968) and Thomas and Znaniecki (1927) noted that attitudes and/or action are a result of the interaction between one's beliefs/values and the definition of the situation. Thus, again the social structure within which one functions will determine how each situation is perceived and the resultant attitudes and behaviors.

Kelman (1958) also stated that the attitude expressed by an individual may vary from situation to situation. Attitude will be determined by what one considers to be proper in a situation and consonant with group norms, as well as by what one considers to be most conducive to

the achievement of his personal goals. The amount of discrepancy depends upon the situational requirements, on the person's goals, on his relation to the group, and on some of his personal characteristics.

As previously mentioned, attitudes are associated with one's value system. Bloom (1959) noted that attitudes toward morality arise from children's relationships among themselves, as well as the relationships of adults and children. Children live not only by the rules that adults enforce, but by those enforced by their peers. Freedman's (1961) study of changes in attitudes and values over six decades showed that chronological age is not a major factor in attitude differences. However, Freedman did state that experiences of the college years do appear to be a major source of the variations in attitudes, especially the increasing liberalization of social outlook in American culture during this century. These changes have apparently persisted after college.

Siegel and Siegel (1957) also investigated the influence of both membership and reference groups on attitude change. Their results indicated that when divergent membership groups with disparate attitude norms were socially imposed on the basis of a random event, attitude change in the subjects over time was a function of the normative attitudes of both imposed membership groups and the individuals' reference groups. The greatest attitude change occurred in subjects who came to take the imposed, initially nonpreferred, membership group as their reference group.

Remmers (1954) mentioned four ways in which attitudes are developed: integration, differentiation, shock, and adoption. Integration is a result of the accumulation of a large number of experiences over a long period of time. Differentiation refers to the splitting off

of a specific attitude from a more general one. Shock obviously refers to the development of attitude due to an unusual, violent or painful experience. By adoption he meant that the individual merely follows the example of social agencies which influence attitude formation.

Relationship of Attitudes and Behavior

For approximately 50 years, there has been conflicting evidence supporting the hypothesis that knowledge of an individual's attitude toward an object will allow one to predict the way he will behave with respect to the object. An early study by LaPiere (1934) has become a classic example of the lack of agreement between verbally expressed attitudes and overt behavior toward the same stimulus object. LaPiere, in the company of a Chinese couple, made a motor trip across the United States, stopping to eat at 184 places and 66 places for overnight accommodations. They were refused service only once. Following the trip, LaPiere sent a questionnaire to each proprietor to determine their stated verbal policy toward Chinese clients. More than 90 per cent of the proprietors said they would not accept Chinese customers. There was obviously a lack of correspondence between expressed verbal attitudes and related overt behavior.

Fishbein (1967) suggested that the efforts to establish the behavioral predictive ability of attitudes has led attitude research from an unidimensional to a multidimensional approach, and possibly it is time to return to an unidimensional concept. Sample and Warland (1973) state that previous literature has shown that attitude is not a consistent predictor of behavior. Efforts to achieve this predictability have led to four general recommendations in attitude research: (1) better attitude conceptualization; (2) improvement of measurement instruments;

(3) reconceptualization of the problem; and (4) wider use of the multi-variable approach.

The father of attitude measurement, Thurstone (1928), qualified his opinion scales by suggesting that subjects may intentionally misrepresent attitude for one reason or another. Thus, actions may be just as distorted. Thurstone did not claim that consistency in measured attitude could necessarily be used to predict behavior, but that his scales measured what people say they believe.

All that we can do with an attitude scale is to measure the attitude actually expressed with the full realization that the subject may be consciously hiding his true attitude or that the social pressure of the situation has made him really believe what he expresses. (1928, p. 532)

According to Cooke and Selltitz (1964), those individuals active in attitude research have assumed that attitudes can be utilized to predict behavior. The lack of success in this endeavor may be due to a narrow interpretation of attitude. Admittedly, other characteristics of the individual and other characteristics of the situation are additional variables which must be considered in predicting overt behavior. Cooke and Selltitz (1964) recognized that this approach to attitude measurement would necessitate a multivariate view including all influencing factors. They further suggested the use of (1) self-reports, (2) observed overt behavior, (3) reactions to or interpretations of partially structured situations, (4) performance on objective tasks, and (5) physiological reactions. The multivariate approach has received much support in attitudinal research.

Tittle and Hill (1967) suggested that many situational factors affect attitudinal responses. Thus, attitude responses would be most predictive of behavior in situations which occur repetitively within the

common behavioral context of the individual. In other words, attitude scales should attempt to be more situation-specific. The authors attempted to compare popular attitudinal measuring techniques with related behavior criterion to determine the degree of correspondence. They developed Thurstone, Likert, Guttman, Osgood and a simple self-rating of attitude scales toward personal participation in student political activity and also overt voting behavior. The results indicated only a moderate degree of correspondence between measured attitude and behavior. The Likert technique proved to be the best predictor of behavior with a correlation of .518, followed by Guttman .419, self-rating .396, semantic differential .339, and finally Thurstone .255. Tittle and Hill are among those researchers who suggest that the method of measurement may be a major factor in the predictive ability of behavior. It was felt that those scales with self-referent items (i.e., personal pronouns I, me, etc.) correlated better with behavior than those without self-referent items. They also suggested that perhaps the Thurstone technique may not be the standard against which other measurement devices should be compared for reliability and validity.

Blumer (1969) is a strong proponent of a reconceptualization of attitude as a scientific concept. Speaking from the perspective of a symbolic interactionist in social psychology, Blumer asserted that an attitude has no clear and fixed empirical referent and is therefore empirically ambiguous. Thus attitudes must be pieced together through a process of inference. Blumer takes special issue with the assumption that attitudes can be utilized to predict related behavior. He does view an intervening internal process which is responsible for the form and direction taken by the developing act, but he is reluctant to

identify this as an attitude which pre-determines behavior. He does, however, see the concept of attitude used as a means of facilitating role-taking in a situation.

DeFleur and Westie (1963) are also among those social psychologists who are calling for a realistic reconceptualization of attitude which will fit with the findings regarding consistency between attitudes and behavior. They stated,

A useful conception of attitude, then, must be prepared to take into account both consistency and variability, uniformity and individuality, and at the same time remain a logical inference from observable behavior. (1963, p. 28)

DeFleur and Westie are of the opinion that the fallacy of attitude measurement historically has been the conception of attitudes as general response tendencies which implied that consistency should appear from one class of behavior to another, that verbal attitudes "should" predict overt behavior. In contrast they stated: "Attitudes appear to be more usefully conceptualized as specific, in the sense that they may be viewed as probabilities of specific forms of response to specific social objects, or specific classes of social objects." (1963, p. 30) This approach would indeed provide a reconceptualization of attitude, especially in contrast to a multivariate approach which has been suggested.

Still other social psychologists have chosen to reconceptualize the problem of attitudes and behavior to account for the inconsistencies in the majority of studies. Sociologist Tartar (1970) suggested that stimulus-response learning theory demonstrates no reason to expect consistency of response where there exists no consistency of stimuli. He feels that attitude scales are designed to measure verbal attitudes toward verbal stimuli, and researchers err to infer behavior beyond these

boundaries due to the multitude of intervening variables. Thus he suggested similar stimulus properties to those found in the actual situation to increase the ability to predict related behaviors in such a situation.

Wicker (1969) and Kelman (1958) also advocated increased attention to situational variables in attitude measurement. Wicker's concept of the "situational threshold" applies to the factors in the situation which elicit a strong enough reaction to result in a positive or negative response. Thus, he suggested that prediction of behavior in a specific situation would be more plausible if the situational threshold for all individuals were known. He stated that predictions of overt behavior can be made more accurately from knowledge of the situation than from knowledge of individual differences. The more similar the situation in which verbal and overt behavior responses are obtained, the stronger will be the attitude-behavior relationship. Wicker further stated that researchers should either admit that verbal attitudes do not measure behavior per se, or just measure behavior directly if that is the ultimate goal.

Fishbein (1967) supported Doob's (1947) argument that once an attitude is learned one must also learn what response to make to it. The relationship between an attitude and behavior is not innate. Therefore, people could have the same attitude and exhibit different behavioral responses to it. Thus an attitude is considered by Fishbein as a unidimensional concept. Beliefs (cognitive component) and behavioral intentions (conative component) are thus viewed as determinants or consequences of an individual attitude. According to Fishbein's theory,

Rather than viewing attitude toward a stimulus object as a major determinant of behavior with respect to that object,

there are three kinds of variables that function as the basic determinants of behavior:

1. Attitude toward the behavior
2. Normative beliefs (both personal and social)
3. Motivation to comply with the norms. (1967, p. 490)

Thus Fishbein viewed behavior as somewhat independent of attitudes toward the stimulus object.

Linn (1965) and Sample and Warland (1973) felt that the discrepancy between attitudes and behaviors is partially due to a breakdown of "unstable" attitudes which are part of a social role that has never been behaviorally put to test. Linn (1965) conducted a study in which individuals responded on a written test stating if they would have their picture taken with a Negro. They then were asked to sign a release to have such a picture taken and come for the picture. Of the subjects, 59 per cent had two or more discrepant responses between verbal attitudes and overt behavior. Linn suggested that the subjects are confronted with two sets of conflicting roles and that the overt behavior which resulted was due to the stronger, more stable, more comfortable role--the more imprinted, tested and experienced role becoming operative and dominant over the weaker one. He hypothesized that (1) discrepant behavior in a negative direction will increase if the liberal attitudes represent an unstable position and if the level of social involvement with the attitude object is high, and (2) discrepant behavior in a positive direction will increase if the level of social involvement is low and if the prejudiced attitudes have not been overtly tested.

Sample and Warland (1973) attempted to offer a solution to the question of attitude and behavior. The authors recommended the use of moderator variables, specifically certainty ratings. Thus subjects would respond on a regular attitude scale and in addition respond on a

certainty rating of very likely, likely, unlikely, and very unlikely. In the study conducted by Sample and Warland, they used Tittle and Hill's Likert scale, certainty ratings, and a multivariate approach including personal and social variables related to attitudes and behavior in college elections. Their results indicated that when the subjects were homogeneously divided by certainty ratings, the multivariate factors (personal and social variables) did not increase the predictive ability of the variables, and certainty responses appeared to be the major predictor of behavior. Perhaps this approach will provide an answer to the complex problems of attitude and behavioral relationships.

In summary, it appears that there is a general concern for the situational variables influencing attitudes, the specific identification of the concept of attitude, and the improvement of measuring instruments or new approaches to measurement which will enhance predictability. Regardless of the problems faced in research, there still seems to prevail the idea that attitude can indeed predict behavior; however, concepts and measurements involved still need continued refinement and sophistication.

The Measurement of Attitudes

From the preceding discussion, it should become obvious that there has been more than one accepted technique developed to measure attitudes. Beginning in the 1920's there were increasing pressures exerted for the development of quantitative techniques to aid in the objective observation of behavior. Contributions to this problem have since been made by numerous distinguished researchers. The literature reviewed in this paper will be limited to those prominent techniques utilizing written

quantitative procedures, although indirect measures and physiological indices have also been investigated and applied to attitudes. The attitude measurement techniques to be discussed in this paper include Thurstone's equal-appearing intervals, Likert's summated ratings, Guttman's cumulative scale, Edwards and Kilpatrick's scale discrimination, Osgood's semantic differential, and the situation-response.

Thurstone or Equal-Appearing Intervals

As previously mentioned, L. L. Thurstone is recognized as the father of attitude measurement, beginning in the 1920's. The essential characteristic of the Thurstone method is the "scaling of graduated opinions so arranged that equal steps or intervals on the scale seem to most people to represent equally noticeable shifts in attitude." (1928, p. 553) Thurstone viewed attitudes on an unidimensional scale. This can be diagrammed as a base line representing a continuum of attitudes from one extreme to another (i.e., conservatism-liberalism). Thus, construction of the scale involved identifying those attitudes which appeared at equal intervals along the continuum.

Thurstone (1928) attempted to make four types of descriptions by means of a scale of attitudes: (1) the average or mean attitude of a particular individual on the issue at stake, (2) the range of opinion that he is willing to accept or tolerate, (3) the relative popularity of each attitude of the scale for a designated group as shown by the frequency distribution for that group, and (4) the degree of homogeneity or heterogeneity in the attitudes of a designated group on the issue as shown by the spread or dispersion of its frequency distribution.

According to Thurstone:

The only way in which we can identify different attitudes (points on the base line) is to use a set of opinions as

landmarks, as it were, for the different parts or steps of the scale. The final scale will then consist of a series of statements of opinion, each of which is allocated to a particular point on the base line. If we start with enough statements, we may be able to select a list of twenty or thirty opinions so chosen that they represent an evenly graduated series of attitudes. The separation between successive statements of opinion would then be uniform, but the scale can be constructed with a series of opinions allocated on the base line even though their base line separations are not uniform. For the purpose of drawing frequency distributions, it will be convenient to have the statements so chosen that the steps between them are uniform throughout the whole range of the scale. (1928, p.541)

Construction of a Thurstone equal-appearing interval (1928, 1929) scale requires that 100-150 statements be prepared from people's opinions on the issue in question and current literature. The list is edited grammatically and practically to a list of 80-100 statements, and is given to a group of 100-300 subjects. This group is asked to arrange the statements in 11 piles ranging from opinions most strongly affirmative to those most strongly negative. In sorting, the subject does not express his own opinion. The intervals between the piles should reflect equal intervals. The scale value of each statement is then calculated from the subjects' responses. The statements are eliminated on the criteria of ambiguity or irrelevance. A list of approximately 20 statements comprises the final scale. The subjects being tested are asked to indicate with which statements they agree. Scoring usually involves using the mean score of all statements checked by the subject.

Likert or Summated Ratings

Likert (1932) attempted to develop a technique less complicated than that proposed by Thurstone, yet as statistically acceptable as equal-appearing intervals. The Likert method of summated ratings also requires the development of several statements from relevant sources.

The preliminary statements are then subjected to evaluation by a group of judges representing a sample of the population to be tested. The final group of questions is identified following an item analysis or applying the criterion of internal consistency. Likert found a highly positive relationship between an item analysis and the criterion of internal consistency ($\rho .91$). Since the criterion of internal consistency is easier to calculate, it was recommended. Likert's item analysis or test for internal consistency accomplishes the same task as Thurstone's tests for ambiguity and irrelevance. The most differentiating statements are selected for the final scale. Subjects typically respond to statements on a five-point scale of strongly approve, approve, undecided, disapprove and strongly disapprove. The Likert technique assumes that attitudes are distributed normally and that the scores derived are applicable to only the population measured. The simple method of scoring proposed by Likert assigns each answer a point value from one through five. It does not matter which end of the continuum is assigned the value of one or five. The reactions to the statements are then combined into a single score. Either summated scores or mean scores can be used to evaluate the subjects' responses. As with Thurstone, the split-halves method is usually used to determine reliability.

Likert claimed that his method of measuring attitudes was faster, equally or more valid, and equally or more reliable than the Thurstone technique. Seiler and Hough (1970) conducted an empirical comparison of the Thurstone and Likert techniques. Their results showed that the Likert method of scoring produces more reliable results than the Thurstone method. In addition, the method of scale construction does not alter the reliability of the Likert technique. If a scale is constructed and

scored by the Likert method, approximately 20-25 items are usually enough to produce a reliability coefficient of .90. The Thurstone technique requires more statements to achieve this same degree of reliability. According to Seiler and Hough (1970), there is speculation to support Likert's claims that his technique is faster and equally or more valid; however, these claims have yet to receive empirical support.

Guttman or Scalogram Analysis or Cumulative Scale

The Likert and Thurstone techniques dominated attitude measurement for over a decade. In 1944 Louis Guttman published a new unidimensional approach to quantifying qualitative data.

The basic notion of the Guttman or cumulative scale is that an internal relationship exists among the items forming the scale such that a person who endorses or agrees with an item of a given scale position will endorse all items below it in the scale. If it is known that a person endorsed three items of a four item scale, it is also known which three items he endorsed. Likewise, all individuals endorsing three items endorse the same three items. Thus, it is possible to order individuals into relative categories or positions defined by the position of the items endorsed. (Dotson and Summers, 1970)

According to Guttman (1944), a multivariate frequency distribution of a universe of attributes (quantitative variables) for a population of subjects is a scale, if it is possible to derive from the distribution a qualitative variable with which to characterize the subjects such that each variable is a simple function of that quantitative variable. This requires that scale items be unambiguous and that the ordering of subjects and categories is generally unique, and not a priori. The Guttman scales, like Thurstone and Likert scales, are relative to time and to population. Scales must be constructed specifically for the group to be measured. Guttman further stated that, from the multivariate distribution of a sample of attributes for a sample of subjects,

inferences can be made concerning the entire distribution of the population. This can be accomplished by rank-ordering among subjects, ordering of categories, or scaling the whole distribution.

Construction of a Guttman scale (Remmers and Gage, 1955) involves a set of statements on a unidimensional scale. Statements are ranked along a continuum from least to most desirable. Statements in a Guttman scale must have homogeneous content, or even rephrasing of the same content. Items must meet a scalability requirement and must provide reproducibility. The universe is said to be scalable for the population if it is possible to rank the people from high to low in such a fashion that, from a person's rank alone, we can reproduce his response to each of the items in a simple fashion. Thus reproducibility indicates that it is possible to reproduce the responses to the individual statements from knowledge of the total score. The degree of reproducibility is determined by setting cutting points for the response categories of each statement. The cutting point marks the place in the rank order of subjects where the most common response shifts from one category to another. Reproducibility requires internal consistency to a much more sophisticated level than that established in either the Thurstone or Likert techniques.

Edwards-Kilpatrick Scale Discrimination

Edwards and Kilpatrick (1948) developed a scale discrimination technique which attempted to incorporate the stronger points in the Thurstone, Likert, and Guttman scales. The scale discrimination technique thus utilizes Thurstone's method of sorting questions, Likert's scoring technique, and Guttman's coefficients of reproducibility.

Thurstone, Likert, and Guttman each use a different criterion for the elimination of statements. The equal-appearing intervals procedure

eliminates those statements that are not judged consistently and are, in other words, ambiguous. The summated ratings procedure eliminates those statements that do not discriminate between favorable and unfavorable individuals. The scalogram analysis eliminates those statements that do not fall on a unidimensional continuum. (Triandis, 1971) Thus, the scale discrimination technique of Edwards and Kilpatrick eliminates statements according to three criteria. The resulting statements should be neither ambiguous nor poor in discrimination and should fall on a unidimensional continuum.

Osgood's Semantic Differential

The above-mentioned standardized verbal specific methods are designed for the measurement of the person's attitudes toward a particular issue or object. The semantic differential is designed to measure affect. This instrument allows the researcher to present any attitude object, be it person, issue, institution, practice or anything else. A series of scales, bounded by polar adjectives, is employed and the subject reacts to the attitude object on this set of standard scales.

According to Osgood and his associates (1957), there are three independent dimensions which underlie the judgments made by subjects. They include: (1) evaluation--the object is good, clean, fair, honest, beautiful; (2) potency--the object is strong, big, large, powerful, heavy; (3) activity--the object is active, hot, fast, alive. Thus, with a set of 9 or 12 scales it is possible to measure the connotative meaning, of affect, experienced by the subject toward the attitude object. Osgood employs the evaluation dimension to measure attitudes. Every concept must involve an attitudinal component as part of its total meaning (although it may be zero if neutral). The kind of evaluation may shift

with the frame of reference determined by the concepts. Osgood and associates have developed an extensive list of polar adjectives to be used in measurement studies.

Scoring each of the evaluative scales from -3 to +3, and using four evaluative scales, one can obtain scores that range from -12 to +12. Thus the attitude score is obtained by summing overall evaluative ratings. Evaluation of the results of the semantic differential utilizes factor analysis. Reliability of the semantic differential is determined by test-retest procedures. Validity is determined by the face validity of the evaluative dimensions. It should be understood that the semantic differential does not tap the content of the attitude (specific reactions which people might make), but provides an index to the location of the attitude object along a general evaluation continuum. (Osgood, 1957)

In support of the semantic differential, Heise (1970) stated that bipolar adjective scales are a simple, economical, instantly ready means of obtaining data on people's reactions. If all three dimensions are utilized, one has a multivariate approach to affective measurement. In addition, it is a generalized approach, applicable to any concept or stimulus, and thus it permits comparisons of affective reactions on widely disparate things. Heise also noted that the semantic differential correlates well with Thurstone, Likert, and Guttman scales. However, he also questioned if the semantic differential is as sensitive as other techniques for attitude measurement. Heise also cautioned the use of the semantic differential with highly salient topics because there is some evidence that measurement may be confounded by social desirability effects in these situations. One other criticism has been leveled against the semantic differential by Kaufman (1959). She noted that it

does not predict behavior and it is difficult to identify one whole concept; it simply measures how things relate.

Situation-Response

The final technique to be discussed in this review is the situation-response which has found support from Pace (1950, 1959). Pace, among others, was concerned about the reported relationship between attitudes and behaviors. In an early study (1950) Pace found that the Thurstone and Likert techniques correlated between .20-.30 with behavioral measures in art, music, and literature. Correlations were considerably lower for politics, civic activities, and science. Through continued study, Pace suggested that true attitudes can be measured best through a subject's response to a specific situation. Often subjects can "beat" a test, and it is necessary to measure attitudes in a more subtle manner. A situation-response scale purportedly measures a more spontaneous and less intellectualized feeling. A situation is described and a number of responses, usually four or five, are given. The responses are to represent varying degrees of attitude concerning the specific situation. The subject is to select the response which best indicates what action one would take if he were confronted with the situation.

Rosander (1937, p. 4) identified seven steps utilized in the construction of a situation-response scale:

. . . the collecting and editing of scale elements, the preliminary sorting, the final sorting, the scaling, the selecting of parallel forms, the determining of the reliability, and the determining of the validity.

The scoring of the situation-response scale usually involves one point for the most conservative response and five points for the most liberal response. The total score is the average of the numerical values for each item.

Pace (1959) cited four reasons for using the situation-response technique: (1) it may be possible to obtain more truthful results because attitudes may be measured more subtly, (2) this technique helps eliminate vagueness and generality of the statements, (3) an attitude inferred from a situation-response scale would be less extreme than one inferred from other measurement techniques, and (4) it is more difficult for a subject to consistently choose similar responses in a situation-response scale. Using the situation-response technique to measure social, political, and economic attitudes, Pace (1959) received low reliability when measuring specific attitudes and high reliability when measuring general attitudes.

Summary of Measurement Techniques

The Thurstone, Likert, and Guttman techniques of attitude measurement are designed for use with unidimensional attitudes toward a specific object. The semantic differential may be viewed as a general instrument capable of measuring a wide variety of attitudes. The situation-response technique is designed to personalize the scale by placing the subject in a specific situation.

Each technique may be more advantageous in specific types of studies which support their inclusion as viable methods in attitudinal research. The continued investigation of attitudes will undoubtedly lead to variations of many of these techniques, as well as the introduction of new, innovative methods.

Attitude Research in Competitive Athletics

Research dealing with the construction of attitude scales in competitive athletics, more specifically with women's competitive sports,

has been somewhat limited. The lack of research in this area may be attributed to the limited competitive opportunities available until recent years. Contemporary research which may be significant to this study includes attitudes dealing with sportsmanship, athletics in general coaching, and specifically women's athletics.

Sportsmanship

Haskins' (1960) Problem-Solving Test of Sportsmanship was designed to measure ethical behavior in sport for both men and women. Haskins' test utilized several statements of sportsmanship developed by Hartman. A jury of judges was used to select 40 statements from among 123 original situations. The final tests consisted of alternate forms of 20 situation-response items each. Validity of the alternate forms was established by administering other sportsmanship tests to the same population. Reliability was determined by administering the alternate forms of the test and correlating responses on both forms. Although the results were statistically sound, Haskins cautioned that responses on a written test do not always indicate behavior in a specific situation, as there may be other possible alternatives for action than those presented on the written test.

Lakie (1964) utilized the Likert method to develop a tool to measure the "win-at-all-costs" syndrome in men's athletics. Lakie hypothesized that outcomes in sportsmanlike behavior may vary under different types of leadership and in differing educational environments. In constructing the attitude scale he selected 22 items from a group of 55 items following an item analysis of responses given by a jury of experts. Validity was established using the Likert technique. The test-retest method of determining reliability was employed and results

were compared by a one-way analysis of variance. Lakie administered his tool to men in six different sports and in several different types of institutions. The results of the study indicated no statistical difference in expressed attitudes toward winning between participants in the six different sports and in several different types of institutions. The results of the study indicated no statistical difference in expressed attitudes toward winning between participants in the six different sports or between different types of institutions (public, private, large, small).

Slusher (1963) compared two groups of varsity football players at the University of Maryland in sports situations in which it was necessary to make value judgments. Subjects were classified into two groups by their coaches. They were then administered a problem-solving test of sportsmanship to measure overt responses while an electrical psychometer simultaneously measured covert responses. Slusher's results showed no difference between overt and covert responses. He also noted that neither group of football players was close to the ideal score on overt responses.

Marion Johnson (1969) utilized the Edwards-Kilpatrick scale discrimination technique to develop alternate forms of a sportsmanship attitude scale. He began with 152 items pertaining to ethically critical behavior in men's football, basketball and baseball. A large group of judges placed items into 11 groups and the least ambiguous items were then selected from the item pool. Item discrimination power was determined by an item analysis and evaluation of the test forms was done by scale analysis. Items were presented to 208 junior high school boys and girls in summated rating form. Forty-two items were selected for the final

scales and placed in either Form A or B. The final 21-item scales were administered to approximately 500 junior high students to determine reproducibility and reliability. Reproducibility for Form A was .81 and for Form B was .86. The reliability of .86 was determined by comparing results on the alternate forms. Validity was determined by comparing scale scores to teachers' subjective ratings of students' behavior. The validity coefficients ranged from $-.008$ to $.427$. The final scales include 21 items each and are used to measure sportsmanship attitudes among seventh, eighth, and ninth grade boys and girls.

The final, and perhaps the most recent study of sportsmanship attitudes to be reviewed in this paper is that conducted by Lauffer (1971). He administered the Haskins-Hartman Action-Choice Test of Sportsmanship to a select group of college and university faculty and coaches. Lauffer's results indicated that there was no significant difference between attitudes of coaches and faculty. There was, however, a difference in attitudes between those in private institutions and public institutions, with those in public institutions scoring significantly higher. The study revealed no differences between coaches of various sports.

It is interesting to note that none of the recent tests of sportsmanship has been specifically constructed for use with girls' and women's sports. Some tests (Haskins, Johnson) could be utilized for women's sports; however, they also include situations in men's athletics.

Coaching

Perhaps one of the first areas of concern in coaching has been the competencies required of coaches. Neal (1957) investigated the competencies necessary for male athletic coaches in the public schools of

Minnesota. These competencies are mentioned here as they may have broader implications for many other situations as well. As a result of a questionnaire, Neal identified the following competencies:

1. Understand the pupil.
2. Relate physical education and athletics to the purposes and objectives of education.
3. Provide learning experience in motor activities.
4. Assist in teaching and render service in related areas in the curriculum.
5. Be qualified to administer policies and maintain discipline.
6. Supervise facilities adequately.
7. Understand legal responsibilities.
8. Be qualified to assume responsibility as a member of the faculty.

Harvey (1963) conducted one of the few studies which specifically dealt with ethical behavior of collegiate male coaches. He utilized expressed opinions of college lettermen to evaluate coaches' practices. Harvey's results showed that basketball coaches displayed the most questionable behavior toward officials, team members and opponents. The more pressure present in athletic programs, the more questionable was the coach's behavior. In addition, the study revealed that younger coaches appeared to have more problems with ethical conduct than did more experienced coaches.

Though not dealing specifically with coaches, Nelson (1966) investigated leadership in sport. He utilized data obtained from coaches and players who completed questionnaires, IPAT Anxiety Scale

Questionnaire results and the Cattell 16 PF scores to study personality and physical characteristics of high school basketball leaders and non-leaders. Nelson's results indicated that there was little difference between leaders and non-leaders in intelligence or physical characteristics. However, qualities of easy-goingness, interest in people, emotional stability, extroversion, adventurousness, and social alertness were most frequently found in leaders.

Utilizing the semantic differential, LeGrande (1971) investigated the responses of athletes to the behavioral characteristics of their coaches. Fourteen concepts of behavioral characteristics were selected based upon opinions of experts. A coach's knowledge of the sport was considered the most important quality followed by enthusiasm, sensitivity and understanding of individual athletes, and a thorough knowledge of the technical aspects of the sport. LeGrande compared profiles of coaches in individual sports (tennis and wrestling) to coaches of team sports (basketball and soccer) and found a significant difference. However, he found no significant difference between the personal attention to athletes in individual and team sports.

The leadership role of the coach has become a major topic in men's athletics today and as such was the subject of a study conducted by King (1973). King investigated the assumption that communication patterns between an athlete and coach are related to how the athlete perceives the authority role of the coach. King utilized a semantic differential to assess competency, potency and supportiveness of an authority figure. The test measured I-Him and He-Me dimensions of interpersonal relations between players and coaches in men's athletics. King used a sample population of eight intercollegiate basketball teams. The results

indicated that (1) athletes and coaches look similarly upon the coach's competency, potency and supportiveness; (2) coaches rated themselves higher than athletes rated coaches on the three dimensions; and (3) there was less variation between coaches' and athletes' responses on competencies, but more variation in their different perception of a coach's potency and supportiveness. King's results certainly support contemporary sports literature which criticizes the coaches' interpersonal relationships with athletes. (Cruse, 1972)

Athletics in General

Although there has been much discussion in the last century focused on the values and attitudes toward intercollegiate competition, there have been relatively few studies conducted to specifically identify these attitudes. The following studies represent those which have appeared in most recent years.

Sanford (1961) developed a questionnaire to determine both existing and desired practices in the conduct of intercollegiate athletics in selected North Carolina colleges and universities. In developing his questionnaire, Sanford categorized attitudes into four general areas: (1) organization and control, (2) status of physical education and/or athletic staff members, (3) type and scope of athletic programs, and (4) financial practices in athletics. Sanford stated the following conclusions:

1. The more emphasis on athletics, the more pressure.
2. There are a variety of organizational patterns and uncertainty of status.
3. There is a tendency to separate athletics and physical education in large schools, by choice of those in athletics.

4. Athletic staffs and physical education staffs disagree on vital issues.
5. There is an overemphasis on football and basketball, while other sports are ignored.
6. Most institutions give grants-in-aid but there were several questions about how to administer and control aid.
7. Coaches were generally weak in academic attainment in large schools.
8. There is more power and authority invested in the athletic director of a large school.
9. Athletic boards vary, but there is very little student representation.
10. Expenditures for football and basketball exceed others considerably.
11. Procedures for budgeting, auditing and reporting of funds vary.

Feldman's (1969) study investigates a somewhat different aspect of athletics, one which has been questioned in contemporary literature dealing with educational sport. (Sheehan and Alsop, 1972) Feldman believed that the fundamental purpose of athletics was to develop desirable student sportsmanship and societal values. His study investigated if such desirable values were facilitated through interscholastic athletics, and if so, were they carried into the daily activity by students. Feldman's results were somewhat discouraging in that athletic participants and spectators revealed the poorest sportsmanship values among members of the school population. In addition, the degree of athletic participation

did not significantly influence the societal values held by the group, nor did participation foster the transference of values received in athletics to societal values. In spite of the negative results, Feldman concluded that the potential is still available in athletics to learn societal values; however, it is imperative that athletic leaders re-examine the situation and initiate change if any fertile results will be harvested.

Still another aspect of athletics is the administration of such programs. Hutter (1971) investigated the attitudes affecting the behavior of administrators of men's intercollegiate athletics. He developed a scale utilizing the scale discrimination technique with responses of the Likert variety. Scale reliability was established at .95 and the coefficient of reproducibility or unidimensionality of the scale was .82. Hutter assumed intrinsic validity. The study revealed that there were some differences in attitudes toward men's intercollegiate athletics among presidents, faculty representatives, athletic directors, and coaches.

Women's Athletics

There has been relatively little research in the measurement of attitudes toward the conduct of competitive athletics for females at any educational level. Perhaps one of the first examples of such research was the study conducted by McCue (1953). She developed an instrument to evaluate attitudes in team sports for females utilizing both the Thurstone and Likert techniques. The content areas included personality development, human relations, public relations, physical development, skill development, recreation and safety. The final instrument consisted of 77 items to which the subject responded on the Likert five-point

scale. McCue utilized a scoring technique of +1, 0, and -1 indicating approval, neutral, or disapproval respectively. The reliability of .70 was acceptable as was the validity on all areas except safety.

Scott (1953) revised McCue's attitude scale and adapted it for use in evaluating attitudes toward competition in elementary schools. Scott administered her scale to parents, teachers, and administrators. The results showed that the majority of all groups approved of competition for elementary school students; however, administrators were least favorable. Scott emphasized the need to educate the lay public on the problems of competition in elementary school.

McGee (1956) also utilized McCue's general technique to measure attitudes of parents, teachers and administrators toward girls' high school competition. The study included subjects from Iowa schools participating in competitive activities, Iowa schools not participating, and Illinois schools not participating. Among her results, McGee found that parents in each group held a positive attitude toward competition; however, teachers and administrators were not as favorable as coaches and parents.

Harres (1968) used items from McGee's scale and a scale by Heck and Smith to develop 62 items which were then subjected to the Likert technique of scale construction. The final form, consisting of 38 items, was administered to college students to determine their expressed attitudes toward intercollegiate competition for women. Subjects were also asked to rank six sports according to the degree of desirability for women's competition. Harres' results indicated that swimming was considered most appropriate for women followed in order by tennis, volleyball, track and field, softball and basketball. The position of basketball is indubitably related to the masculine connotations and

strenuousness associated with the game in the 1920's and 1930's. In addition, Harres', study indicated that most students tended to favor the inclusion of competitive sport opportunities for women. However, a wide range of values existed among the subjects. Harres noted a need to evaluate the attitudes, values and outcomes of present programs for women to determine further desirability of future programs.

With the growing interest in women's sports, Remley (1970) traced attitudes toward sports competition for college-age women in the United States from 1918-1968. Remley's study summarized material written by women about sports competition for college women. She categorized concepts into five areas including: (1) terminology, (2) recurring problems, (3) individuals, (4) organizations and (5) research. Her results indicated (1) ambivalent attitudes existed between 1918-1968, (2) attitudes became less extreme during this period although there was still no consensus, and (3) there was no difference in the degree of ambivalence during different periods of the study.

Massie (1971) studied the desirability of selected practices for the conduct of women's intercollegiate athletics in Kentucky colleges. A jury of 28 women rated selected practices as either desirable or undesirable contributions to the overall athletic program. General categories in her study included health safeguards, recruiting and financial aid, eligibility, length of season, scheduling, travel, officiating and rules, and awards. Those practices which were considered desirable by the jury of experts included:

1. Medical examinations by college physicians
2. Blanket accidental insurance purchased by the institution
3. Physician in attendance at competitive events

4. Uniform practices concerning entrance requirements, college employment and grants-in-aid
5. Amateur status determined separately by sport
6. Competition with teams of comparable ability
7. Travel by chartered bus
8. Competitive schedules arranged to avoid conflicts with exams
9. Maximum travel time one-way not to exceed two hours
10. Inclusion of social events at competitive contests
11. Awards where appropriate

In answer to the needs for further research expressed by Haskins, Lakie, Harres, and others, Sisley (1972) developed a tool to measure attitudes of women coaches toward women's competition. The Sisley scale utilized the situation-response technique advocated by Pace. She used a jury of 10 judges to select a total of 50 items from an original pool of 100 items. The jury ranked the items as essential, desirable, and undesirable, as well as assigned a score to each response ranging from 5 as the most desirable response to 1 as the least desirable. The Sisley scale was then administered to a large group of college coaches throughout the country to determine scale reliability. The reliability of .597 was determined by the split-halves method and stepped-up by the Spearman-Brown Prophecy Formula. Sisley attributed the low reliability to the heterogeneous content of the scale including a variety of practices in several different sports.

Summary of Attitude Research in Athletics

The measurement of attitudes in athletics has been relatively limited. However, there appears to be an increasing interest in

attitudes in women's intercollegiate sports in recent years. It may be anticipated that this trend will continue during the developmental stages of women's competitive sport, and perhaps level off when the growth begins to plateau.

The variety in attitude measurement in athletics is extensive. Studies reviewed in this study were limited to those which dealt with some aspect of the conduct of the intercollegiate program. The types of instruments utilized are as varied as the content included. Tools range from open-ended questionnaires, to summarized literature, to extensively tested scales. Attitude scales in athletics do utilize several techniques including scale discrimination, equal-appearing intervals, summated ratings, scalogram analysis, semantic differential and situation-response. There have also been effective combinations of some techniques in the attitude studies reviewed. Attitude measurement in women's athletics appears to be a fertile field of study.

CHAPTER III

PROCEDURES, ANALYSIS OF DATA AND DISCUSSION

This chapter presents a detailed description of the construction of a scale to measure the attitudes of players and coaches toward the conduct of intercollegiate basketball for women. The analysis of data was an integral phase in the construction of the scale and is also included in this chapter. The procedures and analysis of data include: (1) the selection of a technique, (2) revision of the Sisley scale, (3) evaluation by the jury of experts, and (4) administration of the scale.

Selection of a Technique to Measure Attitudes

The situation-response technique of scale construction was selected for use following the investigation of a variety of techniques for measuring attitudes. This technique seems especially well suited to cope with the variety of situational variables inherent in an intercollegiate sports program. It does encourage personal identification with each situation through the use of familiar situations and personal pronouns, as advocated by Tittle and Hill (1967). Tartar (1970), Wicker (1969), and Kelman (1958) are among those authors who advocate an increased emphasis on situational variables and a situational orientation. Tittle and Hill (1967) state that attitude responses would be most predictive of behavior if they were associated with situations which are familiar to the individual. Pace (1959) is a strong advocate of the

situation-response technique. As he notes, the situation-response scale is action oriented. One must indicate what one must do, not just what one believes. It is possible that this is somewhat more of a commitment than merely stating a position positively or negatively. It may be likened to the signing of a statement of intent in Linn's study (1965) of campus racial attitudes.

The concept of the situation-response technique is also supported by DeFleur and Westie (1963). These authors suggested the specific orientation of attitudes rather than the general orientation. They stated, "They (attitudes) may be viewed as probabilities of specific forms of response to specific social objects, or specific classes of social objects." Thus, response to a somewhat specific situation should elicit valid attitudinal responses which may indicate behavioral intentions. In addition, the situation-response technique is well established in attitudinal research, and is well suited to the content and nature of this study. The very nature of competitive athletic programs is extremely situationally oriented in respect to active decision-making in the variety of situations confronted by a coach.

Revision of the Sisley Scale

The situation-response scale developed by Sisley (1972) was designed to measure the attitudes of coaches toward the conduct of intercollegiate athletics for women. The content areas of Sisley's scale are obviously applicable to any single sport, although it was originally designed to encompass all intercollegiate sports for women. The Sisley scale was used as a basis for the development of the present scale.

The final 50 items included in the Sisley scale were revised to deal only with intercollegiate basketball programs. Ten additional

items were selected from among the rejected items in the Sisley scale. The last ten items were selected on the basis of their content areas and their applicability to intercollegiate basketball. Thus, the original items for this scale represent 60 items from the Sisley scale which were revised to deal only with women's intercollegiate basketball. These 60 items are included in Appendix A.

The 60 preliminary items are representative of Sisley's 13 categories which were used as a frame of reference for the Sisley scale. Sisley's 13 categories included: (1) athletics in education and physical education, (2) leadership, (3) financing, (4) public relations, (5) general philosophy, (6) ethics, (7) methods of coaching, (8) team selection, (9) scheduling of events, (10) standards of eligibility, (11) rules and officials, (12) health and safety, and (13) equipment and facilities. Table I represents the distribution of the 60 questions according to the 13 categories.

The original 60 items were screened by a group of five judges. The preliminary judges reacted to item content, response alternatives, and item construction. The judges were selected on the following criteria:

1. Coaching experience in women's intercollegiate basketball
2. Experience in physical education
3. Graduate degree in physical education
4. Available for an interview
5. Female

The following women were asked and consented to serve as preliminary judges for the study:

Linda Herman	Illinois State University
Kathleen Hildreth	University of Northern Colorado

TABLE 1
CONTENT EMPHASIS IN THE 60-ITEM SCALE

Sisley's Content Areas	Sisley's 50 Items		Revised 60 Items	
	No.	Per Cent	No.	Per Cent ^a
Athletics in Education	3	6	4	7
Leadership	7	14	7	12
Financing	3	6	4	7
Public Relations	4	8	4	7
General Philosophy	4	8	5	8
Ethics	3	6	3	5
Coaching Methods	10	20	14	23
Team Selection	2	4	2	3
Scheduling of Events	3	6	3	5
Standards and Eligibility	2	4	2	3
Rules and Officiating	4	8	6	10
Health and Safety	4	8	5	8
Equipment and Facilities	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>
Totals	50	100	60	100

^aPercentages have been rounded to the nearest whole number.

Laureen Mabry	Illinois State University
Jan Watson	Appalacian State University
Carol Weinmann	California State at Fullerton

The comments from the five preliminary judges resulted in the elimination of six items and the revision of several items and/or responses. Members of the candidate's doctoral committee critically

evaluated the items for sound construction and offered other editorial comments.

Evaluation by a Jury of Experts

Selection of the Jury of Experts

A jury of experts in women's intercollegiate basketball was asked to assist in evaluating items and ranking responses. Members of the jury of experts were selected on the following criteria:

1. Represent each of the nine AIAW regions
2. Represent a variety of ages and professional experiences
3. Actively coach an intercollegiate basketball team
4. Represent degrees of successfulness in coaching as demonstrated by performance at state, regional, and/or national tournaments.
5. Female

Each member of the jury did not meet each criterion; however, the group as a whole did meet all criteria. Each expert judge was an active intercollegiate basketball coach at the time of the study.

Ten women received letters explaining the purpose of the study and requesting their assistance. Each was asked to return an enclosed self-addressed, stamped postcard indicating whether or not she would be willing to assist in the study. A copy of the letter can be found in Appendix B. The following nine women consented to serve as the jury of experts:

Judy Akers	Kansas State University
Lynda Goodrich	Western Washington State College
Fran Koenig	Central Michigan University
Billie Moore	California State at Fullerton

Pat Park	Lamar University
Gloria Rodriguez	University of Northern Colorado
Jeanne Rowlands	Northeastern University
Jill Upton	Mississippi State College for Women
Betty Westmoreland	Western Carolina University

It should be noted that members of the jury represent an age range from the late 20's through the 40's. Two individuals coached the 1973 World University Games team which placed second in the Moscow Games. One individual served as manager for the same tour. Two of the coaches have won National Invitational Basketball Tournaments. In addition, three individuals have never coached a basketball team beyond the regional level of competition. Three individuals served either as the tournament director for a National AIAW Championship or National Invitational Tournament. Three women were members of the United States Collegiate Sports Council--Women's Basketball Committee which is responsible for selecting the team to play in the World University Games. Three individuals were also DGWS rated, active basketball officials and two others have served on the DGWS-AAU Women's Basketball Rules Committee. One individual was serving as President of the Division for Girls and Women's Sports and another as Treasurer of the same organization. Each woman was well recognized at the local and/or national level as a capable and knowledgeable basketball coach.

Responsibilities of the Jury of Experts

The scale of the remaining 54 situation-response items was duplicated and mailed to the jury of experts. Included in the mailing was a letter of appreciation and explanation, as well as a detailed sheet of instructions. A copy of the letter and instructions may be found in Appendix B. The jury

of experts was asked to (1) evaluate each of the items in the scale, and (2) rank each response to each item. Each expert was asked to evaluate each total item as essential (E), desirable (D), or undesirable (U) for the study of attitudes toward the conduct of intercollegiate basketball programs for women. They were also asked to rank each response to each item ranging from the most desirable to the least desirable behavior for the situation described. A value of five (5) was assigned to the most desirable response, four (4) to the next most desirable, through one (1) as the least desirable response. If it was impossible to assign separate values ranging from 5 to 1 to a set of responses, a duplicate value was assigned to two or more responses. The expert judges were encouraged to respond in order of desirability disregarding their personal reactions to each situation if possible. One judge failed to rate each item as essential, desirable, or undesirable. All judges ranked each response to each item. The ratings and response rankings of all nine appear in Appendix C.

The 54-item scale was mailed to the jury of experts at the end of March, 1974, following the National Championship. The final scale was returned by the end of April. A personal thank-you note was sent to each expert after the scales were returned.

Evaluation of Data from the Jury of Experts

The criteria for selection of items in the situation-response scale follow:

1. Each item must be rated essential (E) or desirable (D) by at least two-thirds (6 members) of the jury of experts.
2. Each expert must rank the responses for each item with a minimum of three different rankings and with at least one rank above 3 and one rank below 3.

3. The expert judges must agree in weighting their responses at the .05 level of significance using Edwards' variation of Kendall's coefficient of concordance (W'). Edwards' adaptation of Friedman's table for rankings of less than seven responses was used to assess the significance of W'. (Ferguson, 1966)

Rating of Each Total Item

Although one judge failed to rate each item as essential, desirable or undesirable, the level of acceptance remained six out of eight (rather than nine) judges rating an item as essential or desirable. All 54 items met this criteria. Two items, however, were rated undesirable by two experts. They were eliminated as the least desirable of the total items available even though they met the minimum level of acceptance. Items rated undesirable by one expert were retained unless they were eliminated by other criteria.

Variation of Responses on Each Item

Seventeen items were eliminated because one or more judges did not rank the responses with three separate ranks and/or the ranked responses did not represent rankings above and below three. (Refer to Appendix C, Item #1, in which Judge 8 did not rank responses with three separate ranks and Item #14 in which Judge 2 did not rank responses above and below three.)

Agreement of Experts in Weighting Responses

All items showed significant agreement among all nine judges at the .05 level on Edwards' W' table (1973). Only four items were not significant at the .01 level. All four of these items were ultimately eliminated from the final scale.

Selection of Items for the Scale

A total of 17 items did not meet the original criteria for inclusion in the scale following the analysis of the responses of the expert judges. All 17 items were eliminated because one or more experts failed to assign a range of three different ranks to the responses to an item, including one rank above three and one rank below three. Each item was rated essential or desirable by at least six experts. In addition, all 54 items reflected significant association among all nine judges at the .05 level, using Edwards' adaptation of the coefficient of concordance (W'). (See Appendix C)

At this time the investigator decided arbitrarily to attempt to use approximately 30-35 items in the final scale. A total of 30 items was selected following the recommendation from Sisley's study (1972) to insure a feasible testing time to maintain subjects' interest. Because the remaining 37 items met all criteria for inclusion in the scale, the final items were subjected to further evaluation. The first concern was the representation of items in each of Sisley's 13 categories. Each of the 13 categories was represented and the distribution of items in each category is shown in Table 2.

For the purpose of the present study, Sisley's 13 categories were re-grouped to form a total of five clusters. When examining a total intercollegiate program, there are several broad categories identifiable within Sisley's content areas. However, a single intercollegiate sport reflects considerable overlap from one category to another. Thus several categories were clustered among administrative aspects, including the role of athletics in education, financing, public relations, and leadership. Both general philosophy and ethics were grouped under philosophy.

TABLE 2
COMPARISON OF CONTENT EMPHASIS IN 30- AND 54- ITEM SCALES

Content Areas	54-Item Scale		30-Item Scale	
	No.	Per Cent	No.	Per Cent
Athletics in Education	4	8	2	7
Leadership	5	9	3	10
Financing	3	6	1	3
Public Relations	4	8	2	7
General Philosophy	5	9	4	13
Ethics	3	6	2	7
Coaching Methods	11	20	7	23
Team Selection	1	2	1	3
Scheduling of Events	3	6	1	3
Standards and Eligibility	2	4	2	7
Rules and Officiating	6	11	2	7
Health and Safety	5	9	2	7
Equipment	<u>1</u>	<u>2</u>	<u>1</u>	<u>3</u>
Totals	54	100	30	100

The mechanics of coaching included coaching methods, team selection, and scheduling of events. The cluster of rules and standards was inclusive of sub-categories standards and eligibility and rules and officiating. The final cluster of safety and prevention included health and safety and equipment. Clustering of the category areas allowed better statistical analysis of the scale. In addition, the re-grouping provides eight items in administrative aspects, six items in philosophy, nine items in mechanics of coaching, four items in rules and standards,

and three items in safety and prevention from among the total 30 items in the scale. (See Tables 3 and 4) The clustering of attitudes is supported by Likert (1933), Thurstone (1929), and others. Table 3 represents the clustering of content areas, and the questions included in each area.

Once the distribution of sufficient items in each category and cluster was insured, an attempt was made to identify the best remaining items. Only two remaining items were rated as undesirable by a maximum of two experts and were thus rejected. A total of four of the remaining items reflected significant agreement of the experts at the .05 level but not the .01 level of W' . All four items were thus eliminated insuring significant agreement among all nine judges at the .01 level for all items. One of these items was also ranked as undesirable by two experts and was eliminated on this basis as well. Finally, four items which showed considerable agreement among the experts resulted in calculated W' values greater than 1.000. Although these values were minutely excessive of 1.000, they did appear to be mathematical rarities resulting from the distribution and duplication of extreme rankings. All four items obviously reflected considerable agreement among the judges and were considered appropriate for inclusion in the final scale. However, two of the four items in question were eliminated due to duplication of other items within the same category. Thus, the final scale consisted of 30 situation-response items.

Validity

Content validity for this situation-response scale was established through three channels. First, the scale was developed from Sisley's scale which had established content validity based upon preliminary

TABLE 3
DISTRIBUTION OF QUESTIONS IN CLUSTERS AND CATEGORIES

Clusters and Categories	Item Number
1. Administrative Aspects:	
Athletics in Education	11, 29 ^a , 44 ^a , 47
Financing	8 ^a , 16, 27, 48
Public Relations	17 ^a , 22, 25, 41 ^a
Leadership	18, 21, 24 ^a , 33 ^a , 36 ^a , 57, 60
2. Philosophy:	
General Philosophy	30 ^a , 31 ^a , 37 ^a , 43 ^a , 52
Ethics	12 ^a , 39 ^a , 54
3. Mechanics of Coaching:	
Coaching Methods	5 ^a , 7, 23 ^a , 26 ^a , 34, 35 ^a , 38, 40 ^a , 49 ^a , 50 ^a , 51, 55, 56, 59
Team Selection	13 ^a , 58
Scheduling Events	1, 2 ^a , 10
4. Rules and Standards:	
Standards and Eligibility	6 ^a , 32 ^a
Rules and Officiating	3 ^a , 14, 19, 28 ^a , 46, 53
5. Safety and Prevention:	
Health and Safety	4 ^a , 9 ^a , 15, 42, 45
Equipment	20 ^a

^aItems included in the final 30-item scale.

judges' reactions to content areas and expert judges' reactions to the final 50 items. Secondly, a group of five preliminary judges screened

TABLE 4
DISTRIBUTION OF 30 ITEMS IN CLUSTERS OF CATEGORIES

Clusters	Number	Per Cent
Administrative Aspects	8	27
Philosophy	6	20
Mechanics of Coaching	9	30
Rules and Standards	4	13
Safety and Prevention	<u>3</u>	<u>10</u>
Totals	30	100

the original 60 items for content and response alternatives. Finally, and most important, the nine expert judges rated items as essential, desirable, and undesirable in relation to an intercollegiate basketball program for women. Thus, this scale should be valid to measure what it purports to measure, which are the attitudes of coaches and players toward the conduct of intercollegiate basketball for women.

Final Weighting of Each Response

As mentioned previously, scoring for a situation-response scale typically includes a five-point scale with five as the most desirable response through one as the least desirable response. However, the judges' rankings frequently were not as distinct as the full range of scores from 5 to 1. Thus, the score assigned to each response is the average score assigned by all nine expert judges. These scores were rounded to the nearest tenth of a point. Thus, a response with assigned scores of 3, 2, 3, 3, 4, 4, 3, 5 and 5 would result in a sum score of 32 and a mean score of 3.555 which would be rounded to 3.6. The score

of 3.6 would become the final weighting of the response. The highest possible score for this entire scale based upon ratings by nine expert judges was 136.3 points. The final weighting of each response is shown in Table 5, Appendix C. Sisley set a precedence for this procedure of weighting each response according to the average rankings instead of forcing the averages into value rankings of 5, 4, 3, 2, 1. Consequently, some of the precision of the actual desirability of each response alternative was maintained.

Administration of the Scale

Selection of Subjects

Members and coaches of the 16 teams participating in the 1974 AIAW National Basketball Championship and participants and coaches at the 1974 United States Collegiate Sports Council (USCSC) Women's Basketball Selection Camp were selected as subjects to use in establishing reliability for the instrument. These coaches and players were selected because (1) they were representative of the various practices, procedures and philosophies across the entire country, (2) they had experienced competition at all levels including local and/or state, regional, national, and even international, and (3) they were relatively accessible to the investigator.

The participants in the 1974 AIAW Basketball Championship represented one team from each of the ten AIAW regions, plus one additional team from Regions 1A, 1B, 4, 5, 6, and 8. There was a definite cross-section of the country represented among these 16 teams. Each team was also required to qualify for the regional tournament through either state or sectional play-offs. Thus, their competitive experiences at all levels were substantiated.

The participants in the 1974 USCSC World Games Selection Camp included 62 college women and eight collegiate women coaches. The players participating represented all areas of the country and were selected to attend the camp by members of the USCSC Women's Basketball Committee. These individuals were selected at the 1974 AIAW Basketball Championship, the 1974 Women's AAU National Basketball Tournament, the 1974 Amarillo Invitational Basketball Tournament, and individual screenings by members of the USCSC Basketball Committee. The coaches present at the camp included the head coach and assistant coach of the United States World Games Women's Basketball team, and six members of the USCSC Women's Basketball Committee representing a total of seven of the ten AIAW regions. Again the subjects represented a wide cross-section of the country and a variety of experiences.

Administration of the Scale

Each of the 16 coaches participating in the 1974 AIAW Basketball Championship was personally handed a letter at the 1974 AIAW Basketball Championship explaining the purpose of the study and requesting each team's participation in the study. A copy of the letter to the coaches and a self-addressed, stamped postcard for their response may be found in Appendix D. Coaches were asked to either mail the enclosed, self-addressed, stamped postcard and/or indicate verbally whether they would be willing to participate in the study. Eight coaches mailed the postcard and eight coaches verbally consented to assist in the study.

The 30-item scales were mailed to the schools at the end of April. Coaches were requested to return the completed scales in an enclosed self-addressed, stamped envelope by the middle of May. Each coach was sent a packet which included a letter of appreciation and explanation,

12 copies of the situation-response scale with directions to players, and one color-coded copy of the scale with directions to coaches.

Copies of the letter and the instructions to both players and coaches are included in Appendix D. Only 12 copies with student directions were sent because each team at the National Championship was limited to a maximum of 12 players. Only one copy was sent with coaches' directions and was to be completed by the head coach. The explanatory letter to coaches requested that they schedule a 30-45 minute session in which they could administer the scale to their players. However, it appeared from the responses received that coaches distributed the scale to players and allowed them to complete the scales at their convenience.

Only those individuals at the World Games Selection Camp who had not previously participated in the study as a member of a team in the AIAW Basketball Championship were requested to complete the situation-response scale. The researcher attended the Selection Camp and at the completion of the morning session, June 7, 1974, explained the purpose of the study to the entire group requesting participation in the study by those who would be willing to complete the scale. Interested individuals received a copy of the 30-item scale with accompanying directions at the completion of the morning session, completed the scale during a two-hour intermission, and returned the completed scale at the beginning of the afternoon session.

Each coach was asked to respond to the scale items as he/she might normally react in each situation as described, not necessarily the way they think others think they "should" respond. Each player was asked to react "as if" she were the coach of a women's intercollegiate basketball team. Thus, players projected themselves into the role of a coach.

They were cautioned not to react as they felt their own coach might react, but rather what they would personally do if they were coach in each situation.

Sample of Subjects Responding

A total of 13 out of 16 teams participating in the 1974 AIAW Basketball Championship responded to the scale although all 16 teams consented to participate in the study. A range of from 2 to 12 players from each team responded to the scale and 12 of the 13 coaches involved in the tournament completed the scale. Thus, a total of 106 players and 12 coaches returned the completed scales. A total of 28 additional players and two coaches completed the scale at the World Games Selection Camp. The resulting sample consisted of 134 players and 14 coaches.

Table 5 represents the distribution of subjects by institution.

Scoring the Scales

The score of each response to each item was the average score assigned by all nine expert judges. The scores were rounded to the nearest tenth of a point. (See Table 6, Appendix C, for the score values.) The highest possible score for the entire scale was 136.3. Each response for each individual was manually scored according to the assigned value. The total score for each individual and the sub-total score of all odd-numbered responses and the sub-total score of all even-numbered responses for each individual were recorded. The total scores and odd-even scores for each individual are listed in Appendix E. Scores for players and coaches are listed separately.

A total of 16 scale scores was rejected because subjects either failed to respond to each item in the scale or selected more than one response to one or more items in the scale. The mean total score for

TABLE 5
DISTRIBUTION OF SUBJECTS BY INSTITUTION

Institution	Number of Players	Coach
<u>1974 AIAW Basketball Championship Subjects:</u>		
California State University, Fresno	10	1
California State University, Fullerton	6	1
East Stroudsburg State College	2	1
Immaculata College	6	1
Kansas State University	8	1
Mississippi College	12	1 ^a
Queens College	10	1
Stephen F. Austin State University	5	1
Tennessee Technological University	10	1
Utah State University	11	1
Wayland Baptist College	9	1 ^a
Western Washington State College	7	0
William Penn College	10	1 ^a
	<u>106</u>	<u>12</u>
<u>1974 World Games Selection Camp:</u>		
Brevard College	1	
Central Missouri State College		1
Elon College	3	
Federal City College	1	
Gulf Coast Junior College	2	
Hinds Junior College	1	
Illinois State University	1	
Indiana University	2	
Maryville College	1	
Miami Dade Community College	1	
Morgan State College	2	
Northeastern University	2	
Southern Connecticut State College	2	
Southern Illinois University		1
Temple Junior College	2	
University of South Carolina	1	
University of Tennessee, Knoxville	2	
University of Wisconsin, LaCrosse	1	
University of Wisconsin, Oshkosh	1	
Western Carolina University	1	
Western Michigan University	1	
	<u>28</u>	<u>2</u>
TOTALS:	44 Institutions	134 Players 14 Coaches

^aMale coach.

the remaining 118 players was 120.25 with a standard deviation of 3.44. The mean total score for the 14 coaches was 123.77 with a standard deviation of 3.96.

Reliability of the Scale

The reliability of the scale indicates the internal consistency of the instrument. (Barrow and McGee, 1971) The split-halves method of determining reliability, utilizing the Pearson Product-Moment Correlation and the Spearman Brown Prophecy Formula, was employed to determine the internal consistency of the scale. The Pearson Product-Moment Correlation was computed on the basis of the odd items vs. the even items. The scores for each individual were correlated by the Pearson Product-Moment Correlation and the Spearman Brown Prophecy Formula was utilized to predict the reliability for the full length of the scale.

The reliability of the scale was computed separately for players and coaches. The Pearson Product Moment Correlation for both players and coaches was .23. The predicted reliability for the full length of the scale for both players and coaches was .374.

Discussion

The scope and purpose of this study was limited to the construction of an instrument to measure attitudes of coaches and players toward the conduct of women's intercollegiate basketball. Following the discussion and conclusions, recommendations for further study will include comments relative to the construction of the scale, as well as applications to which the scale might be subjected.

Scale Construction

Perhaps the most perplexing problem in scale construction has been the low reliability of the instrument for both players and coaches

(.374). The low reliability could be a function of several statistical phenomena not the least of which is the homogeneity of the sample to which the scale was administered. Although the sample of participants at the 1974 AIAW Championship and the World Games Selection Camp represents a cross section of the country, it is certainly the "cream of the crop." Thus it is apparent that players and coaches at this caliber of competition reflect consistently high attitudes on the present scale as represented by the high mean scores and the low standard deviations. This homogeneity of responses would definitely result in a lowered correlation coefficient. A more realistic reliability coefficient could be obtained by administering the 30-item scale to several teams across the nation representing varying levels of skill and experience. The present study utilized a much too homogeneous group to verify scale reliability.

It is also possible that the low scale reliability was a function of heterogeneous content. Although the scale dealt specifically with basketball, it included 13 subcategories and five major clusters relevant to women's intercollegiate basketball. Thus, an individual could score very high on one topic (e.g., coaching methods) and very low on another (e.g., financing). It is possible that subjects have more expertise in one or more aspects than another. For example, the content of the situation response reflects some items which require a degree of administrative expertise in administering an intercollegiate basketball program as well as some items dealing with value judgments in actual game situations. This factor could result in inconsistent responses within the instrument. Heterogeneity of scale content could be determined by conducting an item analysis of present scale items. It is possible that scale reliability would be improved by limiting scale content to only one phase of an

intercollegiate basketball program for women, such as philosophy or coaching mechanics or any other large cluster of content emphasis.

Finally, it should also be considered that the 30-item situation-response scale may not be a reliable instrument. Additional administration of the tool and/or revision of the content will be necessary prior to accepting the scale as a reliable measure of attitudes toward the conduct of women's intercollegiate basketball.

It also became apparent during the construction of the scale that some of the criteria for the selection of items for the final scale were inadequate. The criteria included:

1. Each item must have been rated essential or desirable by at least two-thirds (six members) of the jury of experts.
2. Each expert must rank the responses for each item with a minimum of three different rankings and with at least one rank above three and one rank below three.
3. Judges must agree in weighting their responses at the .05 level of significance using Edwards' adaptation of Kendall's coefficient of concordance (W').

All 54 items submitted to the jury of experts met the requirements of the first and third criteria. These criteria were therefore not adequate in discriminating among items. The second criterion involving the range of responses of each expert for each item was successful in eliminating 17 items and was considered an adequate discriminator. Analysis of the responses of the jury of experts indicated that all items retained in the final scale represented 75 percent agreement of the experts on the desirability of the entire item. Perhaps 75 percent would be more discriminating than 66.6 percent of the judges responding.

It was also noted that although all 54 items met the criteria for agreement of judges' responses at the .05 level of significance, only two items were not in agreement at the .01 level of significance. It is, therefore, recommended that future studies consider the .01 level of significance when utilizing the coefficient of concordance.

A comment seems appropriate to justify the recommended increase in criteria standards. Although the present instrument represents a very major revision of the Sisley scale, it is still a derivative of an already established tool. Thus, a high level of agreement should have been anticipated among prominent leaders in the field. It may be possible that relatively high criteria standards should be associated with revised scale items from a previously substantiated scale and this factor should be considered in future research.

Another major problem in scale construction was found in administering the scale to players and coaches. Although subjects were requested to respond with one selection to each item on the scale, 16 players failed to do so. Subjects either failed to respond to one or more items or they responded more than once to one or more items. This makes it impossible to utilize the individual's entire scale score in statistical analysis. Future use of the scale should emphasize appropriate completion of all scale items.

A third problem in administering the scale was the lack of consistency in the administration procedures. Coaches were requested to administer the scale in a scheduled 30-45 minute session. However, it was apparent that players were given copies of the scale and asked to return them at their convenience. This factor could have influenced the lack of consistency in completing the scale, including not completing all

items with one response. It is interesting to note that all players completing the scale at the World Games Selection Camp did so according to the directions. These were the only scales which were administered specifically by the investigator. All of these scales were collected approximately two hours following their distribution. It is possible that more complete and consistent responses might have resulted had the administration of the scale been more controlled.

All of the problems in administering the scale may be attributed to the late date of mailing the scales to the participating schools. All 16 coaches at the AIAW Championship had originally agreed to administer the scale to their players and themselves. However, several teams and participants did not respond. The scales were not mailed until late in April and may not have been received until the first week in May. Many schools were either in final examinations at this time or had already completed the spring term. In addition, once basketball season is completed, many coaches do not have easy access to players. Thus, it may have been extremely difficult to administer the scale to either players or coaches. This may have explained the poor response to scale administration. It may be hypothesized that an earlier distribution of the scale would be advantageous. Distribution during the basketball season would be most desirable.

The final discussion and recommendation relative to construction of the scale focus upon the enduring question, do attitudes predict behavior? Needless to say, attitudes of players and coaches toward the conduct of women's intercollegiate basketball are vitally important in determining where we are as well as where we may be going. However, it may be even more valuable to compare attitudes and behavior. Certainly

a close agreement between expressed attitudes and overt behavior would verify the validity of the instrument. If this situation-response scale truly predicts behavior of coaches, it could become an extremely powerful tool in measuring the actual conduct of intercollegiate basketball for women. This is certainly a viable area for further study.

CHAPTER IV

SUMMARY, CONCLUSIONS, APPLICATIONS
AND RECOMMENDATIONS FOR FURTHER STUDYSummary

The purpose of this study was to explore the feasibility of constructing an instrument which could be utilized to identify the attitudes of coaches of women's intercollegiate basketball teams and female intercollegiate basketball players toward the conduct of intercollegiate basketball programs for women. Rokeach (1968) identified attitudes as a relatively enduring organization of beliefs around a situation which would predispose one to respond in some preferential manner. Tartar (1973), Wicker (1969), Kelman (1958) and DeFleur and Westie (1963) advocated that attitudes are situationally specific. Thus, the situation-response technique was selected to measure attitudes toward specific situations encountered in women's intercollegiate basketball.

Content validity was determined by (1) revision of items in Sisley's scale for use with intercollegiate basketball, (2) evaluation and revision of items by a jury of five judges, and (3) rating of scale items by a jury of nine experts. Scale reliability was determined by administering the scale to 134 players and 14 coaches in women's intercollegiate basketball and then employing the split-halves reliability coefficient.

Conclusions

Validity

Treating the concepts of validity and reliability independently, the 30-item situation-response scale appears to be a potentially valid instrument to measure attitudes toward the conduct of women's intercollegiate basketball. The content validity established through the revision of the scale is evidenced in the comparable percentage of questions per category represented in Tables 1 and 2 for Sisley's 50 items and the 30-item scale. Though the percentages are not exact, they are comparable in areas of emphasis.

Although the subjective evaluation of the original 60 items by the five preliminary judges was helpful in determining content validity, it provided a relatively limited sample of ideas. One of the biggest problems encountered in the construction of a situation-response scale is the identification of desirable alternative responses to each situation as it is described. It may be helpful to administer the scale to a larger sample of individuals in a different fashion. Situations could be described as they are in the present scale, omitting the five alternative responses. The subjects could then respond as they think they would if confronted with the situation, and there would be no alternative responses listed which might confound their response to a situation. Then, in the final construction of situation-response items, the five alternative responses could reflect the possible reactions indicated by the preliminary sample.

The ratings of each item by the jury of nine experts was of primary importance in establishing scale validity. The experts' evaluation of items as essential, desirable and undesirable is the best indication

that this scale might measure what it purports to measure. However, in attempting to construct a final scale which could be administered in a short period of time, two items were eliminated from the scale which met all criteria for inclusion. The judgment of the investigator with regard to what to eliminate could have influenced the reliability and validity of the instrument and should be avoided in future refinements of the scale.

Construct validity is evident in the high mean scores and low standard deviation of both coaches and players. Thus, the select sample of participants and coaches reflect attitudes which are similar to a jury of experts in women's intercollegiate basketball.

Reliability

Although it is possible to discuss validity and reliability as separate concepts, it is certain that scale reliability has a direct influence on scale validity. A lack of consistency in subjects' responses to items directly affects the validity of an instrument. The scale does not measure what it purports to measure if there is no consistency evident in subjects' responses to situations. Such is the case in the present scale.

The 30-item situation-response scale does not appear to be a reliable tool for assessing attitudes toward the conduct of women's intercollegiate basketball programs. The scale reliability of .374 is considerably below the preferred acceptability of attitude scales which is approximately .600. However, this is not altogether unusual; Pace (1959) noted that situation-response scales typically produce poor reliability when measuring specific attitudes. This condition

could be a direct result of the heterogeneity of the content of the scale. Although all scale items deal with intercollegiate basketball, a total of 13 categories of concepts are included. It is quite possible that students and coaches alike are naive about financial, legal, and other administrative concerns which affect the conduct of an intercollegiate basketball program. Thus, their responses may be unpredictable based on ignorance and represent fictional ideas rather than fact. In addition, local practices and procedures on individual campuses may dictate which response would be endorsed by a coach or player. Therefore, perhaps these items are inappropriate in a scale of this sort for the population being measured. It may be advisable to revise scale content so that it would not be inclusive of all aspects of intercollegiate basketball programs, but rather focus on a specific cluster of concepts in the current scale.

Another factor which might influence scale reliability is the arrangement of items within the scale. If the split-halves method of determining reliability is to be utilized, it becomes imperative that items reflecting different categories of scale content be reflected in both odd and even numbered items in the scale. (Barrow and McGee, 1971, p. 407) This was not done in the present scale. Instead, items were merely arranged so that items in each category were randomly distributed in the scale and not placed next to one another. A more precise placement of items with concern for odd and even numbers might improve scale reliability. It should also be noted that determining reliability on a test-retest basis rather than the split-halves technique could possibly prove to be more reliable. The test-retest method would eliminate the necessity for ordering items in relation to odd and even numbers.

It may be surmised that reliability would be greatly influenced by asking players to respond to items "as if they were a coach." It seems difficult to determine if subjects would respond differently in a projected role as compared to a real role. It is interesting to note that the reliability for coaches responding in a "real" role was exactly the same as that for players responding in a projected role. Thus, both groups responded to items with the same degree of consistency. However, it should be noted that student projection may be a mirror effect of what they see in the coach. Placing players in a projected role certainly adds another variable to an already difficult task. The construction of two parallel forms of the attitude scale might resolve this issue. The content of each item could be comparable in the two forms. Items could then be structured for responses from a coach and a player, rather than just from a coaching perspective. It might be advisable also to utilize players in the jury of experts to help assess the validity and develop the scoring of the instrument.

The administration of the scale posed yet another problem which might have affected the scale reliability. Coaches did not receive the scales until late April or early May. Not only were the subjects' thoughts and actions removed from a competitive basketball situation, but they were also confronted with the academic pressures present at the end of a school year. This lack of "basketball involvement" might have affected the intensity of the attitudes expressed and thus the consistency of responses. (Remmers and Gage, 1955, and Katz, 1960) Perhaps certainty ratings, as proposed by Sample and Warland (1973) might prove useful with the present scale. It was undoubtedly difficult for coaches to

contact players and schedule a convenient and appropriate time to properly administer the scale. However, it should also be noted that "attitude is persistent over time. It is not immutable, but requires substantial pressure to change." (Summers, 1970) This persistence should contribute to consistency in responses. However, ideally the scale should be administered during the competitive basketball season, when coaches have easy access to players and when situations may seem more relevant and realistic.

Finally, the reliability of the scale might also have been affected by the selection of the sample. The sample utilized in the study was not a random one, but rather a very select group. The participants at a National Championship and a World Games training camp may not reflect the variety of attitudes prevailing in women's intercollegiate basketball throughout the country. Future administration of a scale should incorporate a variety of institutions participating in intercollegiate basketball. These institutions might be selected from AIAW member schools indicating participation in intercollegiate basketball. Other sample sources might be available through state collegiate organizations, which might also include schools which are not members of AIAW.

In summary, several factors might have influenced scale reliability and validity. Although the 30-item situation-response scale does not have even a minimal level of acceptable reliability, it is hoped that this exploratory study did make a contribution to the literature. Perhaps it will provide direction to the development of future attitude studies in women's sports and suggest techniques which might be utilized in the development of further attitude scales, even as it identifies problems to be avoided.

Applications of the 30-Item Scale

The present 30-item situation-response scale has very limited use in research due to the poor reliability of the instrument. Perhaps the most profitable use of the scale would be for the purpose of initiating classroom discussion. If the concept that attitudes reflect internalized values is accepted, the items in the scale certainly challenge one's basic value judgments. A discussion pertaining not only to which responses one could select in a specific situation may be enlightening, but even more revealing would be a discussion of why one chose one response over another. Thus, the scale seems to have some potential as a teaching-learning tool.

It should be noted that the scale does have potential to become a useful tool. Modification of several procedures utilized in this study possibly could provide enough change to improve scale reliability. The implications for further development of a valid and reliable scale seem unlimited and the possible applications of an acceptable scale would be endless. The challenge would be an exciting one.

Recommendations for Further Study

The original intent of this study was to attempt to assess the basic value positions of coaches and players in relation to women's intercollegiate basketball. However, it appeared that values would be extremely difficult to measure and that attitudes might reflect internalized values. Rokeach (1968) identified attitudes as an enduring organization of beliefs around a situation. He further suggested that a value system is an organization of beliefs along a continuum of relative importance. Thus, the present attitude scale was developed to explore the feasibility of indirectly measuring values. The investigator is

still confident that a valid and reliable situation-response scale could reflect attitudes toward intercollegiate basketball, and that such an instrument would be useful in reflecting the direction of the women's intercollegiate basketball programs. An attitude scale does serve the function of raising one's conscious level of awareness to specific situations. Thus, once a subject responds to a situation on an attitude scale and is later faced with a similar situation and decision, it is hoped that the decision-making process would involve possible alternatives for appropriate action.

Perhaps it would be desirable to construct a situation-response scale which focuses upon the specific cluster of concepts dealing with the philosophical aspects of women's intercollegiate basketball. Historically, the ethical and philosophical concerns in women's sports have been controversial and of utmost importance. In addition, the pervasiveness of a philosophical or ethical position should surely indicate patterns of decision-making involved in the conduct of the total program. It is also probable that women have failed to identify a philosophical basis from which to operate. The development of an instrument to assess the philosophical aspects of women's intercollegiate basketball hopefully would arouse interest in the underlying reasons and patterns for the conduct of the program.

It is also possible that there may be other research techniques available to investigate underlying values which are equally as appropriate as a situation-response attitude scale. Certainly limiting the content of the situation-response scale to include only philosophical and ethical items could be one technique of emphasizing these areas. When dealing with values, researchers may be more comfortable with a

philosophical study which would present different avenues of investigation.

A historical study of the philosophical positions of organizations controlling and influencing women's sports would be another viable avenue of investigation. This information certainly would be reflected by the leadership of the day and the practices of the time. It would be interesting also to investigate the technique utilized in influencing others to accept or believe in a philosophy adopted by national organizations. Studies by Lee (1924, 1931) would indicate that a specific national philosophy toward competition was rather pervasive throughout the country at one time and it would be interesting to explore the ways a philosophy permeates organizational members and/or supporters.

An obvious pursuit of the philosophical aspect of women's sports might be the development of sportsmanship scales such as Haskins (1960) or win-at-all costs inventories such as Lakie's (1964). These concepts certainly underlie the basic purposes and conduct of a program. In addition, these concepts appear to be among the most important in all of sport.

Another tack that might be pursued would be to compare the stated philosophical purpose of an athletic program to the coaching practices. Such a study would reflect how a philosophy is implemented. It is possible that this is one factor presently affecting intercollegiate sports; that is, belief in a certain philosophical pattern but difficulty in finding appropriate ways of implementing such a philosophy. Too often coaches only pay "lip service" to a philosophical position and fail to operate within its framework.

Still another interesting approach to the philosophical bases of women's intercollegiate athletics might be the effect of Title IX and other legislation upon the stated philosophy of organizations governing or influencing women's sports. Data might include policies and procedures, position papers, interviews with leaders, and other relevant sources.

Each of the aforementioned ideas, if studied, would reflect an assessment of what has or does exist. Perhaps one approach to research which has not been fully explored is to project how things might or could be in the future. Thus, it may be possible for a philosophical researcher to explore different philosophical positions (i.e. pragmatism, idealism, existentialism) and develop or describe an athletic program that would reflect each of these positions. Such a study would have to employ futuristic methodology. Research of this sort might be beneficial in helping individuals understand and appreciate differing points of view and thus ultimately aid in interpersonal communications. Expanding upon this concept even more, it might be feasible for a researcher to design an utopian model for an intercollegiate athletic program. This would, of course, reflect the value judgment of the researcher and those consulted, but ideas for alternate models are certainly much needed in women's intercollegiate athletics.

Regardless of which approach to research might be pursued, it seems apparent that research has universal responsibilities. Generally speaking, one contribution of research is to awaken an awareness to the concept being investigated and hopefully stimulate interest toward further research. Research is also responsible for providing data for theory projection. Quite often research does not answer questions, but

creates more questions. This exploratory study has suggested both things to do and not to do; it has raised questions; it has provided a few answers. Most important of all, it has made the investigator more critical.

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APPENDIX A

60-Item Scale with Final Scale Designated

THE MEASUREMENT OF ATTITUDES TOWARD
THE CONDUCT OF INTERCOLLEGIATE BASKETBALL FOR WOMEN

1. You are scheduling a basketball game to fill an open date for next season. On what basis would you select your opponent?
- a. The equality of the level of competition
- b. the superiority of the opposing team
- c. The team record needed for qualifying tournaments
- d. The opportunity for a winning season
- e. My relationship with the opposing coach
- (1)¹ 2. Your school is hosting an invitational state-wide basketball tournament. How would you arrange the schedule of games for eight teams?
- a. Draw from a hat the names of the teams for placement in the brackets
- b. Place the teams into the brackets on the basis of season record
- c. Seed the two strongest teams according to season record and draw the remaining six positions
- d. Match my team against an easy opponent in the first game
- e. Have a neutral person arrange the bracket
- (2) 3. What emphasis would you place on your players knowing the rules?
- a. Little emphasis would be placed on rule knowledge, it is the officials' responsibility
- b. All players would be required to pass a rules test to qualify for the team
- c. A player would sit on the bench if she did not know the rules
- d. Time would be spent during practice to discuss rules with players if necessary
- e. There would be several rule sessions at the first of the season
- (3) 4. You are establishing a school policy dealing with medical clearance for female athletes. What kind of medical clearance would you require for participation on the intercollegiate basketball team?
- a. Note of approval from family doctor
- b. No medical clearance necessary if admitted to institution without problems
- c. Basic physical check-up by family doctor within one year of beginning of competitive season
- d. Medical examinations for athletes arranged through the school health services prior to the season
- e. Complete physical check-up required within six months of beginning of season

¹Item number in the final 30-item scale.

- ___ 5. One of your experienced players continually yells at her teammates during practices and then in games. What would you do to handle this situation initially?
- ___ a. Drop her from the team
 - ___ b. Bring up the situation without mentioning names at a team meeting
 - ___ c. Talk to the girl individually
 - ___ d. Have the team captain talk to her
 - ___ e. Pull her from the game each time she yells
- (5) 6. You observe the state high school championship girls' basketball game, and are very impressed with one of the players. What action would you take?
- ___ a. Contact her coach and inform her about your basketball program
 - ___ b. Offer her a scholarship at your school
 - ___ c. Have players from your school talk to her about your basketball program
 - ___ d. None
 - ___ e. Tell her about the academic and intercollegiate opportunities at your school
- ___ 7. There are only 10 minutes available for warm-up activities prior to a game. What warm-up procedures would you follow?
- ___ a. Players can structure their own warm-up activities as a team
 - ___ b. Players can structure their individual warm-up; I will determine team drills
 - ___ c. I will determine all warm-up activities
 - ___ d. Players can structure their own warm-up activities with my approval
 - ___ e. Players may structure their team warm-up activities; I will determine individual warm-up drills
- (6) 8. Your team has qualified to participate in a national championship. Ideally, how do you anticipate securing funds for the team to go?
- ___ a. Take funds from other sports in the competitive program
 - ___ b. Include such possible expenses in the budget for that season
 - ___ c. Members of the team will engage in money-making projects
 - ___ d. Request additional funds from available funds on campus
 - ___ e. Solicit donations from the community and alumni
- (7) 9. Your team is traveling to a near-by town in university station wagons. What would you tell your players regarding transportation arrangements?
- ___ a. Players will meet and be assigned to university cars driven by faculty members
 - ___ b. Players will meet and ride in university cars driven by faculty members

- c. Players will meet and ride in university cars driven by students
 - d. Players will meet and be assigned to university cars driven by students
 - e. Players may ride in university cars or may make their own arrangements.
10. As coach of the women's intercollegiate basketball team, what is your attitude about players missing classes for scheduled games?
- a. No classes would be missed
 - b. Students would make arrangements with faculty members whose classes are to be missed.
 - c. I would make arrangements with the faculty members whose classes are to be missed
 - d. Students would miss classes only with the approval of the respective faculty member
 - e. I would circulate a memo to all faculty members indicating the students' absences on game days
11. Your team will hold its first meeting next week. What would you tell the players about the role of student leadership in the activities of the team?
- a. There will be no team captain
 - b. The team will determine what type of leadership they desire
 - c. A captain will be elected by the team
 - d. A captain will be appointed by the coach
 - e. Leadership roles will be designated by the coach on an alternating basis
- (8) 12. One of your players often phones you at home for no apparent reason. She comes early and stays late for practices to be friendly with you. How would you respond to her actions?
- a. Encourage her to be friendly with me
 - b. Discuss it with her privately to discourage her
 - c. Ignore the student as much as possible
 - d. Ask the student not to call me at home
 - e. Treat her as I do each other member of the team
- (9) 13. You are in the process of making the selection of your varsity basketball squad. What two factors do you rank highest in making your selections?
- a. Upperclassman and demonstrated skill
 - b. Demonstrated skill and potential skill
 - c. Underclassman and potential skill
 - d. Attitude toward competition and demonstrated skill
 - e. Attitude toward competition and potential skill

14. You are attending a meeting of the regional women's intercollegiate athletic association. There is some concern expressed about the skill and personal integrity of officials. What do you say?
- a. Officials are usually honest and try to do a good job
 - b. If our rating procedures are valid, the official's skill cannot be questioned
 - c. Officials are sometimes influenced by the home crowd
 - d. Officials often try to please some of the coaches
 - e. Officials are sometimes incompetent
15. One of your players reports to you that another player is using drugs. What would you do about the situation if there is no policy regarding drugs?
- a. Report the possibility of drug usage to her parents
 - b. Call the student into my office for a conference
 - c. Do nothing, because it is none of my business until I have proof
 - d. Investigate the truth in the report by talking with other members of the team and friends of the student
 - e. Repeat what I have been told to the university health service
16. An alumna sends a check for \$1,000 to you as a contribution for the support of the women's intercollegiate basketball program. What would you do with the money?
- a. Use the money to allow interested players to observe the national tournament
 - b. Use the money to offer a basketball scholarship
 - c. Use the money to purchase new uniforms or other equipment for the basketball team
 - d. Refuse it since I feel all funds must come from within the institution
 - e. Put the money into the intercollegiate fund to be divided among all sports as needed
- (10) 17. Several of the coaches in your area are upset about the rough play of one of the teams. What type of policy or procedure do you feel would be appropriate to handle the situation?
- a. Nothing
 - b. Do not schedule any games with this team in the near future
 - c. Speak to the coach of the team and tell her that if the situation is not corrected I will not schedule games with them
 - d. Write to the president of the regional athletic association explaining the situation
 - e. Have my athletic director write to the athletic director of the school involved explaining the situation

18. You are going on leave of absence during the current year. No one can be hired to take over your coaching responsibility. What recommendation would you make to fill this assignment?
- a. The assignment should not be filled, and there will be no basketball this year
 - b. A female faculty member who has consented to help, but is poorly qualified, could serve as coach
 - c. A qualified female graduate assistant could serve as coach with my approval
 - d. A qualified female volunteer from the community will serve as coach
 - e. A qualified male faculty member in physical education will serve as coach
19. Your team is playing a home game. You feel certain that the officials are not watching for three-second lane violations. How would you react to this situation if your team is behind 4 points in the last 2 minutes?
- a. Call out the violation each time it occurs
 - b. Bring up my concern to the officials at the end of the game
 - c. Ignore it
 - d. Call a time out to discuss my concern with officials when it first occurs
 - e. Instruct my players to call out the violation each time it occurs
- (11) 20. What do you feel should be the policy of your institution in purchasing equipment for the members of your team?
- a. No individual player's equipment (e.g., shoes, practice shirts) should be purchased by the institution
 - b. Basketballs and uniforms should be provided when necessary
 - c. All equipment, including personal items, should be provided by the institution
 - d. Members of the team should buy their personal equipment from the institution
 - e. Intercollegiate athletic teams should use department basketballs purchased from the physical education department budget
21. You serve as basketball chairman for the state intercollegiate association. The coach of a nearby team yells from the sidelines during games and at times questions the calls of the officials. What would you do to alter the situation?
- a. Speak to the coach about her behavior
 - b. Nothing
 - c. Send a letter to the coach in behalf of the other coaches explaining disapproval of her behavior
 - d. Bring up the general concern for proper conduct of coaches during games when all the coaches are together at a meeting
 - e. Send a letter to the athletic director where the coach works telling her there is disapproval of the coach's behavior

- ___ 22. As basketball coach, you have been asked to write an article for the alumnae news bulletin. How would you respond to this request?
- ___ a. Write an article telling about the events of the season, team members, and special activities
 - ___ b. Write a general article about the team when you can get around to it
 - ___ c. Write an article about the outstanding players and their statistics
 - ___ d. Ask my student manager to write an article and then approve it
 - ___ e. Prepare an article and in it ask alumnae to send their promising players to their alma mater
- (12)23. Your team is in a play-off game. The score is tied with 1 minute left. Your top scorer commits two unsportsmanlike acts. What would you do if you saw her commit one of these fouls even though the official did not call a foul?
- ___ a. Tell her after the game that her actions were wrong
 - ___ b. Forget about the incident unless someone mentions it
 - ___ c. Tell the players on the bench that this kind of behavior is bad
 - ___ d. Take her out of the game and talk with her about her conduct
 - ___ e. During the next time out tell her that she will be taken out of the game if such conduct continues
- (13)24. What attempt would you make to understand the idiosyncracies of your team members?
- ___ a. Talk with a player if a problem arises
 - ___ b. Make it a point to have an individual conference with every member of the team during the season
 - ___ c. Look over the personal folders of those members who are physical education majors
 - ___ d. Provide opportunities for a great deal of group interaction and expression of opinion at team meetings
 - ___ e. Remember what I hear or observe about members of my team, but do not attempt to get involved in their personal lives
- ___ 25. A local sports booster has said he would financially help an entering freshman so she will have an opportunity for a college education and can participate in the athletic program. The girl holds a state high school scoring record. What would you tell this person?
- ___ a. It is very kind of you to offer this assistance to such a promising young athlete
 - ___ b. I am leary of the possible obligations this may put on the student
 - ___ c. Do not say anything and pretend to know nothing about the transaction

- ___ d. Inform the person that this support would be a type of athletic scholarship and should be administered through the school
- ___ e. Encourage the person to support the total intercollegiate program through a contribution to the intercollegiate fund
- (14)26. You have just finished your season. How would you evaluate your coaching effectiveness?
- ___ a. I would use win-loss record as the best evaluation
- ___ b. I would plan for an open discussion with the team members and allow for suggestions and criticism
- ___ c. I would prepare an evaluation sheet for all the team members to complete
- ___ d. I would discuss the season with the team captain
- ___ e. I would not spend any further time on basketball once the season is over
- ___ 27. Your new athletic director has decided that every competitive team should be allocated the same amount of money. As basketball coach, you tell her money should be allocated on what basis?
- ___ a. Quality of the team
- ___ b. Budget submitted by each respective coach
- ___ c. Number of opportunities to participate in competition
- ___ d. Number of participants and the extent of the schedule
- ___ e. Equally to all sports in the program
- (15)28. What advice would you give your players concerning rules of the game?
- ___ a. Use the rules to your advantage
- ___ b. Adhere to the rules in a strict fashion
- ___ c. Play by the spirit as well as the letter of the rules
- ___ d. Use the rules as a basis for practicing good moral principles
- ___ e. Avoid being technical in interpreting the rules
- (16)29. An intercollegiate basketball program for women will be started at your institution. You have been named as the coach. What do you feel should be the purpose of the competitive program?
- ___ a. To provide physical education majors with an opportunity to learn advanced skills
- ___ b. To give women students an opportunity to spend a great deal of time in highly structured competitive situations
- ___ c. To provide an opportunity for all who are interested, no matter their skill level, to participate in athletic contests
- ___ d. To provide an opportunity for skilled performers to compete against those of similar ability from other colleges
- ___ e. To allow students to have an opportunity to compete beyond the level of intramurals

(17)30. You make it a point to explain your philosophy toward winning and losing, after the team is selected. What would you tell the team?

- a. Winning is paramount
- b. There is no place for a defeatist on this team
- c. It does not matter whether you win or lose, but you must put forth 100%
- d. The outcome of the game is unimportant, excepting tournament play
- e. Winning is important, but winning is not the all important thing

(18)31. What kind of attendance commitment would you expect of all players?

- a. Players may be allowed to miss practice and games if they have social obligations
- b. There shall be no unexcused absences for practices or games
- c. Players must be available to participate in all games, but practices may be more flexible
- d. Players are to talk to me if they have to miss practice
- e. Attendance at all practices and games is required

(19)32. Some of your stronger players ask you if there is a policy about playing on the school team and on an outside team at the same time. What would you say if there was no policy?

- a. You are free to play on both teams as long as the competitive seasons do not overlap
- b. You may play on both teams if you desire
- c. You may not practice on the outside team until the school season is over, if you play on the school team
- d. If you have played on an outside team, you cannot play on the school team
- e. You may play on the school team but only practice with the outside team

(21)33. You are speaking to a group of physical education major students regarding the professional preparation of women coaches. What would you tell them about the role of actual competitive experience in preparing to coach?

- a. There might be some value in having taken part in a competitive program, but it is not a primary factor in learning to be a coach
- b. The knowledge gained about organization alone is enough to require future coaches to take part in a competitive program
- c. There is no value gained from competing that cannot be gained through clinics, workshops, or courses
- d. It is imperative to participate competitively while you are young so you can relate to competitive experiences
- e. One of the best ways to learn how to coach is to be coached

34. One of your returning post players plays with a new girl who is trying out at the point position. The post player is extremely upset because the new point player cannot get the ball into her. What would you tell the post player?

- a. You were once a new player; please show more understanding toward the new player
- b. If she cannot pass the ball to you, intercept the ball when it goes to her position
- c. The new player will not be playing very much so do not worry about her
- d. It is your responsibility to help the new player understand her relationship with the other members of the team
- e. With your help, the new player will improve her skills; work with her

(22) 35. Betty is the sixth player on your team. She frequently becomes angry and gives up when she is not scoring well. What would you do to improve her attitude?

- a. Talk to the captain of the team about Betty's reactions
- b. Leave her alone to work out her problems
- c. Tell Betty that she needs to improve her attitude
- d. Tell her that she will not play in any more games if she continues to display her anger
- e. Talk with Betty about possible reasons for her actions and what she might do to control them

(20) 36. How do you expect to command the respect of your team?

- a. By telling them exactly what is expected of them and not allowing exceptions
- b. By demonstrating my superior skill
- c. By showing individual concern for all members of the team
- d. By being one with the members of the team
- e. By being well prepared for practices and organized in handling the team

(23) 37. The faculty is concerned about the direction of the basketball program. You are asked your philosophy regarding the emphasis for competitive opportunities in the program. What would you tell them?

- a. There should be a competitive team for every sport where interest is indicated
- b. There should only be team sports since there is more interest there and more students can participate
- c. There should be an emphasis on those sports in which the greatest amount of interest is shown
- d. There should be a variety of teams in both individual and team sports in an attempt to provide a well-rounded program
- e. There should only be two programs offered and these should be highly competitive

38. You are playing a team that you have not played before. At half time the score is 32-8 in your favor. What would be your plans for substituting during the second half?
- a. The entire bench would play the second half as long as the team stays ahead
 - b. Several of the substitutes would rotate in with the regulars
 - c. There would be no substitutes except in case of injury or fatigue
 - d. A team of regulars would play half of the third and fourth quarters, and a team of substitutes would play the remainder of the time
 - e. All players would have an opportunity to play as I attempt to observe different combinations in game play
- (24)39. One of your players habitually stomps her feet after missing a shot. What would you do?
- a. Have her play with more skillful and emotionally stable players
 - b. Talk to her to help her understand that when she displays her emotions her level of concentration is upset
 - c. Ignore her actions
 - d. Tell her that you disapprove of her actions
 - e. Tell her to quit displaying her emotions or she will be sitting on the bench
- (25)40. Your team has a 2-point lead with 1 minute left in the game. How would you instruct your players to defend an opponent driving for a lay-up who has a half-step advantage?
- a. Foul her and take a chance she will miss the free throws
 - b. Yell at her to distract her
 - c. Attempt to stay with her without fouling
 - d. Jump early to distract her timing
 - e. Let her go, since it is to no avail to follow her
- (26)41. There has been some discussion at coaches' meetings regarding the personal image of coaches. What do you feel would be an appropriate method of dealing with questionable conduct and dress of coaches?
- a. Problems regarding the image presented by certain coaches should be treated individually by the athletic director
 - b. A subcommittee of coaches should develop guidelines for coaches that can be approved by the entire department
 - c. This should not be a concern of anyone, it is an individual's prerogative
 - d. The women's athletic director should set down definite standards that must be followed
 - e. A subcommittee of coaches should deal with instances of questionable conduct and dress

42. Your top all-around player becomes ill at the regional championship. She is up all night. In the morning she looks pale and drained. She wants to compete very badly. What would you do?
- a. Tell her she can compete if she feels up to it
 - b. Check her temperature and if it is normal let her compete
 - c. Give her some aspirin and tell her that she will be all right
 - d. Tell her to stay in bed
 - e. Have the infirmary check her over and let them make the decision as to whether or not she can compete
- (27)43. One of your players is near the school scoring record. Members of the team are discussing her chances of breaking the record in the next game which is the finals of the state tournament. What would you tell them?
- a. Feed the ball to her as much as possible
 - b. Do not say anything to them
 - c. Allow her to play until she breaks the record
 - d. Play the game in the usual style because she should not be concerned about the record
 - e. Do not worry, if she does not break the record she will not get such a big head
- (28)44. Your department chairman has appointed you to a committee to suggest appropriate load credit for coaching. What would you, as a coach, recommend?
- a. Women coaches should have load credit equivalent to their male counterparts
 - b. All coaches should be relieved of half their teaching load during their competitive season
 - c. All coaches should be relieved of teaching two general college classes during their competitive season
 - d. Coaches should not receive load credit, but should receive extra compensation
 - e. Load credit for coaching should be determined on the extent of competitive season and amount of practice time involved
45. The first string center sprained her ankle the day before the regional tournament. The ankle is still swollen, and she walks with a noticeable limp. How would you use her?
- a. She would start the game and play throughout the game as usual with her ankle taped if she had a medical release
 - b. She would not be allowed to play at all
 - c. She would go in as a substitute if the second-string player got into foul trouble
 - d. She would go in as a substitute if the second-string player was not effective
 - e. She would be used as a substitute if she had received a medical release

46. How would you make arrangements for officials for your home games if you had the privilege of choice and all options were available to you?
- a. Ask the local board of officials to schedule the best officials
- b. Use 2 or 3 staff members who hold current ratings
- c. Use students who hold current ratings
- d. Use a few friends who are currently rated
- e. Allow players to recommend rated officials they like
47. What would be the role of team members regarding decisions about team policies?
- a. Team members would not be involved in decision-making
- b. Decisions would be made by the captain(s)
- c. Decisions would be made by all members of the team
- d. Decisions would be made by the coach and the captain(s)
- e. Decisions would be made by the coach and all team members
48. When do you feel it is appropriate to charge admission to women's basketball games, assuming there are no policies governing any situation?
- a. Never
- b. At all home games
- c. For special exhibitions
- d. When additional funds are needed to finance as aspect of the program
- e. At championship events
- (29)49. There are 12 girls on your team. How would you make use of the substitutes?
- a. Substitutes would have equal opportunities during practice
- b. Substitutes would practice one position and be ready to play that position if the regular player is injured or not performing well
- c. Substitutes would be encouraged to attend all practices, but would seldom be used in games
- d. The best substitutes would work with the starting 5 in practice when possible
- e. Substitutes would have second place in practice opportunities
- (30)50. The members of your basketball team come to you requesting training rules. What is your attitude toward training rules?
- a. Players may establish their own training rules if they desire
- b. I will establish the team training rules
- c. Both the players and I will establish training rules
- d. Individual players will be responsible for their own training rules
- e. They are only made to be broken so why have them

- ___ 51. There has been discussion among the coaches at your school regarding the number of hours per week competitive teams should be allowed to practice. What opinion would you express when the coaches meet to discuss the issue?
- ___ a. The amount of time for practice should be decided by team members
 - ___ b. The time required to attend practices should not infringe on students' rights to develop social interests
 - ___ c. There should be no more than 6 hours of practice per week to protect the students
 - ___ d. The amount of time allowed for practice should be reasonable considering that a player is first a student
 - ___ e. Practice time should be regulated by each coach
- ___ 52. You have been asked to speak to the Theory of Coaching class. A student asks you if you feel a basketball team can win in ways other than by the score. What would you tell her?
- ___ a. The final score tells the total picture
 - ___ b. Winning can be in the realm of improved sportsmanship and team cooperation as well as in the score
 - ___ c. If there is improvement in performance the game can be called a victory no matter what the score
 - ___ d. Winning may be in terms of individuals making gains toward their potential
 - ___ e. There may be some elements of the game that are victories in themselves
- ___ 53. Your team is ahead by 4 points in the last 2 minutes of a state tournament game. There is no 30-second clock in use. What game strategy would you instruct your girls to employ?
- ___ a. Dribble the ball in an attempt to draw a foul
 - ___ b. Do not shoot unless you are forced to, or can draw a foul
 - ___ c. Shoot quickly to increase the lead
 - ___ d. Take shots only when there are opportunities for good ones
 - ___ e. Keep control of the ball until the end of the game
- ___ 54. You are a coach at a large university. Your colleague who coaches the swimming team asks you to change the grade of one of her swimmers so she will be eligible for competition. What would you tell her?
- ___ a. I do not believe in changing grades for students
 - ___ b. I will change the grade because her competitive experiences are the only reason she is remaining in college.
 - ___ c. I will change the grade if the student does some additional work
 - ___ d. I will change the grade if you will be willing to do the same for one of my players
 - ___ e. I will re-check my evaluation to be sure it is accurate, and perhaps some adjustments can be made

- ___ 55. How would you as a coach intend to keep abreast with research findings in professional literature?
- ___ a. Read the research published by DGWS
 - ___ b. Read all research published in the Research Quarterly related to the activity I coach
 - ___ c. Attempt to read research in the area of motor learning and sports psychology
 - ___ d. Do not intend to read any research literature
 - ___ e. Might read an article that someone points out that may be interesting
- ___ 56. You attend a summer basketball camp which includes special sessions for coaches. How would you use the new knowledges and coaching techniques presented at camp?
- ___ a. Revamp all of my practices and incorporate all the ideas presented at camp
 - ___ b. Do not incorporate any new materials because I think my present techniques are best
 - ___ c. Prepare written materials from notes taken at camp and make them available for the members of my team
 - ___ d. Incorporate a few of the ideas into my coaching
 - ___ e. Pick out a few totally new concepts to introduce and some varying techniques which may help my players adjust to skill problems
- ___ 57. The students are concerned about coaches' conduct at practices. What would you tell them?
- ___ a. Coaches are responsible for setting good examples for their players
 - ___ b. It is not important how coaches act, but that they attend all practices
 - ___ c. Coaches need to show more enthusiasm and interest
 - ___ d. Coaches should realize that their team members are learning to coach from the way they coach
 - ___ e. Coaches have a responsibility and an obligation to have well-planned and well-organized practices
- ___ 58. Your team will be allowed to have a manager for the first time. Which criteria would you use to govern the selection of a manager?
- ___ a. She must have a background in athletic training techniques
 - ___ b. She must be a freshman or sophomore physical education major
 - ___ c. She must be dependable and have indicated an interest by applying for the position
 - ___ d. She will be selected by the members of the team
 - ___ e. She must have had experience in competitive basketball and show interest in being a manager

- ___ 59. You have just attended a conference on the psychology of coaching. One of the main topics discussed was effective goal-setting. How would you apply knowledge gained in coaching your team?
- ___ a. There is no way to apply information which is really beneficial
 - ___ b. Attempts will be made to make individual work-out and performance charts
 - ___ c. I will share information gained at the conference with the student manager and she will apply the material to set goals for the team
 - ___ d. Individual and team goals will be set weekly; knowledge of results of performances will be posted for all to see
 - ___ e. I will discuss knowledge gained at the conference with the members of the team and leave it at that
- ___ 60. Your team loses the championship game at the regional tournament. Your only senior wanted to win very badly and cries when the team loses. How would you respond to her?
- ___ a. Tell her there is a time and place to cry, not here
 - ___ b. Tell her that you know how she feels
 - ___ c. Ignore her
 - ___ d. Tell her it is only a game
 - ___ e. Make sure that some of her friends are with her

APPENDIX B

Correspondence with the Jury of Experts

206-E Berryman St.
Greensboro, N. C. 27405
January 25, 1974

Dear

I am presently working on my doctoral degree at the University of North Carolina at Greensboro, and I would like your help in developing a tool for my dissertation. The topic is the Measurement of Values of Coaches and Players Toward the Conduct of Intercollegiate Basketball for Women. I am attempting to revise an attitude scale on intercollegiate athletics developed by Becky Sisley in 1972, for use with basketball specifically.

I would appreciate it if you would serve as one of the nine judges rating the quality of each item and ranking the responses within each item. You have been selected because of your expertise in the conduct of a women's intercollegiate basketball program. You will represent one of the nine AIAW Regions. There will be approximately 60 multiple-choice items to which you will need to react, requiring from one to two hours of your time.

If you are willing and able to assist in this way, I will mail a copy of the scale and the instructions to you on February 1. It must be returned to me no later than February 15 because I hope to administer the final form of the scale at the 1974 AIAW Regional Basketball Tournaments which begin February 28. As you see, I am on a rather narrow time schedule.

Please complete the enclosed card and return it to me at your earliest convenience. Your help would be sincerely appreciated. If you have any further questions, please feel free to call me collect:

(919) 288-1650.

Sincerely,

Jill Hutchison

Enclosure

SELF-ADDRESSED, STAMPED POSTCARD
: SENT TO THE JURY OF EXPERTS

Name _____

School Phone _____ Home Phone _____

_____ I will serve as a judge for your study

_____ I cannot serve as a judge for your study

If you cannot serve as a judge, please recommend
someone within your region who is currently coaching
intercollegiate basketball, and whom you feel is
qualified.

Name _____

School _____

206-E Berryman St.
Greensboro, N. C. 27405
February 8, 1974

Dear

I have received your post card indicating your willingness to serve as a judge for my study. Your help will be greatly appreciated. There will be a short delay in getting the attitude scale to you for your evaluation. You should be receiving the scale within the next two weeks. You will have approximately three weeks to evaluate it before returning it to me.

I hope this will not inconvenience you. I realize it is fast approaching tournament time and you will be busy, but I will attempt to get the scale to you as soon as possible. Again, thank you for your assistance.

Sincerely,

Jill Hutchison
Ed. D. Candidate

Rosemary McGee
Advisor

206-E Berryman St.
Greensboro, N.C. 27405
March 28, 1974

Dear

I am pleased that you are willing to serve as a judge for my study. I hope the delay in sending the scale to you will not be an inconvenience. Enclosed are 54 situation-response items and directions for you to follow when (1) evaluating the items and (2) rating the responses. The purpose of this scale is to measure the attitudes of women coaches and players toward the conduct of intercollegiate basketball for women.

The ratings of the judges will be used to select the items to be included in the final scale. It will then be sent to each of the sixteen teams competing in the AIAW National Basketball Championship. It will be administered to all head coaches and players participating in the Championship for the purpose of establishing scale reliability.

I am very interested in any suggestions or comments that you may have regarding any items and/or responses. Please be sure, however, to rate the items as they are written. I would particularly welcome comments about any items you consider undesirable. Please feel free to make any comments directly on the scale.

I would appreciate it if you would return the items to me by April 13. Your assistance in meeting this deadline is necessary if the completed scale is to be mailed to teams prior to the end of the academic year. Enclosed is a self-addressed, stamped envelope for your convenience. Thank you very much for assisting with my study.

Sincerely,

Jill Hutchison
Ed. D. Candidate

Rosemary McGee
Advisor

enc.

A Situation-Response Scale
to Measure the Attitudes of Coaches and Players Toward the
Conduct of Intercollegiate Basketball for Women

Directions

The items on the following pages are situation-response items related to the conduct of intercollegiate basketball for women. Please make two judgments on each of the items.

I. Rating of Responses

Read each situation carefully. Then read the five responses which indicate possible actions toward the situation. You are a member of a jury to judge the responses ranging from the most desirable behavior to the least desirable behavior. Please disregard your personal response toward the situation, and respond in order of desirability. Assign a value of five (5) points to the response which you judge to be the most desirable, four (4) points to the next most desirable response, and so on, giving one (1) point to the least desirable response. For example:

- _____ 1. The center and high scorer on your team is usually the last one out to practice. The first game of the season she only scores 4 points. How would you attempt to handle the situation?
- 5 a. Not let her play any more
- 1 b. Plan some special practice sessions for her
- 4 c. Talk to her about her attitude toward practice
- 2 d. Start to train another center
- 3 e. Have the team captain talk to the center

If you had rated the responses as indicated, it would mean that you rated a as the most desirable action to be taken, c as the next most desirable, e as the next most desirable, etc. Remember, you are to rate the responses in order of desirability and not necessarily how you would react in your situation.

You may feel it is impossible to rate the responses for a particular item on a 5 to 1 scale. If so, assign a duplicate value to two or more responses you think are equally desirable or equally undesirable. For example, in a given item, you may feel that two responses rate 4 points, two responses rate 1 point, and one response rates 3 points. Make sure that each response for every item is rated. The combined ratings of the judges will be used to determine the final weightings of responses.

II. Evaluation of Items

Also, please evaluate each total item. Indicate, in the space provided to the left of the item number, how you would rate each item in view of its contribution to the total scale. Use the following scoring method:

- E - Essential - Should be included
- D - Desirable - Acceptable
- U - Undesirable - Should be left out

Be sure that each item is evaluated. The combined ratings of the judges will be used to determine the items to be included in the scale.

APPENDIX C

Responses from the Jury of Experts

TABLE 6

RESPONSES FROM THE JURY OF EXPERTS

Orig. No.	New No.	Judges' Responses									Ave. Wt.	W'	Orig. No.	New No.	Judges' Responses									Ave. Wt.	W'	
		1	2	3	4	5	6	7	8	9					1	2	3	4	5	6	7	8	9			
1.		E	E	E	E	E	E	E		D			12.	8	E	E	E	D	E	D	D		U			.1.04
a.		5	5	5	4	5	5	5	4	5			a.		1	1	1	1	2	1	1	1	1	1.2		
b.		4	4	3	3	4	4	4	4	4			b.		4	4	4	3	4	4	5	4	4	4.0		
c.		1	3	4	1	2	2	2	1	3			c.		2	3	1	2	1	2	2	1	1	1.7		
d.		1	3	1	1	1	1	1	1	1			d.		3	3	2	4	3	3	4	3	3	3.1		
e.		1	2	2	3	3	3	2	1	2			e.		5	5	5	5	5	5	5	5	5	5.0		
2.	1	D	E	E	D	E	D	E		D	.611		13.	9	E	E	E	E	E	D	E		E	.510		
a.		1	1	5	2	2	3	2	4	4	2.7		a.		1	4	2	3	2	3	1	2	2	2.2		
b.		5	5	3	3	3	5	5	4	3	4.0		b.		3	3	5	5	3	1	3	5	5	3.7		
c.		4	4	4	5	4	4	4	5	5	4.3		c.		1	2	3	3	1	2	2	2	1	1.9		
d.		1	1	1	1	1	1	1	1	1	1.0		d.		5	5	5	4	5	5	5	4	4	4.7		
e.		3	2	2	4	5	2	3	2	2	2.8		e.		4	2	4	2	4	4	4	4	3	3.4		
3.	2	D	D	E	E	D	E	E		E	.817		14.		E	D	E	E	E	D	E		E			
a.		1	1	1	1	3	2	1	1	1	1.3		a.		5	3	5	5	4	5	5	5	4			
b.		1	3	3	4	2	1	3	1	2	2.2		b.		3	2	2	4	5	4	4	3	5			
c.		2	2	2	2	1	1	2	1	1	1.9		c.		1	1	3	3	2	2	2	4	1			
d.		5	4	5	4	5	4	4	5	5	4.6		d.		1	1	1	3	1	1	3	2	1			
e.		3	5	4	5	4	5	5	3	2	4.0		e.		2	2	4	3	3	3	1	1	2			
4.	3	E	E	E	E	D	E	E		E	.883		15.		E	D	E	D	E	D	D		D			
a.		2	1	3	3	2	3	2	3	3	2.4		a.		1	3	2	1	3	1	2	3	1			
b.		1	1	1	1	1	1	1	1	1	1.0		b.		3	1	5	4	5	5	5	5	5			
c.		3	1	2	2	3	2	3	2	4	2.4		c.		1	1	1	5	1		1	1	1			
d.		5	4	4	4	5	5	5	5	5	4.7		d.		2	2	3	1	2		2	4	3			
e.		4	5	5	5	4	4	4	5	2	4.2		e.		3	3	4	4	4	1	3	2	4			
5.	4	E	D	E	E	E	D	E		E	.727		16.		D	D	E	E	E	D	D		D			
a.		1	1	1	1	1	1	1	1	1	1.0		a.		2	1	4	3	3	1	4	1	2			
b.		2	3	4	5	4	4	4	3	3	3.6		b.		1	2	3	4	4	3	1	2	4			
c.		4	5	5	3	5	5	5	5	5	4.7		c.		2	4	5	4	5	4	5	4	5			
d.		1	2	2	4	2	3	2	2	4	2.4		d.		1	1	5	1	2	2	1	1	3			
													e.		3	5	2	2	1	5	2	5	3			

6.	5	.408	17.	10	.463
a.	1	e	a.	1	1
b.	1	3	b.	3	2
c.	1	1	c.	4	5
d.	5	5	d.	1	4
e.	3	4	e.	2	5
7.	7	.311	18.	E	U
a.	5	D	a.	1	1
b.	3	5	b.	1	1
c.	1	3	c.	5	5
d.	4	1	d.	4	5
e.	2	2	e.	3	5
8.	6	.978	19.	E	E
a.	3	1	a.	1	1
b.	5	5	b.	2	4
c.	1	1	c.	1	3
d.	4	2	d.	5	5
e.	2	2	e.	1	1
9.	7	.802	20.	E	E
a.	4	D	a.	1	1
b.	5	4	b.	4	5
c.	1	5	c.	5	4
d.	1	3	d.	2	2
e.	1	1	e.	3	1
10.	10		21.	U	D
a.	4	E	a.	2	5
b.	5	2	b.	2	1
c.	2	3	c.	1	4
d.	1	5	d.	3	3
e.	1	5	e.	1	2
11.	11	.263	22.	E	U
a.	1	E	a.	5	5
b.	2	1	b.	2	2
c.	5	4	c.	1	1
d.	2	4	d.	2	3
e.	1	2	e.	1	2

TABLE 6 (continued)

Orig. No.	New No.	Judges' Responses									Ave.		Orig. No.	New No.	Judges' Responses									Ave.		
		1	2	3	4	5	6	7	8	9	Wt.	W'			1	2	3	4	5	6	7	8	9	Wt.	W'	
23.	12	E	E	E	E	E	D	D		E		.831	34.		E	E	E	E	E	D	E		E		1.00	
a.		2	2	5	1	3	2	2	4	3	2.7		a.		4	3	5	3	3	4	4	5	4			
b.		1	1	1	1	1	1	1	1	1	1.0		b.		1	1	1	1	1	1	1	1	1			
c.		2	2	3	3	2	3	3	4	3	2.7		c.		1	1	2	2	2	1	2	2	2			
d.		4	5	4	5	5	5	5	5	5	4.8		d.		3	4	3	5	4	3	3	4	3			
e.		2	4	5	4	4	4	4	4	5	4.0		e.		5	5	4	5	5	5	5	5	4	5		
24.	13	E	E	E	E	D	D	E		E		.619	35.	22	E	D	E	E	E	D	E		D		.708	
a.		4	3	4	3	4	4	5	5	3	3.8		a.		3	1	4	3	4	1	2	2	2	2.4		
b.		3	5	2	3	5	5	4	5	4	4.0		b.		2	1	1	1	1	2	1	1	1	1.2		
c.		2	2	1	2	2	1	1	1	1	1.6		c.		1	3	3	4	2	5	4	3	4	3.2		
d.		5	5	5	5	3	3	3	4	5	4.2		d.		2	4	2	2	3	3	3	4	3	2.9		
e.		4	1	3	2	1	2	2	3	2	2.2		e.		5	5	5	5	5	4	5	5	5	4.9		
25.		E	D	E	E	E	D	D		E		1.05	36.	20	E	E	E	E	E	E	E		D		1.09	
a.		1	1	1	2	2	2	3	2	2			a.		4	2	3	4	3	3	3	1	2	2.8		
b.		3	2	3	3	3	3	2	2	3			b.		1	1	1	1	2	1	1	2	1	1.2		
c.		1	1	1	1	1	1	1	1	1			c.		5	4	4	5	5	5	4	5	4	4.6		
d.		5	5	5	5	4	5	5	5	4			d.		1	1	2	1	1	2	2	1	3	1.6		
e.		5	4	4	4	5	4	4	4	5			e.		5	5	5	5	4	4	5	5	5	4.8		
26.	14	E	E	E	E	E	D	E		E		.885	37.	23	E	D	E	E	D	D	E		D		.945	
a.		2	1	2	2	1	1	3	2	1	1.7		a.		3	5	4	4	4	3	5	5	4	4.1		
b.		5	3	5	5	4	3	5	5	5	4.4		b.		1	1	2	1	1	2	2	1	2	1.4		
c.		4	4	4	5	5	4	4	4	4	4.2		c.		4	4	5	5	3	4	4	5	3	4.1		
d.		4	2	3	5	3	2	2	2	3	2.8		d.		5	3	3	3	5	5	3	4	5	4.0		
e.		1	1	1	1	2	1	1	1	1	1.1		e.		1	1	1	2	1	1	1	1	1	1.1		
27.		E	E	E	E	E	D	E		D		.265	38.		E	D	E	E	E	D	D		E			
a.		1	2	2	4	2	1	5	4	2			a.		3	5	2	3	2	2	3	3	4			
b.		5	4	5	1	3	5	2	3	1			b.		2	4	4	4	4	4	4	5	3			
c.		3	4	4	3	4	3	4	5	3			c.		1	1	1	1	1	1	1	1	1			
d.		1	3	3	5	4	4	4	5	1			d.		2	1	3	1	3	3	2	2	2			
e.		1	2	1	3	3	2	2	1	2			e.		3	3	5	4	5	5	5	5	4	5		

TABLE 6 (continued)

Orig. No.	New No.	Judges' Responses									Ave.		Orig. No.	New No.	Judges' Responses									Ave.	
		1	2	3	4	5	6	7	8	9	Wt.	W'			1	2	3	4	5	6	7	8	9	Wt.	W'
45.		E	E	E	E	E	D	D		D		.303	50.	30	D	E	E	E	E	D	D		D		.364
a.		1	3	4	2	3	3	5	1	1			a.		5	3	3	1	5	3	3	1	4	3.1	
b.		1	4	1	2	4	5	1	5	4			b.		1	2	2	1	3	4	1	4	3	2.3	
c.		4	3	2	1	1	1	3	3	4			c.		3	5	5	4	4	5	2	5	5	4.2	
d.		3	2	5	2	1	1	2	2	3			d.		5	2	4	2	2	2	4	1	2	2.7	
e.		5	5	3	5	5	4	5	4	4			e.		2	1	1	1	1	1	5	2	1	1.7	
46.		D	D	E	E	E	U	D		D			51.		E	E	E	E	E	D	D		D		
a.		2	5	5	5	5	5	5	5	5			a.		2	1	3	1	2	2	4	3	3		
b.		1	4	3	1	4	1	3	2	3			b.		2	1	1	4	4	4	4	4	4		
c.		1	3	2	1	3	1	4	1	1			c.		4	2	1	1	1	1	1	4	1		
d.		1	1	1	1	1	1	2	2	1			d.		3	5	5	4	5	5	5	5	5		
e.		2	1	4	1	2	1	4	2	4			e.		4	4	4	4	3	3	3	4	2		
47.		E	E	E	E	D	D	D		E			52.		E	D	E	E	E	D	E		D		
a.		1	1	2	1	3	4	1	3	1			a.		2	1	1	1	1	1	1	1	1		
b.		1	2	1	2	1	1	3	1	2			b.		2	3	2	5	3	5	2	5	3		
c.		1	4	3	1	2	2	4	5	4			c.		2	4	5	5	4	3	4	4	4		
d.		2	2	4	3	4	3	2	4	3			d.		5	5	3	5	5	4	5	4	3		
e.		5	5	5	3	5	5	5	5	5			e.		4	4	4	5	2	2	3	3	5		
48.		E	D	E	E	D	D	E		D			53.		E	D	E	E	U	D	D		E		
a.		1	1	1	1	2	1	1	1	1			a.		1	3	2	2	1	4	3	3	2		
b.		5	2	5	5	4	5	5	5	3			b.		1	2	4	3	2	2	2	4	3		
c.		5	5	2	1	3	3	5	5	4			c.		1	1	1	1	3	1	1	1	1		
d.		5	3	4	1	1	4	5	5	2			d.		5	5	5	4	5	3	5	5	5		
e.		5	5	3	5	5	5	5	5	5			e.		1	4	3	5	4	5	4	2	4		
49.	29	E	E	E	E	U	D	E		D		.737	54.		E	E	E	E	E	D	D		E		
a.		5	5	5	4	5	3	3	4	5	4.3		a.		2	5	5	5	5	1	5	5	4		
b.		3	2	3	3	4	4	5	5	3	3.6		b.		1	1	1	3	2	1	1	1	1		
c.		3	2	1	2	2	1	1	1	1	1.6		c.		1	4	1	2	4	1	1	2	3		
d.		4	4	4	5	3	5	4	2	4	3.9		d.		1	1	1	1	1	1	1	1	1		
e.		1	1	2	2	1	2	2	1	1	1.4		e.		1	2	4	3	3	5	1	2	5		

APPENDIX D

Correspondence with Subjects

206-E Berryman St.
Greensboro, N. C. 27405
March 19, 1974

Dear Coach:

Congratulations on qualifying for the 1974 AIAW National Basketball Championship. You and your team are to be commended for being one of the best sixteen teams in the country. Throughout my experiences coaching intercollegiate basketball, I have been interested in the direction of women's intercollegiate basketball. My experiences this year as Chairman of the AIAW Basketball Committee have made me increasingly aware of the role of coaches and players in influencing the future role of our programs. In pursuing my doctoral study at the University of North Carolina at Greensboro my interests have focused on the areas of coaching and women's athletics. My dissertation involves the construction of a situation-response scale to measure the attitudes of players and coaches toward the conduct of intercollegiate basketball for women. A preliminary evaluation of the scale items is being completed by a jury of expert judges including:

Jeanne Rowlands
Betty Westmoreland
Jill Upton

Pat Park
Fran Koenig
Judy Akers

Gloria Rodriguez
Billie Moore
Lynda Goodrich

In order to determine the reliability of the attitude scale it is necessary to administer the scale to several players and coaches. Teams participating in the National Championship represent experiences at state, regional and national levels, as well as a representative cross-section of the United States. Thus, I would appreciate your cooperation in this study.

I am asking that you and each of your players respond to the attitude scale. All respondents will remain anonymous. The scale will include approximately thirty situation-response items which can be completed in approximately thirty minutes. If you consent to participate in the study, I would appreciate it if you would schedule a 30-45 minute session with your players to respond to the scale.

Please complete the enclosed post card and return it to me at your earliest convenience. Your assistance will be greatly appreciated.

Sincerely,

Jill Hutchison
Ed. D. Candidate

Rosemary McGee
Advisor

Enclosure

Self-Addressed, Stamped Postcard
Given to Coaches at
1974 AIAW National Basketball Tournament

Name _____

School _____

Address _____

_____ Our team will participate in the study.

_____ Our team will be unable to participate in
the study.

School of Physical Education
University of North Carolina
at Greensboro
Greensboro, N. C. 27412
April 25, 1974

Dear Coach:

I hope that you and your team have had an opportunity to recover from the excitement of the AIAW Basketball Championship. As you recall I contacted you at the tournament requesting your participation in my doctoral dissertation. It involves the construction of a situation-response scale to measure the attitudes of players and coaches toward the conduct of intercollegiate basketball for women. A preliminary evaluation of the scale items has been completed by a jury of expert judges, and the final scale has been constructed.

In order to determine the reliability of the attitude scale it is necessary to administer the scale to several players and coaches. I am asking that you and each of your players attending the National Championship respond to the enclosed attitude scale. All respondents will remain anonymous. I would appreciate it if you would schedule a 30-45 minute session with your players to respond to the scale.

Enclosed is a self-addressed, stamped envelope which may be used to return the completed scales to me. Please attempt to administer the scale and return it to me by May 15, 1974. If you have difficulties meeting this deadline, please call me collect (ph. 919 288-1650). It is extremely important that I receive your input. Your cooperation and participation are greatly appreciated. I hope to see you next year at Madison College for the Fourth AIAW National Basketball Championship.

Sincerely,

Jill Hutchison
Ed. D. Candidate

Rosemary McGee
Advisor

Enclosures

A SITUATION-RESPONSE SCALE TO MEASURE THE
ATTITUDES OF COACHES AND PLAYERS TOWARD THE
CONDUCT OF INTERCOLLEGIATE BASKETBALL FOR WOMEN

Directions to Coaches

The items on the following pages are situation-response items related to the conduct of intercollegiate basketball programs for women. Read each situation carefully. Then read the five responses which indicate possible actions toward the situation. Put yourself in the situation described and indicate how you would respond to the situation by placing an "X" in the space to the left of the appropriate response. Do not attempt to determine what "should" be done, but rather what you would do in your own coaching situation. Only one response is to be marked. Please respond to each item.

For example:

1. The center and high scorer on your team is usually the last one out to practice. The first game of the season she only scores 4 points. How would you attempt to handle the situation?

- a. Not let her play any more
 b. Plan some special practice sessions for her
 c. Talk to her about her attitude toward practice
 d. Start to train another center
 e. Have the team captain talk to the center

Information from Respondent: (to be used only for record-keeping of
the investigator)

Name (not necessary) _____

School _____

A SITUATION-RESPONSE SCALE TO MEASURE THE
ATTITUDES OF COACHES AND PLAYERS TOWARD THE
CONDUCT OF INTERCOLLEGIATE BASKETBALL FOR WOMEN

Directions to Players

The items on the following pages are situation-response items related to the conduct of intercollegiate basketball programs for women. Read each situation carefully. Then read the five responses which indicate possible actions toward the situation. Put yourself in the role of a coach of a women's intercollegiate basketball team. Indicate how you would respond to the situation described by placing an "X" in the space to the left of the appropriate response. Do not attempt to determine what you think your coach would do, but rather what you think you would do if you were a coach. Only one response is to be marked. Please respond to each item.

For example:

1. The center and high scorer on your team is usually the last one out to practice. The first game of the season she only scores 4 points. How would you attempt to handle the situation?

- a. Not let her play any more
- b. Plan some special practice sessions for her
- c. Talk to her about her attitude toward practice
- d. Start to train another center
- e. Have the team captain talk to the center

Information from Respondent: (to be used only for record keeping of the investigator)

Name (not necessary) _____

School _____

APPENDIX E

Raw Data from Subjects

TABLE 7
PLAYERS' RAW SCORES ON THE 30-ITEM SCALE

Subject	Odd Score	Even Score	Total Score	Subject	Odd Score	Even Score	Total Score
1	63.0	62.7	125.7	46	53.7	61.2	114.9 ^a
2	60.8	63.1	123.9	47	57.6	67.0	124.6
3	63.0	64.5	127.5	48	62.7	59.7	122.4
4	53.6	57.8	111.4	49	62.7	58.2	120.9
5	60.0	63.5	123.5	50	62.7	59.7	122.4
6	58.2	65.9	123.1	51	62.7	58.2	120.9
7	57.3	60.8	118.1	52	52.4	51.3	103.7 ^a
8	60.4	58.0	118.4	53	62.7	57.6	120.3
9	59.5	65.0	124.5	54	61.5	68.6	130.1
10	62.1	61.6	123.7	55	57.4	61.9	119.3
11	62.5	66.6	129.1	56	54.4	53.7	108.1
12	58.9	59.2	118.1	57	57.2	60.7	117.9
13	57.9	61.8	119.7	58	58.9	64.2	123.1
14	56.6	60.3	116.9	59	53.9	64.2	118.1
15	62.5	66.8	129.3	60	53.0	68.8	121.8
16	61.0	63.7	124.7	61	58.5	63.4	121.9
17	56.2	55.3	111.5	62	60.5	63.9	124.4
18	63.2	61.4	124.6	63	58.5	53.3	111.8
19	60.4	64.5	124.9	64	50.4	59.9	110.3
20	62.2	63.4	125.6	65	35.9	38.8	74.7 ^a
21	58.2	58.4	116.6	66	59.6	59.7	119.3
22	53.5	58.4	111.9	67	57.6	60.1	117.7
23	60.4	61.0	121.4	68	59.0	62.5	121.5
24	50.7	61.4	112.1	69	56.8	63.1	119.9
25	59.2	60.0	119.2	70	60.0	65.9	125.9
26	59.9	55.9	115.8	71	50.4	61.6	122.0
27	60.0	65.1	125.1	72	60.4	61.6	122.0
28	57.7	56.2	113.9	73	57.9	62.4	120.3
29	57.4	57.6	115.0	74	57.6	63.5	121.1
30	59.9	66.0	125.9	75	57.8	65.0	122.8
31	57.8	62.9	120.7	76	66.4	59.8	126.2 ^a
32	57.0	59.1	116.1	77	59.0	63.5	122.5
33	60.1	58.3	118.4	78	58.5	57.8	116.3 ^a
34	60.5	62.4	122.9	79	62.7	62.9	125.6
35	49.0	53.4	102.4 ^a	80	56.3	54.5	110.7 ^a
36	60.0	59.4	119.4 ^a	81	63.7	57.0	120.7
37	60.1	63.6	123.7	82	63.1	60.3	123.4
38	61.3	59.0	120.3	83	63.5	61.4	124.9
39	63.3	66.3	129.6	84	62.2	59.6	121.8
40	56.9	56.6	113.5	85	53.1	62.0	115.1
41	54.9	59.7	114.6	86	60.1	64.8	124.9
42	60.3	50.5	110.8 ^a	87	62.4	61.0	123.4
43	58.6	63.5	122.1	88	60.8	60.1	120.9
44	60.7	62.7	123.4	89	61.0	65.1	126.1
45	58.1	57.4	115.5	90	61.2	63.3	124.5

^aIncomplete scale scores which were not included in the analysis of data.

TABLE 7 (continued)

Subject	Odd Score	Even Score	Total Score	Subject	Odd Score	Even Score	Total Score
91	59.8	64.5	124.3	113	57.0	59.9	116.9
92	64.8	61.7	126.5	114	59.9	63.0	122.8
93	61.0	63.2	124.2	115	52.2	53.3	105.5
94	60.6	60.6	121.2	116	56.9	51.4	108.3 ^a
95	58.3	60.9	119.2	117	58.1	56.2	114.3
96	57.8	61.6	119.4	118	56.5	63.4	119.9
97	59.4	65.8	125.2	119	51.3	53.7	105.0 ^a
98	58.2	66.8	125.0	120	60.3	55.8	116.1
99	57.8	64.2	122.0	121	56.8	55.0	111.8
100	52.8	52.9	105.7	122	61.9	63.3	125.2
101	57.2	61.3	118.5	123	56.5	58.0	114.5
102	65.4	66.9	132.3	124	58.4	52.4	110.8
103	49.5	53.4	102.9 ^a	125	60.4	60.6	121.0
104	60.3	60.3	120.6	126	62.0	62.0	124.0
105	61.8	51.8	114.6 ^a	127	57.5	59.0	116.5
106	56.7	54.8	111.5	128	63.7	63.6	127.3
107	60.7	63.0	123.7	129	58.1	59.0	117.1
108	61.0	59.9	120.9	130	58.9	58.6	117.5
109	59.9	58.4	118.3	131	57.5	57.9	115.4
110	51.0	49.1	100.1 ^a	132	56.9	64.2	121.1
111	60.9	53.9	114.8	133	63.3	57.7	121.0
112	55.1	57.7	102.8 ^a	134	37.8	35.2	73.0 ^a

N = 118 $\bar{X} = 120.25$ s = 3.44 $\lambda = .23$ $r_{tt} = .374$

^aIncomplete scale scores which were not included in the analysis of data.

TABLE 8
COACHES' RAW SCORES ON THE 30-ITEM SCALE

Subject	Odd Score	Even Score	Total Score
1	64.2	62.0	126.2
2	60.3	58.8	119.1
3	64.0	66.3	130.3
4	51.5	57.0	108.5
5	60.1	67.4	127.5 ^a
6	54.5	66.7	121.2
7	61.5	66.2	127.7 ^a
8	58.0	67.1	125.1
9	63.5	65.4	128.9
10	61.8	60.8	122.6 ^a
11	60.1	67.5	127.6
12	63.4	63.0	126.4
13	57.8	58.3	116.1
14	64.1	61.5	125.6

N = 14

$\bar{X} = 123.77$

s = 3.96

r = .23

$r_{tt} = .374$

^aMale subjects